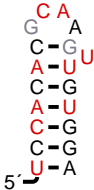


motif100-5001-5019_1



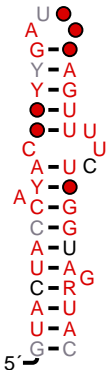
motif102-5037-5077_1



motif103-5100-5138_1



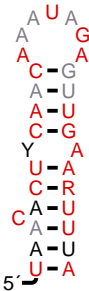
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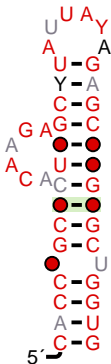
motif108-5272-5296_1



motif109-5307-5336_1



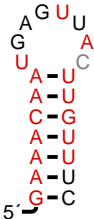
motif110-5340-5381_1



motif111-5400-5444_1



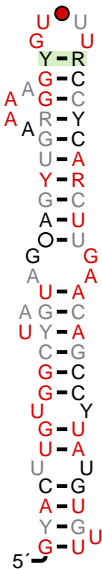
motif1 12-5453-5474_1



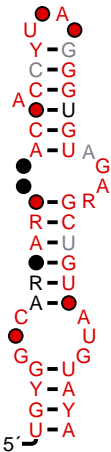
Y A A



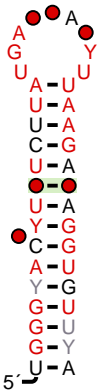
motif1 1-41 1-474_1



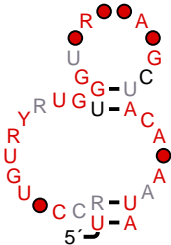
motif114-5528-5576_1



motif115-5577-5616_1



motif1 16-5619-5652_1



motif117-5662-5679_1

U^C A^Y

G-C

A-U

G-U

R-U

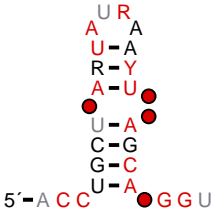
A-U

C-G

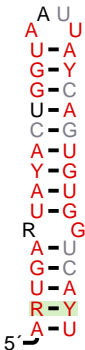
A-U

5'-

motif1 18-5695-5722_1



motif119-5738-5771_1



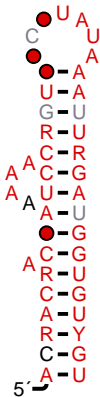
motif120-5796-5846_1



motif122-5861-5878_1



motif123-5885-5928_1



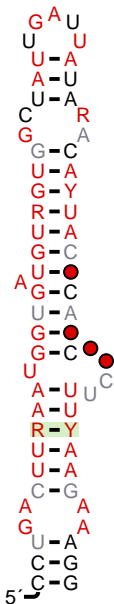
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motif126-6023-6065_1



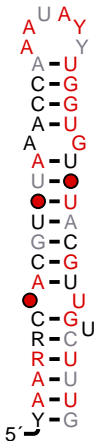
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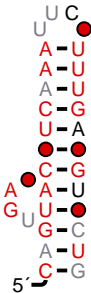
motif128-6217-6253_1



motif129-6262-6306_1



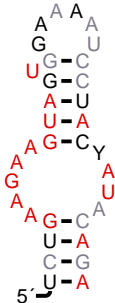
motif130-6318-6349_1



motif132-6363-6389_1



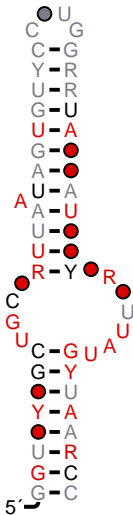
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motif134-6446-6504_1



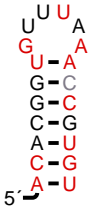
motif138-6641-6696_1



motif139-6712-6731_1



motif140-6737-6756_1





motif142-6846-6887_1



motif143-6901-6924_1



motif14-538-554_1



motif146-6974-7009_1



motif148-7042-7072_1



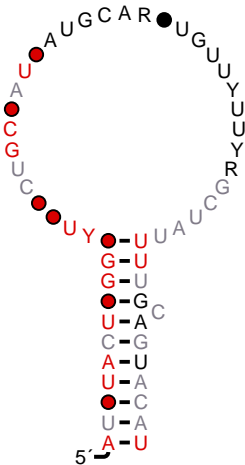
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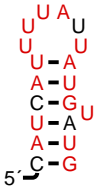
motif150-7146-7187_1



motif151-7281-7336_1



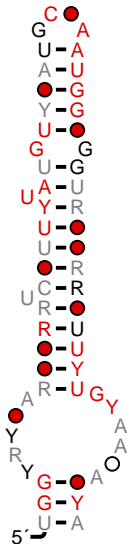
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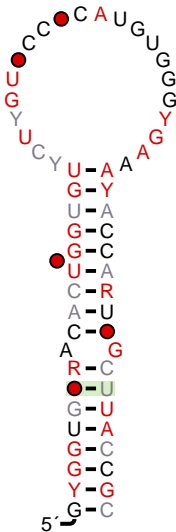
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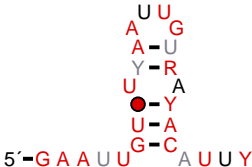
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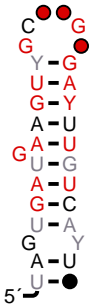
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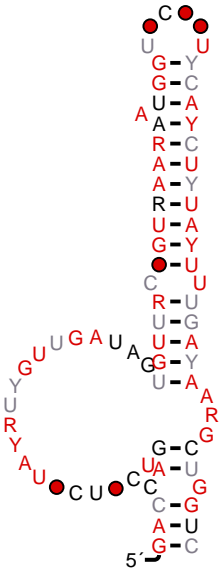
motif155-7615-7639_1



motif156-7660-7690_1



motif157-7718-7793_1



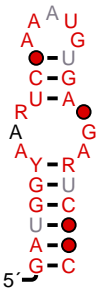
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motif159-7855-7886_1



motif160-7895-7923_1



motif161-7933-7956_1



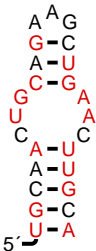
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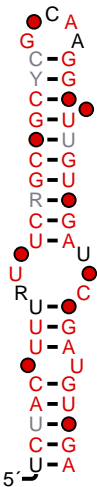
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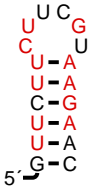
motif164-8104-8128_1



motif165-8156-8205_1



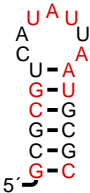
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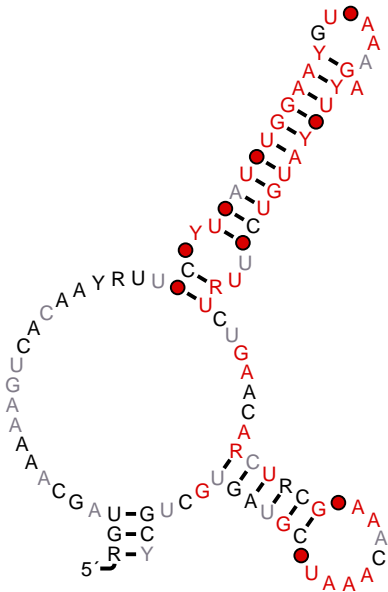
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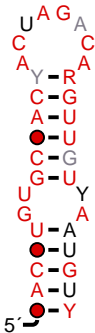
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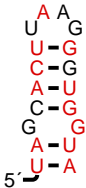
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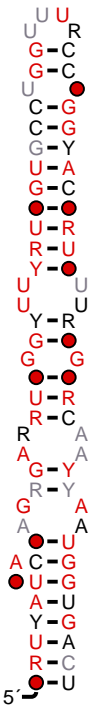
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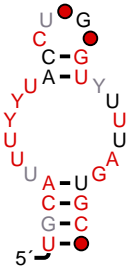
motif170-8538-8555_1



