

Table. Experimental values of longitudinal (R_1) and transverse (R_2) relaxation rates and $NOEs$ for backbone amide ^{15}N nuclei in ribosome-associated cold shock response protein Yfia of *Escherichia coli* at 9.4 T, 11.7 T, and 14.1 T. Experimental uncertainties in relaxation rates are given in parentheses. Experimental uncertainties in NOE values were estimated to be ± 0.11 and ± 0.09 , at 9.4 T and 11.7 T, respectively.

Amino acid residue	9.4 T			11.7 T			14.1 T	
	R_1 (s^{-1})	R_2 (s^{-1})	NOE	R_1 (s^{-1})	R_2 (s^{-1})	NOE	R_1 (s^{-1})	R_2 (s^{-1})
Asn4	2.43 (0.04)	9.44 (0.22)	0.42	2.11 (0.06)	11.57 (0.24)	0.48	1.66 (0.06)	12.57 (0.20)
Thr6	2.57 (0.04)	11.49 (0.17)	0.87	2.02 (0.04)	12.60 (0.32)	0.67	1.66 (0.05)	15.57 (0.30)
Ser7	2.64 (0.04)	16.31 (0.20)	0.61	2.12 (0.05)	20.60 (0.36)	0.73	1.61 (0.06)	26.70 (0.39)
Lys8	2.55 (0.07)	11.75 (0.60)	0.81	2.04 (0.06)	11.45 (0.45)	0.44	1.83 (0.18)	14.11 (0.74)
Gln9	2.71 (0.08)	19.13 (1.04)	0.52	2.14 (0.07)	23.92 (0.68)	0.56	1.58 (0.08)	31.03 (0.95)
Met10	2.50 (0.08)	21.98 (1.25)	0.59	1.91 (0.10)	30.72 (4.05)	0.72	1.47 (0.12)	39.84 (3.04)
Glu11	2.39 (0.03)	9.13 (0.19)	0.61	2.01 (0.04)	9.21 (0.07)	0.61	1.71 (0.06)	10.39 (0.13)
Ile12	2.36 (0.03)	7.96 (0.06)	0.70	1.94 (0.03)	8.34 (0.04)	0.74	1.53 (0.02)	9.28 (0.05)
Thr13	2.31 (0.02)	7.94 (0.11)	0.62	1.86 (0.01)	8.04 (0.07)	0.69	1.53 (0.02)	8.90 (0.09)
Ala15	2.47 (0.04)	11.97 (0.10)	0.65	2.02 (0.06)	12.43 (0.22)	0.86	1.62 (0.07)	13.17 (0.12)
Ile16	2.45 (0.02)	10.58 (0.07)	0.71	1.90 (0.02)	10.87 (0.06)	0.85	1.53 (0.04)	11.57 (0.09)
Arg17	2.38 (0.02)	11.93 (0.16)	0.64	1.88 (0.03)	12.70 (0.23)	0.74	1.52 (0.04)	14.04 (0.14)
Gln18	2.31 (0.02)	12.13 (0.10)	0.67	1.77 (0.02)	12.92 (0.14)	0.81	1.43 (0.01)	14.11 (0.19)
His19	2.29 (0.02)	10.88 (0.07)	0.71	1.84 (0.02)	11.50 (0.15)	0.79	1.48 (0.02)	12.48 (0.11)
Val20	2.36 (0.02)	10.94 (0.11)	0.71	1.83 (0.02)	11.40 (0.10)	0.75	1.50 (0.03)	12.35 (0.12)
Ala21	2.32 (0.03)	11.62 (0.17)	0.71	1.77 (0.01)	11.29 (0.22)	0.70	1.47 (0.02)	12.16 (0.17)

Asp22	2.25 (0.01)	11.21 (0.09)	0.72	1.74 (0.01)	11.72 (0.08)	0.72	1.41 (0.01)	12.17 (0.12)
Arg23	2.41 (0.03)	11.02 (0.13)	0.65	1.86 (0.02)	11.69 (0.27)	0.67	1.53 (0.02)	12.30 (0.14)
Leu24	2.30 (0.02)	11.58 (0.13)	0.68	1.77 (0.03)	12.28 (0.14)	0.74	1.47 (0.02)	13.41 (0.07)
Ala25	2.25 (0.04)	18.50 (0.36)	0.65	1.75 (0.03)	23.20 (0.56)	0.74	1.43 (0.05)	26.42 (0.76)
