

**Table 3.** A3-staple group motif 539\_7\_0.26\_2z75\_1\_259 representatives from different non-coding RNA molecules.

<b>PDB entry</b>	<b>RNA molecule</b>	<b>Motif instance</b>	<b>Staple residue</b>	<b>Layer-1</b>	<b>Layer-2</b>	<b>Layer-3</b>
2Z75	glmS ribozyme	2z75_1_259	B.A.104	O2'-O2'(2.65)	N1-N2G(2.94)	N6-O4'(3.02)
6TH6	Archaeal SSU rRNA	6th6_48_678	Aa.A.1239	O2'-O2'(3.48)	N1-N2G(3.04)	N6-O4'(3.55)
6TH6	Archaeal LSU rRNA	6th6_27_968	BA.A.1716.	O2'-O2'(3.1)	N1-N2G(2.89)	N6-O4'(3.34)
4WFL	Bacterial large SRP RNA	4wfl_0_354	A.G.76.	O2'-O2'(2.78)	-	N2-O4'(3.8)
5T83	Guanidine-I riboswitch	5t83_0_210	A.A.82.	O4'-O2'(3.31) O2'-O4'(3.29)	N3-O2'(2.73)	N6-O2'(3.16)
7D1A	Group II catalytic intron	7d1a_4_746	A.G.501.	O4'-O2'(2.91)	N1-O2'(2.3)	N2-O4'(2.71)
7EZ2	Group I catalytic intron	7ez2_0_400	N.A.115.	O4'-O2'(3.09)	O2'-O2'(3.78)	C2-O2'(3.75)