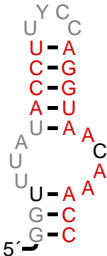
motif171-8833-8906_1



motif172-8910-8938_1

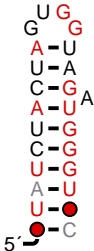


motif1-7-33_1

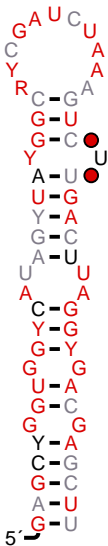


5'-●●●R●●RRYR●●UGYRU●UUR●Y●C●G●●UGYAC●AY●YUR●●●●●Y

motif175-9257-9281_1



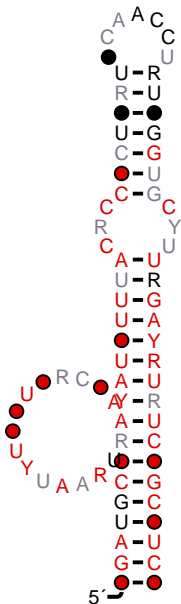
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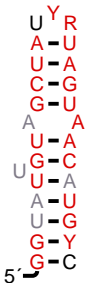
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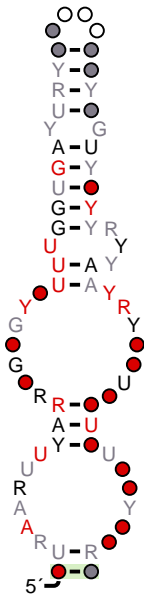


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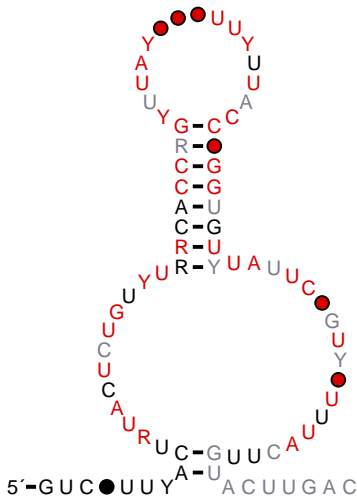


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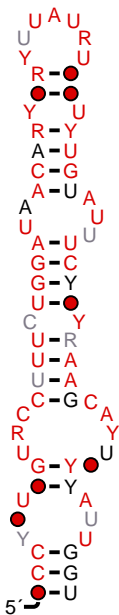




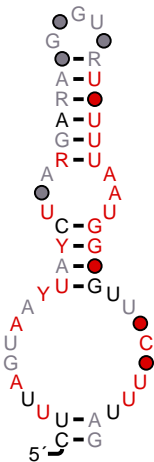
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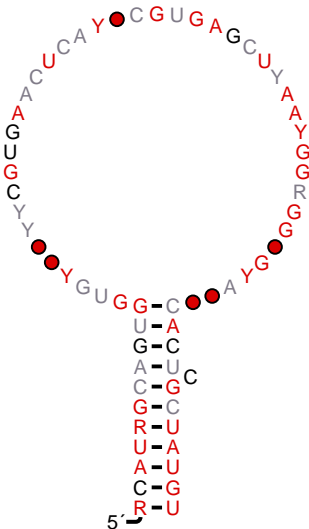
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motif184-9733-9783_1



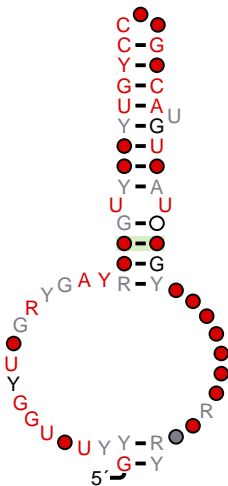
motif18-757-822_1



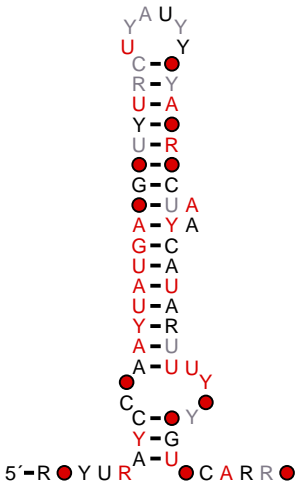
motif187-9832-9886_1



motif189-10140-10198_1



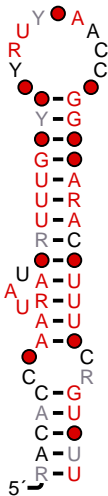
motif190-10201-10263_1



motif191-10269-10294_1



motif193-10345-10398_1



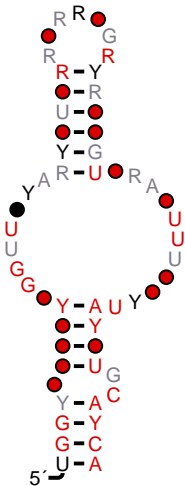
motif194-10400-10448_1



motif195-10457-10483_1



motif196-10489-10545_1



motif198-10630-10687_1



motif19-837-853_1



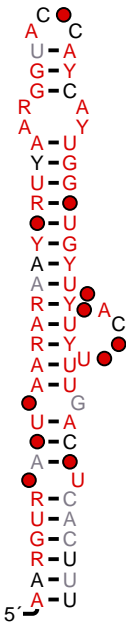
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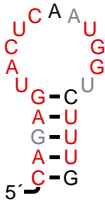
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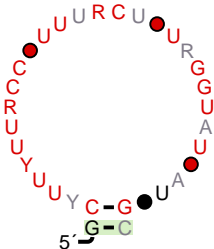
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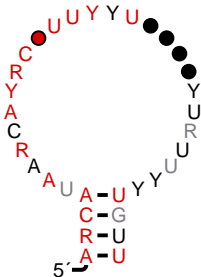
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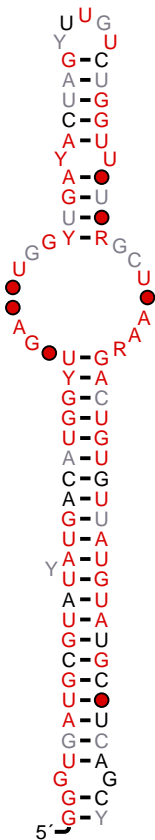
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motif205-11154-11187_1



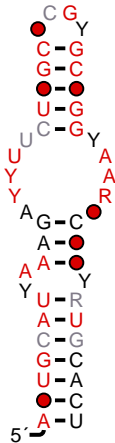
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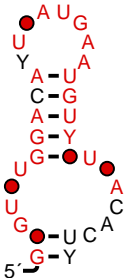
motif208-1 1330-1 1352_1



motif20-861-907_1



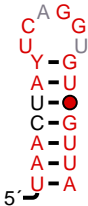
motif209-11385-11416_1



motif210-11419-11477_1



motif21 1-1 1491-1 1510_1



motif212-11578-11611_1



motif213-11623-11652_1

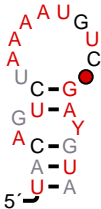


motif214-11720-11739_1



motif215-11742-11836_1

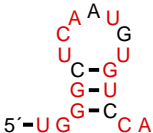
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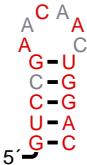
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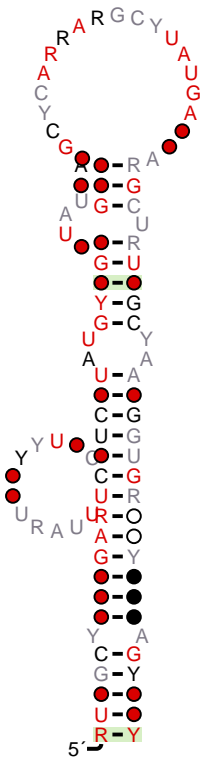
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motif21-910-925_1