Lys26	2.31 (0.02)	10.83 (0.08)	0.66	1.84 (0.01)	11.59 (0.12)	0.71	1.47 (0.02)	13.26 (0.11)
Leu27	2.31 (0.04)	17.72 (0.44)	0.58	1.83 (0.03)	22.77 (0.65)	0.75	1.57 (0.06)	29.35 (0.75)
Glu28	2.57 (0.05)	19.09 (0.54)	0.60	1.94 (0.07)	20.49 (2.17)	0.49	1.65 (0.09)	20.60 (0.81)
Lys29	2.39 (0.03)	10.86 (0.22)	0.65	1.85 (0.01)	11.00 (0.22)	0.71	1.52 (0.03)	11.92 (0.10)
Trp30	2.58 (0.04)	13.51 (0.30)	0.69	2.07 (0.02)	16.22 (0.58)	0.62	1.73 (0.03)	19.67 (0.45)
Asn36	2.65 (0.07)	13.81 (0.31)	0.67	2.29 (0.06)	19.16 (0.59)	0.82	1.79 (0.15)	21.02 (0.65)
His38	2.39 (0.03)	12.16 (0.17)	0.59	1.88 (0.03)	12.99 (0.27)	0.64	1.50 (0.03)	15.27 (0.18)
Ile39	2.63 (0.05)	12.16 (0.49)	0.70	2.10 (0.05)	14.17 (0.45)	0.67	1.75 (0.15)	17.59 (0.82)
Ile40	2.47 (0.06)	10.01 (0.23)	0.73	1.91 (0.03)	10.85 (0.18)	0.73	1.54 (0.03)	12.39 (0.22)
Leu41	2.62 (0.03)	9.77 (0.20)	0.76	2.09 (0.01)	9.99 (0.13)	0.78	1.72 (0.04)	12.00 (0.18)
Ser42	2.47 (0.03)	11.68 (0.23)	0.68	1.97 (0.03)	13.41 (0.10)	0.73	1.57 (0.02)	15.00 (0.16)
Lys43	2.53 (0.02)	7.93 (0.09)	0.71	2.02 (0.03)	8.19 (0.18)	0.63	1.64 (0.03)	8.17 (0.19)
Glu44	2.42 (0.02)	7.70 (0.08)	0.60	1.93 (0.01)	8.09 (0.15)	0.68	1.59 (0.02)	8.73 (0.11)
Gln46	2.37 (0.04)	7.78 (0.11)	0.50	2.00 (0.05)	7.85 (0.12)	0.60	1.66 (0.05)	8.56 (0.08)
Gly47	2.35 (0.02)	7.44 (0.03)	0.52	1.94 (0.02)	8.03 (0.04)	0.60	1.57 (0.02)	8.73 (0.05)
Phe48	2.55 (0.02)	8.68 (0.11)	0.67	2.00 (0.02)	8.86 (0.06)	0.73	1.65 (0.02)	9.33 (0.07)
Val49	2.42 (0.04)	10.30 (0.12)	0.72	1.91 (0.02)	10.67 (0.15)	0.76	1.50 (0.02)	11.22 (0.12)

Ala50	2.56 (0.03)	9.14 (0.10)	0.82	1.97 (0.02)	9.77 (0.14)	0.82	1.60 (0.02)	10.79 (0.14)
Asp51	2.44 (0.03)	10.13 (0.14)	0.68	1.82 (0.02)	10.01 (0.18)	0.77	1.48 (0.02)	11.12 (0.14)
Ala52	2.48 (0.02)	9.67 (0.12)	0.66	1.92 (0.02)	10.20 (0.06)	0.74	1.58 (0.02)	10.98 (0.11)
Thr53	2.4 (0.05)	15.40 (0.27)	0.52	1.93 (0.04)	18.96 (0.41)	0.74	1.61 (0.06)	23.51 (0.77)
Ile54	2.52 (0.05)	17.68 (0.51)	0.82	2.03 (0.03)	22.01 (0.82)	0.81	1.61 (0.05)	28.84 (1.08)
Asn55	2.47 (0.02)	10.02 (0.13)	0.69	2.05 (0.03)	11.78 (0.14)	0.66	1.67 (0.04)	13.11 (0.16)
Thr56	2.17 (0.02)	6.71 (0.09)	0.47	1.85 (0.02)	6.97 (0.11)	0.43	1.52 (0.02)	7.93 (0.10)
Asn58	2.44 (0.04)	7.74 (0.06)	0.59	2.02 (0.04)	8.09 (0.11)	0.61	1.67 (0.05)	8.82 (0.13)
Gly59	2.26 (0.02)	6.98 (0.09)	0.52	1.88 (0.03)	7.43 (0.05)	0.55	1.59 (0.04)	8.55 (0.09)
