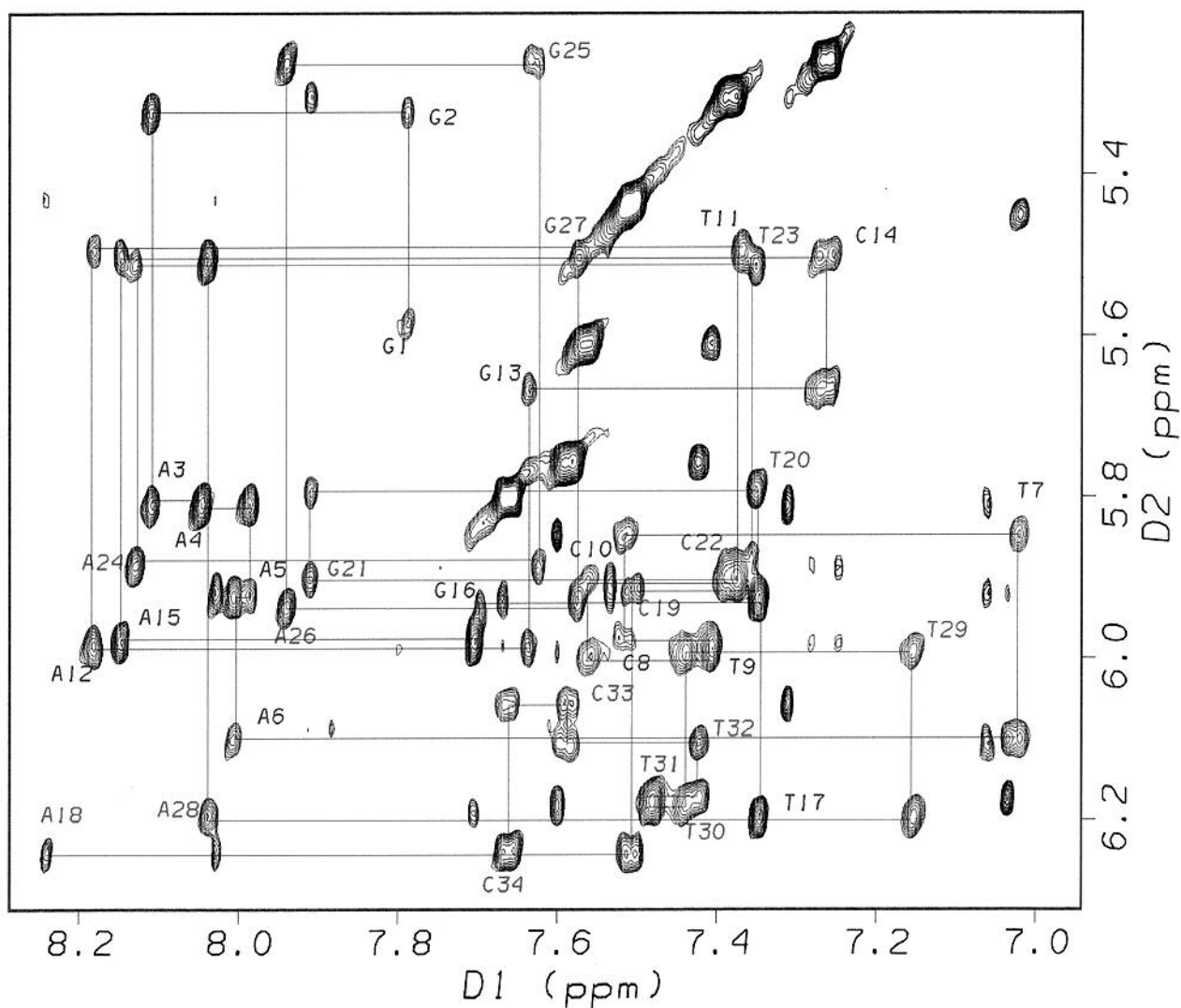


Supplementary material figure1 Region of 2D watergate NOESY spectrum (recorded at 500 MHz with mixing time of 200 ms) of U5-term in $^2\text{H}_2\text{O}$ - $\text{KH}_2\text{PO}_4/\text{Na}_2\text{HPO}_4$ buffer, pH6.6, 30°C, showing connectivities between sugar H1' protons and aromatic H6/8 protons. Lines illustrate the pathways of sequential assignments, for sake of clarity only intra-residue connectivities are labelled.



Supplementary material Table 1 Chemical shifts of non-exchangeable protons of U5-term at 30°C (ppm from TSP)

	H1'	H2'	H2''	H3'	H4'	H6/H8	H2/CH3/H5
G1	5.58	2.40	2.59	4.78	4.14	7.79	
G2	5.32	2.60	2.65	4.95	4.29	7.79	
A3	5.81	2.64	2.81	5.03	4.40	8.11	7.31
A4	5.81	2.58	2.83	5.04	4.42	8.05	7.06
A5	5.92	2.57	2.90	5.04	4.45	7.89	7.03
A6	6.10	2.46	2.91	4.98	4.46	8.00	7.59
T7	5.85	2.02	2.48	4.84	4.24	7.02	1.21
C8	5.97	2.08	2.52	4.78	4.20	7.52	5.44
T9	5.99	2.22	2.53	4.89	4.22	7.41	1.57
C10	5.90	2.07	2.44	4.78	4.14	7.56	5.61
T11	5.50	2.09	2.39	4.84	4.11	7.37	1.68
A12	5.98	2.71	2.87	5.03	4.37	8.18	7.27
G13	5.66	2.46	2.59	4.94	4.33	7.64	
C14	5.50	1.87	2.27	4.79	4.10	7.26	5.26
A15	5.98	2.68	2.84	5.01	4.36	8.14	7.53
G16	5.93	2.51	2.66	4.93	4.36	7.70	
T17	6.20	2.23	2.23	4.52	4.07	7.34	1.52
A18	6.24	2.72	2.82	4.85	4.28	8.24	8.04
C19	5.91	2.13	2.47	4.78	4.25	7.50	5.44
T20	5.79	2.15	2.49	4.89	4.18	7.34	1.63
G21	5.91	2.67	2.71	4.99	4.39	7.91	
C22	5.88	2.00	2.45	4.72	4.21	7.37	5.31
T23	5.51	2.06	2.35	4.83	4.11	7.36	1.63
A24	5.89	2.64	2.78	4.99	4.33	8.13	7.24
G25	5.26	2.47	2.57	4.94	4.28	7.62	
A26	5.94	2.52	2.81	4.99	4.36	7.94	7.67
G27	5.50	2.48	2.67	4.95	4.34	7.57	
A28	6.20	2.57	2.93	4.97	4.46	8.04	7.70
T29	5.99	2.06	2.61	4.86	4.23	7.15	1.24
T30	6.18	2.23	2.67	4.94	4.24	7.44	1.53
T31	6.18	2.22	2.67	4.94	4.32	7.48	1.62
T32	6.11	2.18	2.59	4.93	4.22	7.42	1.67
C33	6.06	2.22	2.48	4.87	4.18	7.58	5.76
C34	6.24	2.28	2.28	4.56	4.05	7.66	5.79