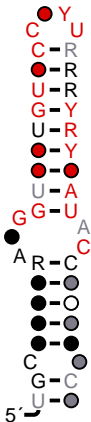
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motif220-12382-12415_1



motif221-12418-12460_1



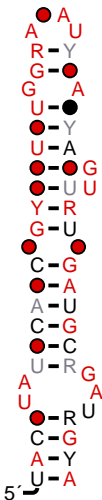
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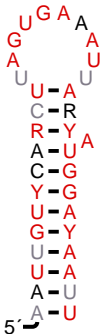
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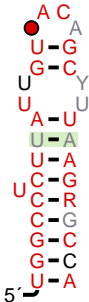
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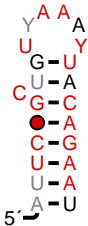
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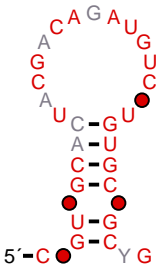
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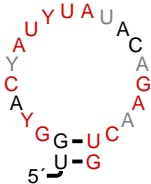
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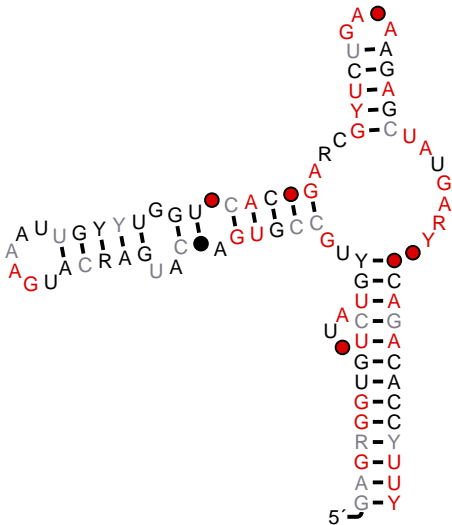
motif228-12702-12734_1



motif229-12871-12892_1



motif22-940-1030_1



motif230-12899-12930_1



motif23-1067-1093_1



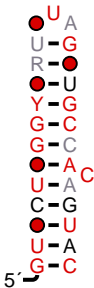
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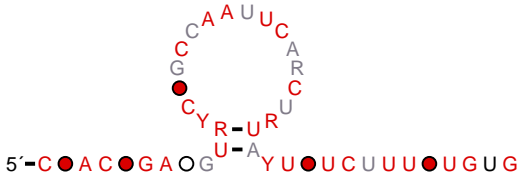
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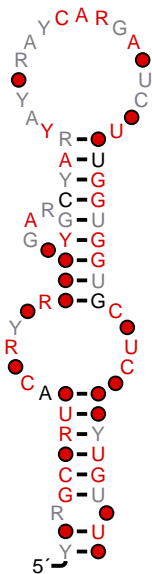
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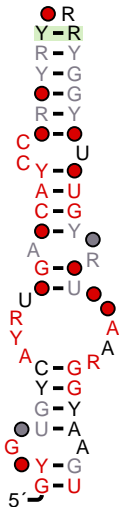
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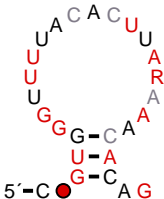
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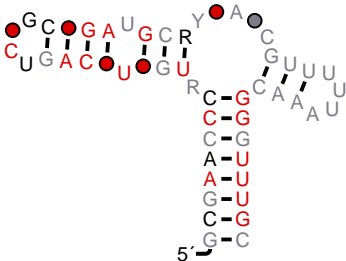
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motif237-13344-13370_1



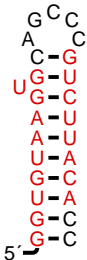
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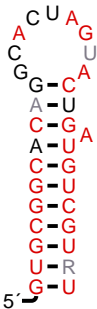
motif24-1113-1135_1



motif241-13477-13502_1



motif242-13503-13534_1



motif243-13594-13633_1



motif244-13635-13698_1



motif245-13707-13750_1

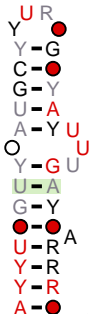


Diagram illustrating a DNA double helix structure. The strands are labeled 5' and 3'. The base pairs are shown as follows:

- Top strand (5' to 3'): C, C, A, Y, R, G, U, A, Y, G, U, G, G, A, G, R, U, R, A, U, U, U.
- Bottom strand (3' to 5'): A, U, C, C, U, A, G, C, U, C, G, C, A, U, G, C, A, U, C, U, A, A.

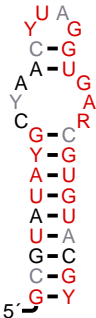
The diagram shows the pairing of bases between the two strands, with some bases highlighted in red (A, Y, R, G, U, A, Y, G, U, G, A, G, R, U, R, A, U, U) and others in grey (C, C, U, C, U, C, G, C, A, U, C, U, A, A). The 5' end is indicated at the bottom left, and the 3' end is indicated at the top right.

motif247-13811-13853_1



5'-UGR Y R G A●

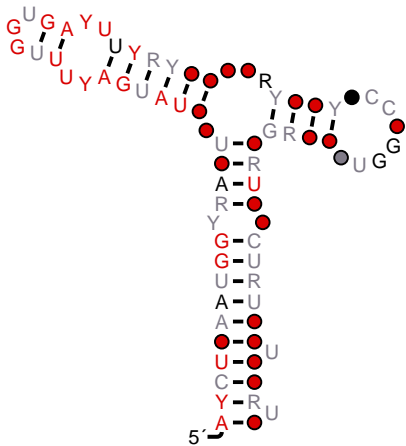
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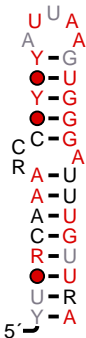
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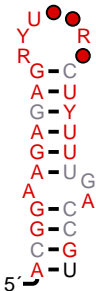
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motif252-14221-14254_1



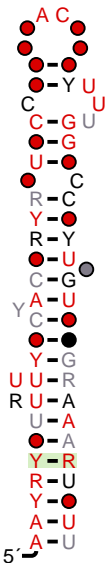
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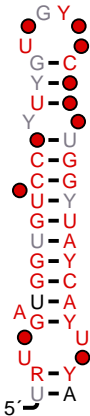
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motif256-14380-14441_1



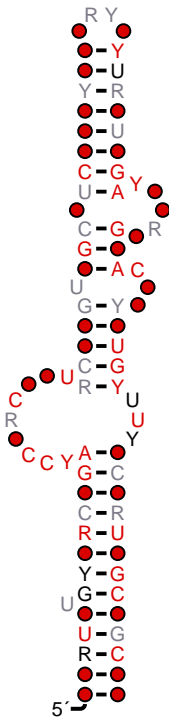
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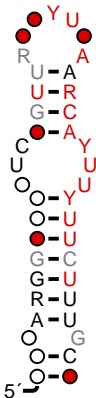
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motif26-1155-1180_1



motif262-14729-14769_1



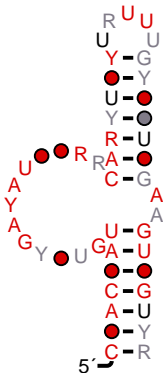
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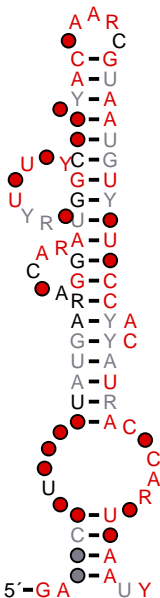
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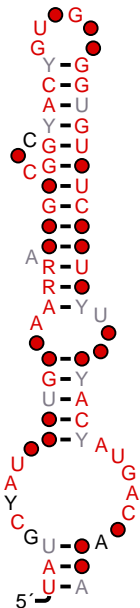
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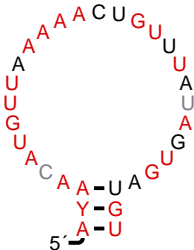
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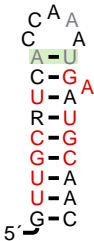
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motif271-15236-15266_1