Val60	2.24 (0.02)	8.76 (0.09)	0.56	1.80 (0.01)	9.63 (0.09)	0.66	1.50 (0.02)	10.21 (0.05)
Leu61	2.48 (0.04)	9.21 (0.18)	0.69	1.98 (0.02)	9.74 (0.07)	0.76	1.62 (0.02)	11.14 (0.12)
Val62	2.30 (0.01)	10.45 (0.18)	0.54	1.80 (0.02)	11.40 (0.15)	0.56	1.46 (0.03)	13.23 (0.14)
Ala63	2.43 (0.02)	10.76 (0.13)	0.63	1.93 (0.02)	12.87 (0.21)	0.68	1.45 (0.10)	13.31 (0.26)
Ser64	2.48 (0.03)	9.32 (0.14)	0.70	2.06 (0.03)	9.82 (0.08)	0.84	1.65 (0.04)	10.90 (0.14)
Gly65	2.45 (0.02)	9.56 (0.16)	0.74	1.95 (0.02)	10.16 (0.15)	0.65	1.54 (0.02)	11.57 (0.16)
Lys66	2.28 (0.02)	8.13 (0.07)	0.56	1.89 (0.03)	8.60 (0.07)	0.63	1.56 (0.03)	9.50 (0.08)
His67	2.46 (0.02)	9.28 (0.01)	0.68	1.95 (0.02)	9.57 (0.08)	0.75	1.54 (0.01)	10.25 (0.10)
Glu68	2.46 (0.02)	9.18 (0.08)	0.68	1.96 (0.02)	9.58 (0.04)	0.73	1.59 (0.03)	10.33 (0.08)
Asp69	2.37 (0.03)	11.70 (0.37)	0.77	1.81 (0.03)	12.11 (0.39)	0.72	1.52 (0.03)	14.88 (0.26)
Met70	2.19 (0.02)	10.30 (0.20)	0.69	1.77 (0.02)	11.30 (0.22)	0.79	1.47 (0.02)	13.05 (0.14)
Tyr71	2.29 (0.01)	9.89 (0.07)	0.60	1.81 (0.02)	10.19 (0.09)	0.78	1.45 (0.03)	11.13 (0.07)

Thr72	2.34 (0.02)	11.13 (0.09)	0.66	1.86 (0.03)	11.80 (0.12)	0.80	1.52 (0.03)	13.37 (0.13)
Ala73	2.29 (0.02)	9.90 (0.16)	0.53	1.82 (0.02)	10.86 (0.25)	0.76	1.52 (0.02)	10.57 (0.38)
Ile74	2.35 (0.02)	10.79 (0.01)	0.67	1.82 (0.01)	11.08 (0.08)	0.84	1.50 (0.02)	11.60 (0.12)
Asn75	2.3 (0.02)	11.15 (0.07)	0.67	1.85 (0.02)	11.55 (0.08)	0.75	1.50 (0.02)	12.54 (0.13)
Glu76	2.29 (0.01)	11.88 (0.08)	0.67	1.79 (0.01)	12.39 (0.09)	0.81	1.42 (0.01)	12.76 (0.01)
Leu77	2.33 (0.01)	11.83 (0.16)	0.72	1.79 (0.01)	12.21 (0.22)	0.73	1.44 (0.02)	12.94 (0.17)
Ile78	2.45 (0.02)	10.93 (0.12)	0.67	1.87 (0.01)	11.20 (0.18)	0.76	1.53 (0.03)	12.30 (0.11)
Asn79	2.33 (0.01)	11.52 (0.08)	0.74	1.80 (0.02)	12.19 (0.11)	0.76	1.45 (0.01)	12.72 (0.13)
Lys80	2.30 (0.02)	10.93 (0.19)	0.63	1.81 (0.02)	11.28 (0.19)	0.68	1.57 (0.03)	9.02 (0.23)
Leu81	2.36 (0.02)	11.27 (0.12)	0.65	1.80 (0.02)	11.63 (0.13)	0.79	1.49 (0.09)	12.27 (0.12)
Glu82	2.32 (0.02)	11.16 (0.09)	0.69	1.82 (0.02)	11.60 (0.16)	0.67	1.48 (0.02)	12.25 (0.10)
Arg83	2.21 (0.01)	11.63 (0.07)	0.69	1.73 (0.01)	12.17 (0.16)	0.76	1.40 (0.08)	12.62 (0.09)
Gln84	2.29 (0.02)	11.42 (0.14)	0.65	1.74 (0.02)	11.79 (0.06)	0.73	1.44 (0.02)	12.43 (0.14)
Leu85	2.30 (0.02)	10.77 (0.21)	0.68	1.82 (0.02)	11.50 (0.21)	0.69	1.45 (0.02)	12.72 (0.33)