motif27-1181-1204_1



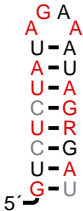
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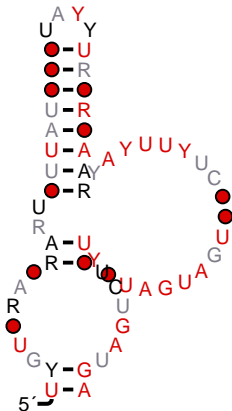
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motif275-15629-15648_1



motif276-15662-15722_1



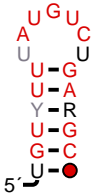
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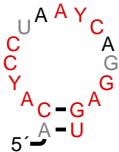
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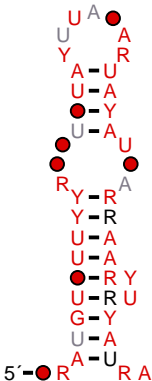
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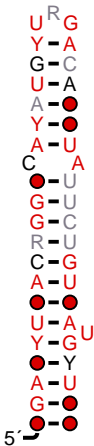
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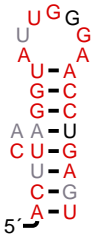
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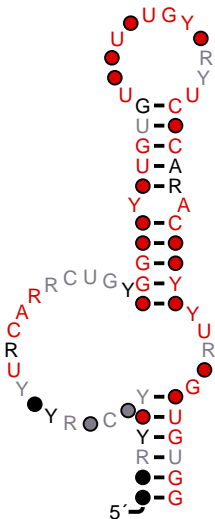
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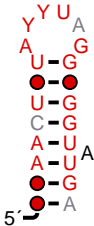
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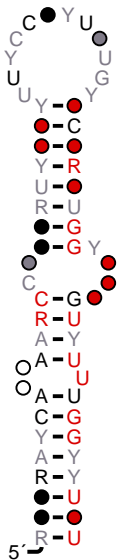
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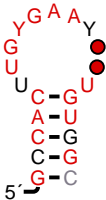
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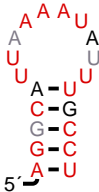
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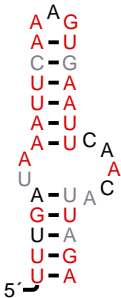
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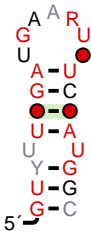
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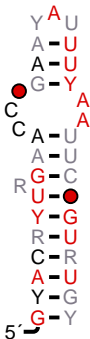
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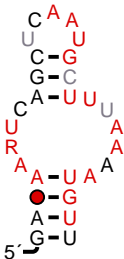
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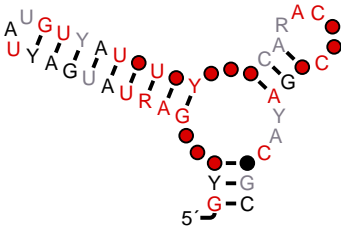
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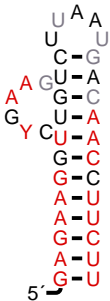
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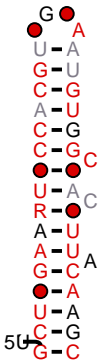
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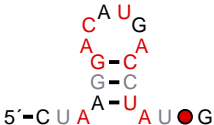
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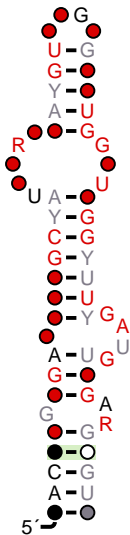
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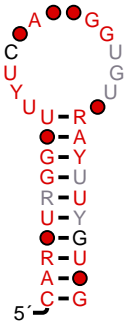
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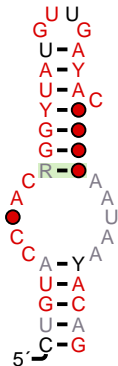
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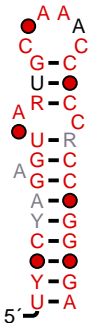
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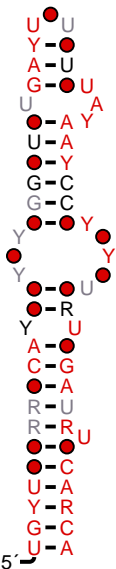
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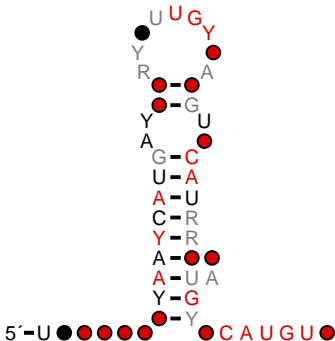
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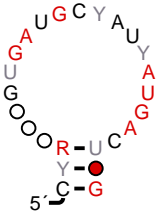
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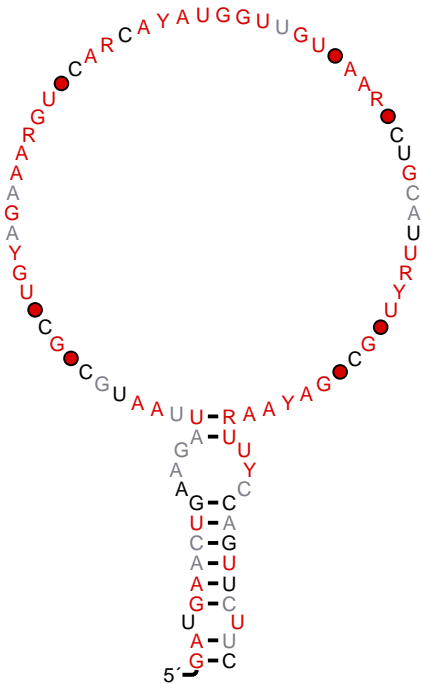
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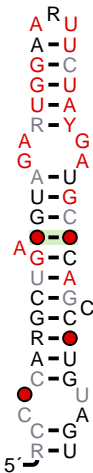
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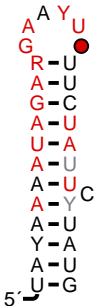
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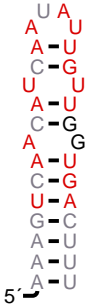
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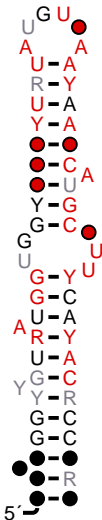
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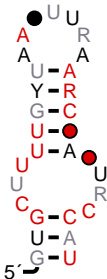
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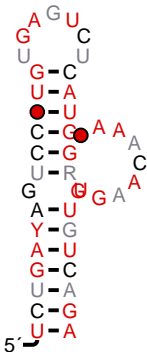
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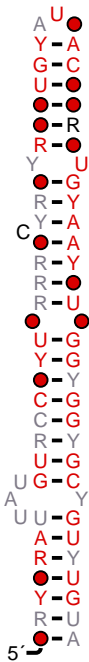
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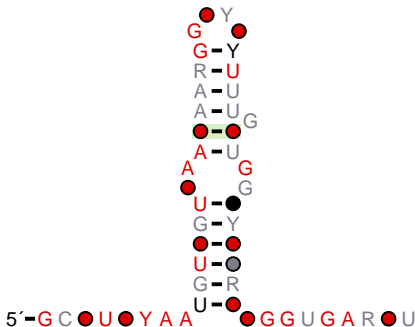
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G U
 Y - A
 A - Y
 G - Y
 C - U
 C - G A
 A - U
 U - G
 G - C
 A - C
 G - U
 U - A
 A - U
 A
 G - Y A
 U - A
 A - U
 C - G
 U - A
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 C - G A
 A - U
 G - Y

5'2"

motif337-19636-19685_1



motif338-19694-19741_1



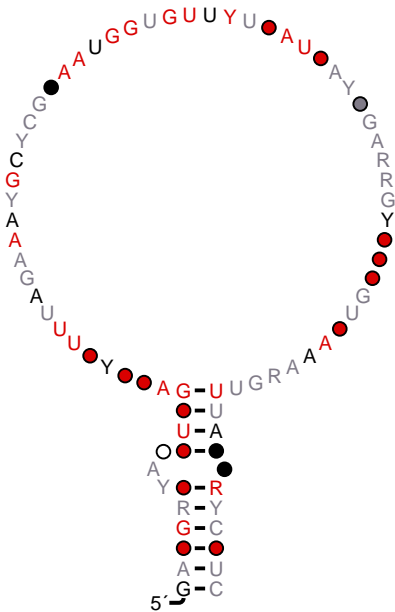
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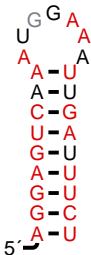
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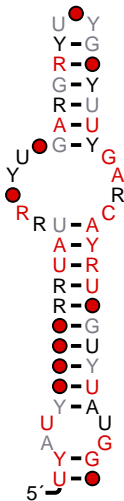
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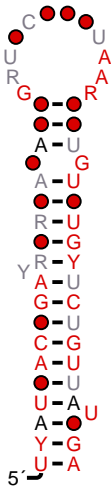
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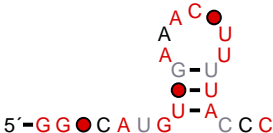
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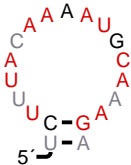
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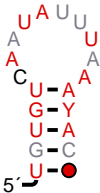
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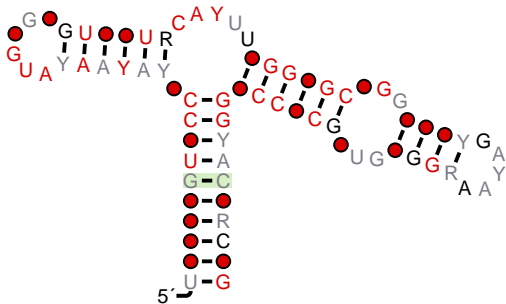
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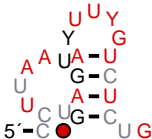
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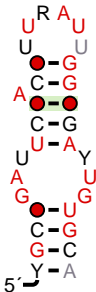
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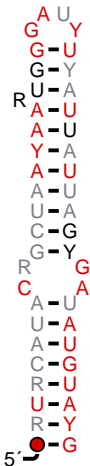
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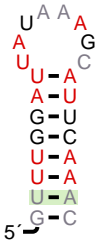
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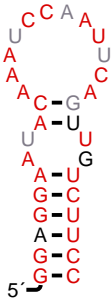
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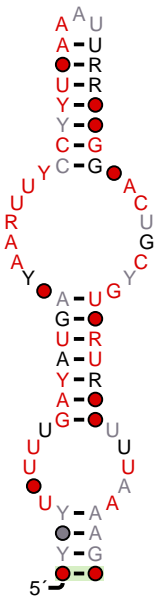
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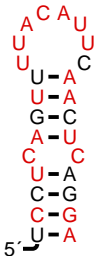
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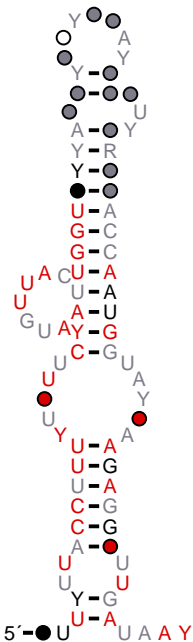
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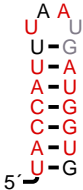
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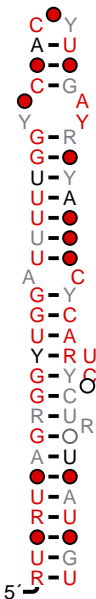
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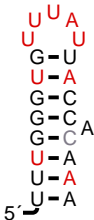
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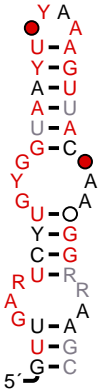
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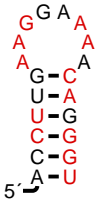
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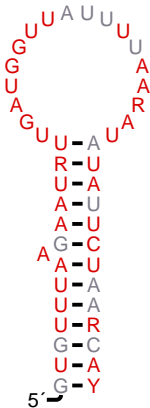
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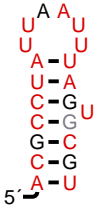
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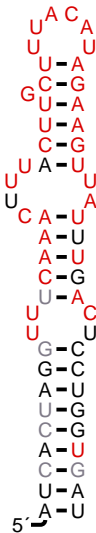
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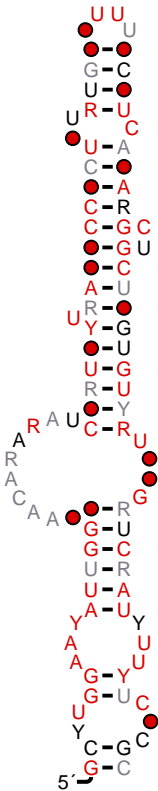
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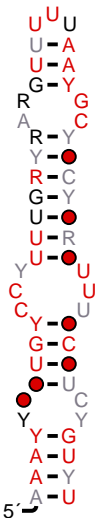
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motif38-1823-1915_1



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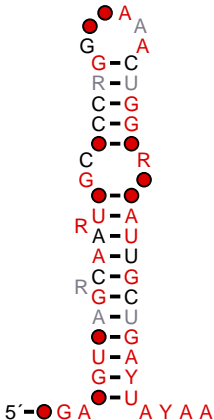




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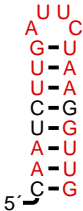
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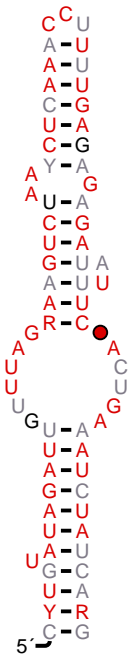
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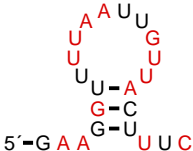
motif388-22879-22898_1



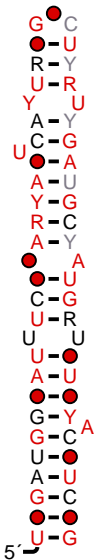
motif389-22915-22985_1



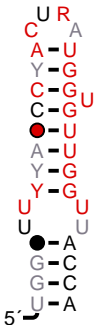
motif391-23012-23033_1



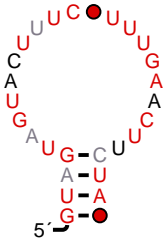
motif39-1974-2030_1



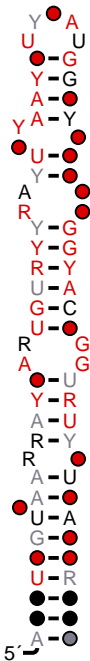
motif392-23047-23079_1



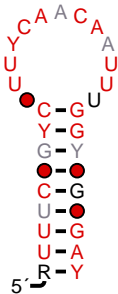
motif393-23090-23117_1



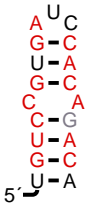
motif395-23157-23225_1



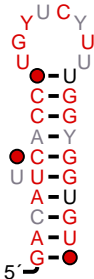
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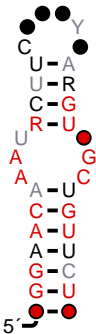
motif397-23287-23305_1