Asn86	2.31 (0.01)	11.52 (0.11)	0.72	1.81 (0.02)	12.35 (0.15)	0.70	1.49 (0.02)	13.65 (0.13)
Lys87	2.24 (0.02)	10.67 (0.06)	0.51	1.74 (0.01)	10.90 (0.09)	0.68	1.47 (0.01)	11.47 (0.07)
Leu88	2.31 (0.01)	10.13 (0.08)	0.56	1.84 (0.01)	10.46 (0.08)	0.50	1.53 (0.02)	10.90 (0.08)
Gln89	2.45 (0.02)	8.82 (0.01)	0.53	2.03 (0.03)	9.38 (0.08)	0.53	1.67 (0.03)	10.18 (0.06)
His90	2.43 (0.06)	8.80 (0.42)	0.40	2.18 (0.09)	9.39 (0.12)	0.37	1.75 (0.11)	11.78 (0.15)
Lys91	2.31 (0.05)	6.05 (0.12)	-0.05	2.13 (0.08)	6.79 (0.15)	0.22	1.93 (0.14)	7.75 (0.14)
Gly92	2.28 (0.07)	4.95 (0.12)	-0.03	2.10 (0.07)	5.20 (0.15)	0.06	1.86 (0.15)	6.38 (0.13)

Glu93	2.21 (0.04)	5.09 (0.09)	0.11	2.07 (0.06)	5.30 (0.08)	0.06	1.79 (0.01)	6.21 (0.11)
Arg95	2.08 (0.04)	4.09 (0.04)	-0.27	1.96 (0.07)	4.36 (0.07)	-0.11	1.78 (0.10)	4.92 (0.01)
Arg96	2.11 (0.05)	3.94 (0.07)	-0.38	2.02 (0.08)	4.14 (0.09)	-0.15	1.86 (0.11)	4.88 (0.10)
Ala97	2.03 (0.04)	3.72 (0.08)	-0.34	1.96 (0.07)	3.95 (0.07)	-0.010	1.79 (0.11)	4.55 (0.20)
Ala98	1.92 (0.05)	3.61 (0.11)	-0.38	1.88 (0.07)	3.65 (0.14)	-0.17	1.69 (0.11)	4.78 (0.15)
Thr99	1.86 (0.05)	2.95 (0.08)	-0.65	1.82 (0.07)	3.38 (0.10)	-0.20	1.72 (0.15)	4.17 (0.11)
Ser100	1.99 (0.05)	4.04 (0.21)	-0.67	1.91 (0.07)	3.96 (0.14)	-0.11	1.76 (0.13)	4.62 (0.14)
Val101	1.93 (0.05)	2.78 (0.02)	-0.68	1.90 (0.07)	3.14 (0.04)	-0.22	1.78 (0.10)	3.73 (0.09)
Lys102	2.00 (0.04)	3.00 (0.06)	-0.55	1.96 (0.06)	3.22 (0.06)	-0.21	1.77 (0.07)	4.70 (0.14)
Asp103	1.95 (0.04)	3.02 (0.06)	-0.61	1.92 (0.06)	3.09 (0.03)	-0.46	1.79 (0.08)	3.62 (0.07)
Asn105	2.02 (0.04)	3.08 (0.03)	-0.54	2.01 (0.07)	3.30 (0.05)	-0.41	1.83 (0.10)	3.92 (0.08)
Phe106	1.94 (0.03)	2.88 (0.02)	-0.57	1.92 (0.05)	3.14 (0.03)	-0.36	1.77 (0.06)	3.71 (0.06)
Val107	1.77 (0.01)	2.63 (0.03)	-0.52	1.72 (0.02)	2.62 (0.01)	-0.28	1.58 (0.01)	3.07 (0.04)
Glu108	1.87 (0.02)	2.82 (0.04)	-0.49	1.78 (0.03)	2.94 (0.05)	-0.30	1.61 (0.02)	3.09 (0.06)
Glu109	1.77 (0.02)	2.39 (0.01)	-0.70	1.71 (0.02)	2.58 (0.04)	-0.79	1.59 (0.01)	2.88 (0.05)
Val110	1.58 (0.01)	2.15 (0.02)	-0.88	1.50 (0.01)	2.20 (0.02)	-0.56	1.45 (0.01)	2.52 (0.01)
Glu111	1.60 (0.01)	2.00 (0.01)	-1.12	1.56 (0.02)	2.17 (0.03)	-0.56	1.49 (0.01)	2.53 (0.03)
Glu112	1.46 (0.01)	1.66 (0.04)	-1.13	1.42 (0.02)	1.84 (0.02)	-0.81	1.27 (0.06)	2.18 (0.02)
Glu113	1.05 (0.01)	1.34 (0.02)	-1.86	1.02 (0.01)	1.32 (0.04)	-1.63	1.07 (0.01)	1.50 (0.01)