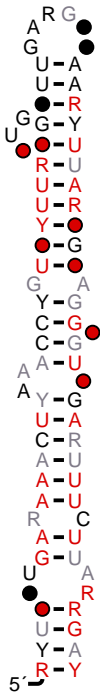
motif398-23318-23347_1



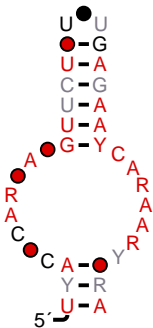
motif400-23362-23395_1



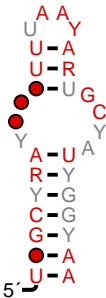
motif41-2123-2197_1



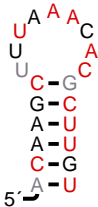
motif415-24294-24329_1



motif416-24330-24360_1



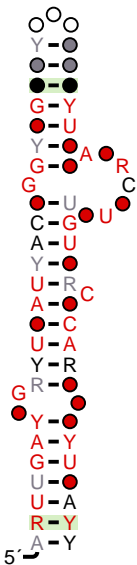
motif418-24430-24450_1



motif420-24505-24532_1



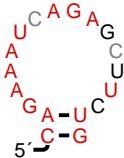
motif421-24538-24601_1



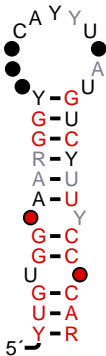
motif42-2198-2227_1



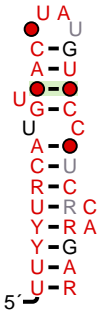
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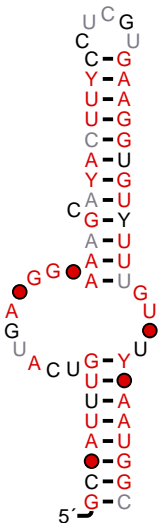
motif424-24688-24724_1



motif426-24746-24778_1



motif427-24800-24859_1



motif428-24866-24898_1



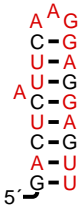
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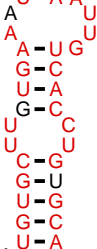


motif430-24935-24973_1



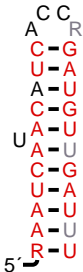
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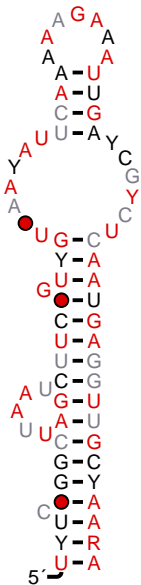


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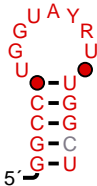
motif432-25033-25059_1



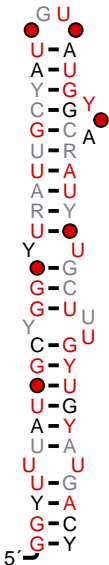
motif433-25068-25136_1



motif435-25197-25215_1

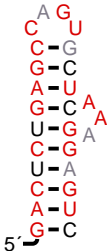


motif436-25217-25276_1



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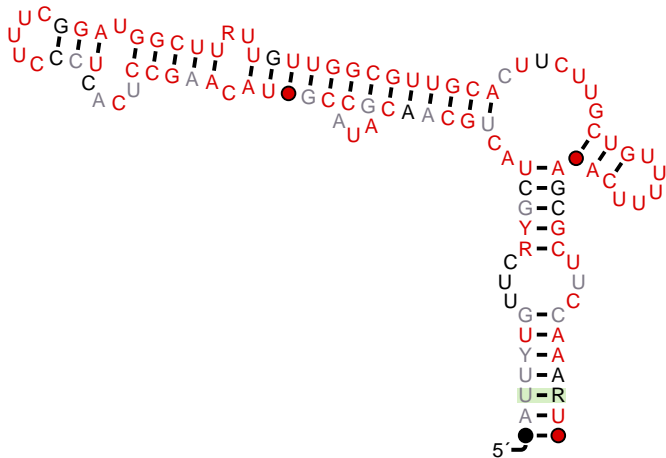
motif438-25340-25366_1



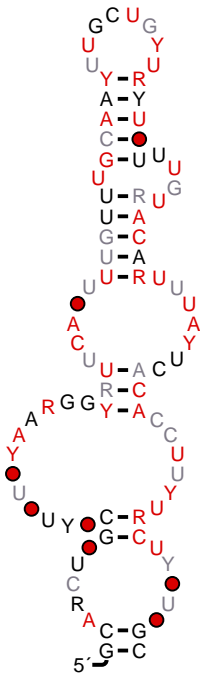
motif439-25380-25407_1



motif440-25471-25578_1



motif442-25599-25685_1



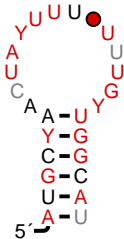
motif44-2281-2302_1



motif443-25720-25771_1



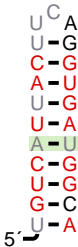
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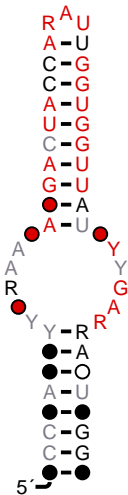
motif447-25850-25883_1



motif448-25893-25915_1



motif449-25923-25973_1



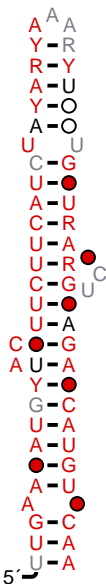
motif450-25975-26021_1



motif451-26026-26065_1

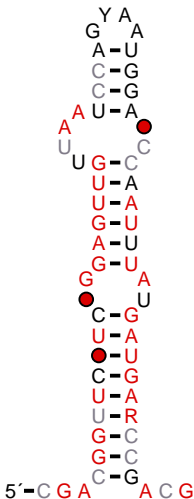


motif452-26066-26127_1

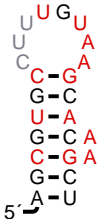


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motif453-26139-26196_1



motif454-26206-26229_1



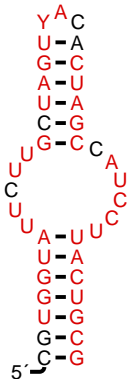
motif455-26230-26255_1



motif456-26262-26305_1



motif457-26313-26352_1



motif459-26388-26426_1



motif462-26475-26496_1



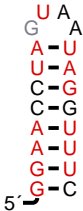
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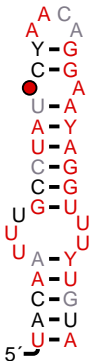
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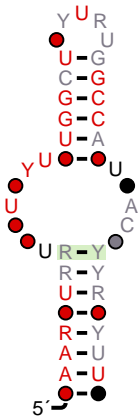
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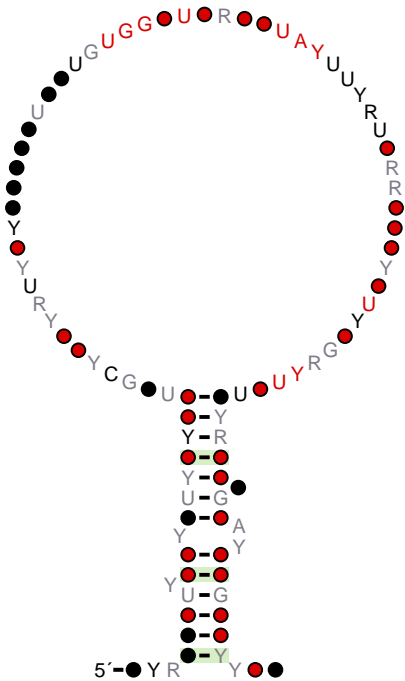
motif468-26626-26662_1



motif469-26669-26713_1



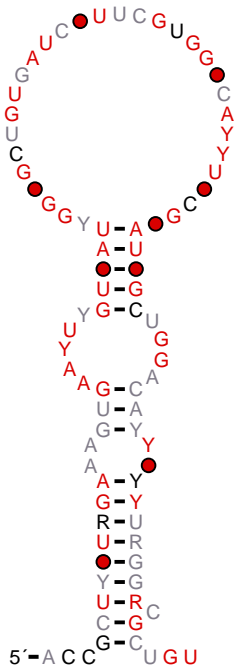
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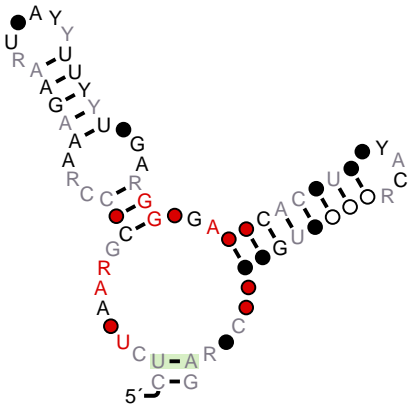
motif471-26886-26902_1



motif472-26915-26999_1

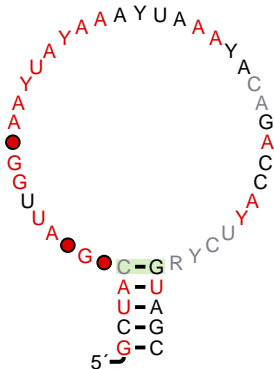


motif47-2460-2527_1



The diagram illustrates a tRNA cloverleaf structure. At the bottom, the 5' end is labeled. The structure consists of several stems and loops. The stems are formed by base pairing between nucleotides, with some pairs highlighted in red (e.g., U-G, A-U, C-G, G-C, U-G, A-U, C-G, G-C). The loops contain unpaired nucleotides. The overall shape is a compact, folded structure typical of tRNA.

motif475-27115-27161_1



[illegible]

motif477-27328-27362_1



motif478-27375-27409_1



motif479-27410-27458_1



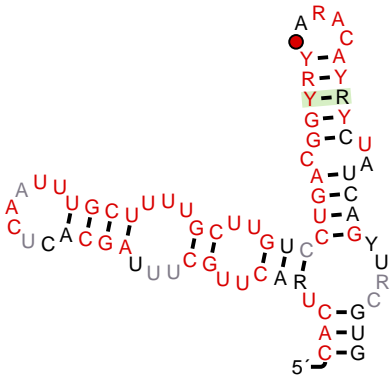
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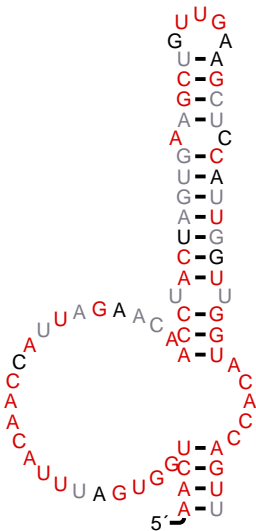
motif481-27490-27524_1



motif482-27557-27628_1



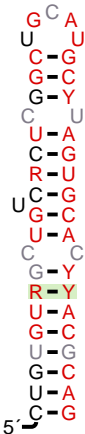
motif48-2542-2614_1



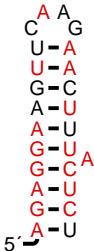
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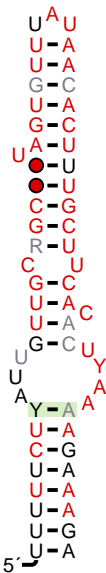
motif4-84-127_1



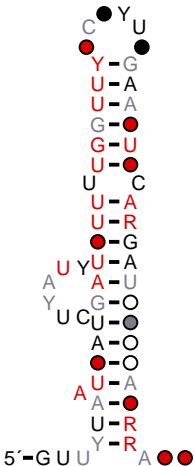
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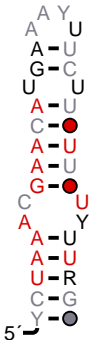
motif485-27692-27751_1



motif486-27816-27874_1



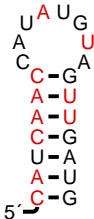
motif487-27883-27916_1



A C C A
C U - G
U - A
U - A
A - U
C - G
G - U
U - A
C - G U
G - U
A - U
U - A
G - C
U - A
C - G
A - U C
A - U A
C - G
A - U

5'

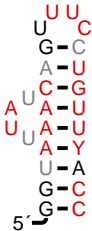
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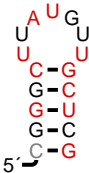
motif491-28065-28118_1



motif492-28122-28147_1



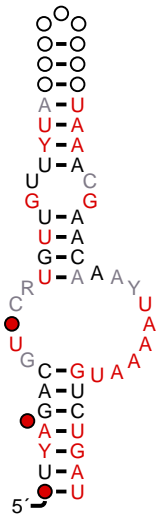
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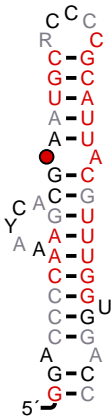
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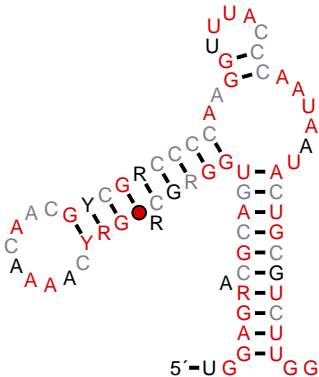
motif494-28225-28282_1



motif495-28286-28332_1



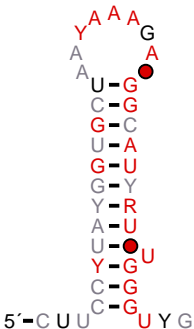
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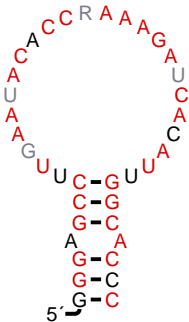
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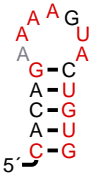
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motif502-28681-28718_1



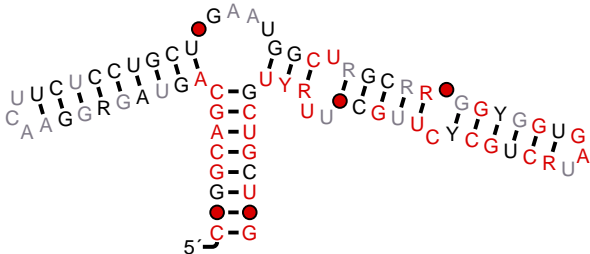
motif50-2650-2666_1



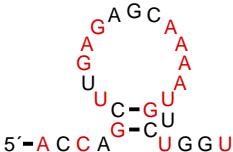
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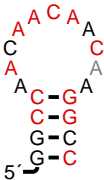
motif507-28869-28946_1



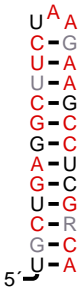
motif508-28956-28981_1



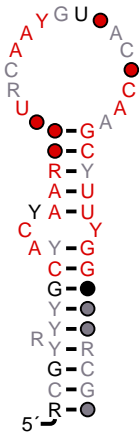
motif509-28985-29003_1



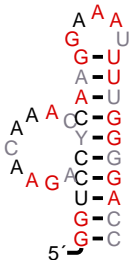
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motif511-29056-29104_1



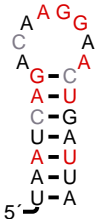
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motif51-2682-2705_1



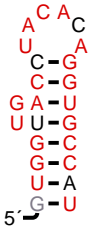
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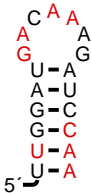
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motif515-29260-29283_1



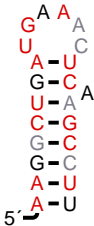
motif516-29288-29306_1



motif517-29321-29347_1



motif519-29396-29418_1



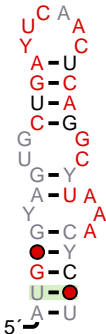
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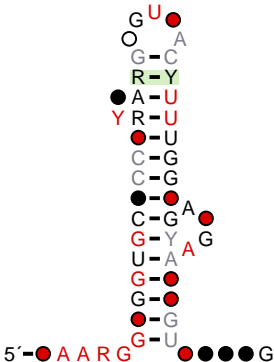
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motif522-29504-29539_1



motif52-2710-2759_1



motif523-29548-29613_1



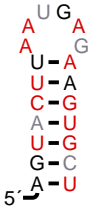
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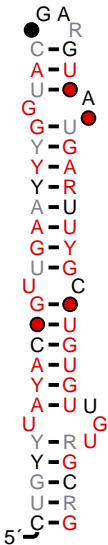
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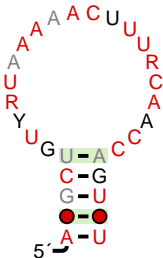
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motif55-2838-2894_1



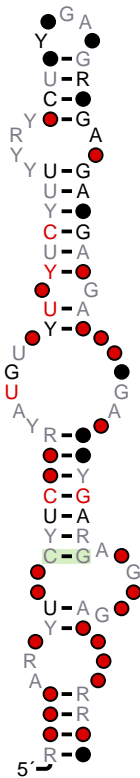
motif56-2895-2924_1



motif57-2940-3002_1



motif58-3004-3092_1



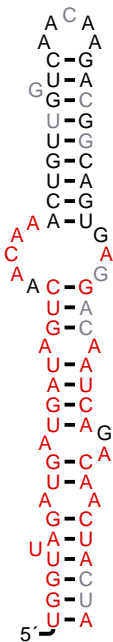
motif60-3112-3158_1



motif61-3159-3197_1



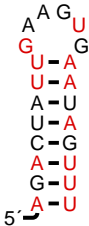
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motif63-3274-3325_1



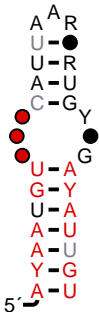
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motif65-3350-3370_1



motif66-3372-3402_1

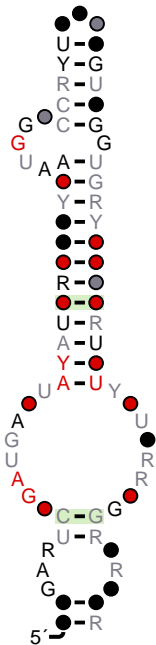


5' 

motif68-3473-3511_1



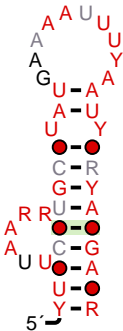
motif69-3519-3591_1



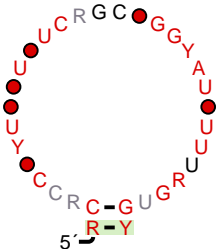
motif70-3605-3647_1



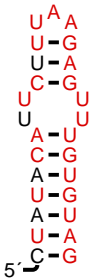
motif71-3653-3692_1



motif72-3701-3732_1



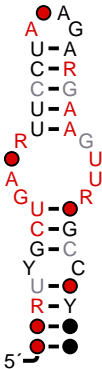
motif73-3738-3764_1



motif74-3819-3862_1



motif75-3870-3907_1



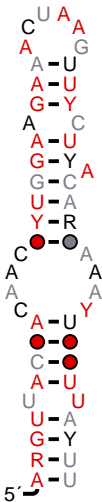
motif76-3909-3932_1



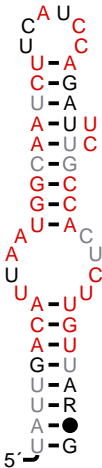
motif77-3943-3970_1



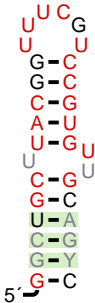
motif78-3978-4030_1



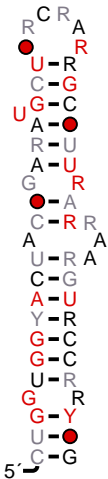
motif79-4033-4082_1



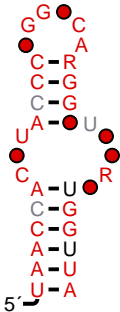
motif8-188-218_1



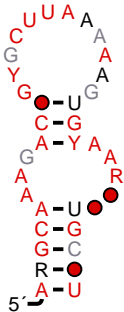
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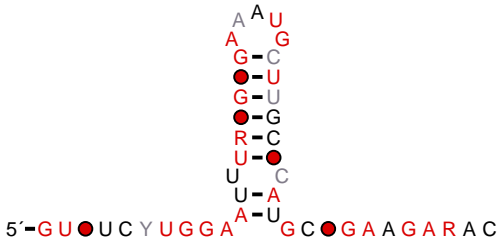
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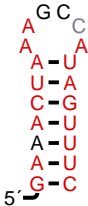
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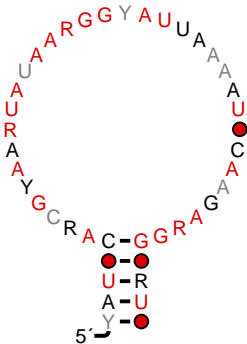
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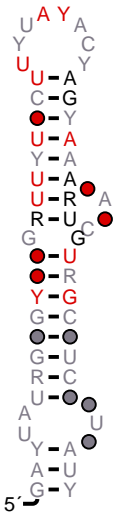
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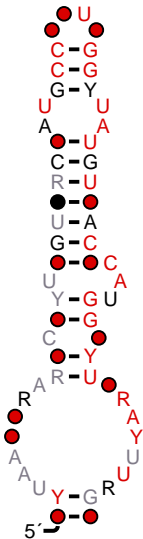
motif90-4468-4510_1



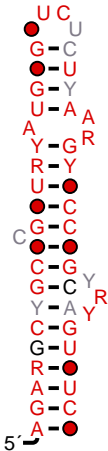
motif91-4514-4570_1



motif92-4585-4644_1



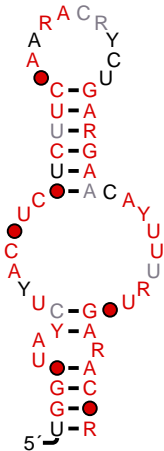
motif93-4645-4693_1



motif9-347-395_1



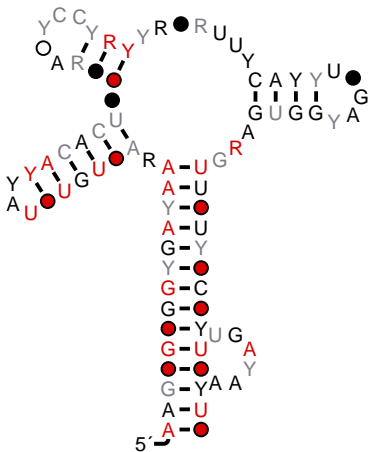
motif95-4726-4778_1



motif96-4801-4825_1



motif97-4850-4933_1



motif98-4938-4960_1

