Supporting information for:
Protein structural variation in computational models and crystallographic data

Dmitry A. Kondrashov, Adam W. Van Wynsberghe, Ryan M. Bannen,
Qiang Cui, and George N. Phillips, Jr.
(Dated: December 11, 2006)

TABLE I: Optimization of cutoff distances for DNM

DNM	dot	overlap	IC
5 Å	0.655	0.450	0.540
7 Å	0.659	0.572	0.641
9 Å	0.650	0.575	0.655
11 Å	0.644	0.575	0.653

TABLE II: Optimization of cutoff distances for ANM

ANM	dot	overlap	IC
10 Å	0.574	0.565	0.621
12 Å	0.564	0.532	0.642
14 Å	0.557	0.519	0.668
16 Å	0.564	0.533	0.674

TABLE III: Optimization of cutoff distances for ElNemo

ElNemo	dot	overlap	IC
5 Å	0.641	0.583	0.680
7 Å	0.626	0.571	0.672
9 Å	0.621	0.564	0.645
11 Å	0.623	0.555	0.604

Table IV: Summary of structural data

PDB ID	SCOP family	all chains	usable	anisotropic	<anis>	refinement
1a6m	a.1.1.2	151	104	44	0.35935	shelx
1byi	c.37.1.10	224	139	37	0.39236	shelx
1c75	a.3.1.1	71	38	21	0.40144	shelx
1c7k	d.92.1.1	132	85	41	0.40166	shelx
1ea7	c.41.1.1	310	251	150	0.39188	shelx
1eb6	d.92.1.12	177	125	4	0.48257	refmac
1exr	a.39.1.5	148	55	39	0.31676	shelx
1f94	g.7.1.1	63	23	0	0	shelx
1f9y	d.58.30.1	158	97	42	0.41108	shelx
1g4i	a.133.1.2	123	61	17	0.36853	shelx
1g66	c.69.1.30	207	145	65	0.41016	shelx
1g6x	g.8.1.1	58	21	7	0.41169	shelx
1ga6	c.41.1.2	372/3	315	131	0.39593	shelx
1gkm	a.127.1.2	509	373	250	0.35823	shelx
1gqv	d.5.1.1	135	71	32	0.37521	shelx
1gvk	b.47.1.2	240/4	169	38	0.39058	shelx
1gwe	e.5.1.1	503	301	93	0.40309	refmac
1hj9	b.47.1.2	223	168	28	0.4191	shelx
1i1w	c.1.8.3	303	238	67	0.43425	shelx
1iqz	d.58.1.4	81	60	23	0.35991	shelx
1iua	g.35.1.1	83	29	17	0.39857	shelx
1ix9	a.2.11.1/d.44.1.1	205/205	331	222	0.35627	shelx
1ixh	c.94.1.1	321	271	126	0.40954	shelx
1j0p	a.138.1.1	108	71	30	0.41371	shelx
1jfb	a.104.1.1	404	314	97	0.39815	shelx
1k5c	b.80.1.3	335	288	9	0.44981	shelx
1kth	g.8.1.1	58	21	5	0.40353	shelx
1kwf	a.102.1.2	363	288	72	0.40215	shelx
1l9l	a.64.1.1	74	33	4	0.48251	shelx
1lkk	d.93.1.1	105/5	55	24	0.41967	shelx
1lni	d.1.1.2	96/96	103	68	0.33828	shelx
1lug	b.74.1.1	259	187	112	0.35334	shelx
1m1q	a.138.1.3	91	47	24	0.39032	shelx
1m40	e.3.1.1	263	95	6	0.44647	shelx
1mc2	a.133.1.2	122	77	44	0.38122	shelx
1mj5	c.69.1.8	302	211	176	0.3491	shelx
1muw	c.1.15.3	386	202	102	0.37052	shelx
1mwq	d.58.4.7	101/101	147	43	0.39848	shelx
1n4w	c.3.1.2/d.16.1.1	504	404	98	0.43339	shelx
1n55	c.1.1.1	251	181	45	0.41803	shelx
1nki	d.32.1.2	135/135	203	63	0.40563	shelx
1nls	b.29.1.1	237	166	137	0.38206	shelx
1nwz	d.110.3.1	125	58	25	0.37105	shelx
1o7j	c.88.1.1	327x4	1237	593	0.41875	shelx
1oai	a.5.2.3	59/9	27	6	0.45643	refmac
1od3	b.18.1.10	168	90	20	0.44612	refmac
1ok0	b.5.1.1	74	30	17	0.40461	shelx
1pq7	b.47.1.2	224	163	35	0.4189	shelx
1r2m	b.138.1.1	71/71	85	0	0	refmac
1r6j	b.36.1.1	82	27	3	0.45907	shelx
1rb9	g.41.5.1	53	18	8	0.41841	shelx
1rtq	c.56.5.4	299	245	114	0.38605	shelx
1sfd	b.6.1.1	105/105	164	81	0.35301	shelx
1ssx	b.47.1.1	198	134	33	0.40574	shelx
1tg0	b.34.2.1	68	29	25	0.36794	shelx
1tqg	a.24.10.3	105	31	19	0.34591	shelx
1tt8	d.190.1.1	164	117	71	0.40676	shelx
1u2h	b.1.1.4	99	47	12	0.44905	refmac
1ufy	d.79.1.2	122	63	33	0.38332	shelx
1ug6	c.1.8.4	431	385	96	0.44551	refmac
1unq	b.55.1.1	125	69	18	0.39155	shelx

1us0	c.1.7.1	316	203	91	0.38627	shelx
1v0l	c.1.8.3	313	241	61	0.43297	refmac
1v6p	g.7.1.1	62/62	41	9	0.37781	shelx
1vbw	d.40.1.1	68	20	14	0.3859	shelx
1vyr	c.1.4.1	364	317	127	0.39561	shelx
1vyy	b.115.1.1	113	59	3	0.46928	refmac
1w0n	b.18.1.10	131	72	30	0.44108	refmac
1x6z	d.24.1.1	123	58	0	0	refmac
1x8q	b.60.1.1	184	94	41	0.38158	shelx
1xmk	a.4.5.19	79	34	21	0.40913	shelx
1y55	b.61.1.1	126/126	167	0	0	refmac
1ylj	e.3.1.1	263	193	56	0.41735	shelx
1zk4	c.2.1.2	251	146	0	0	refmac
1zzk	d.51.1.1	82	32	19	0.37158	shelx
2bt9	b.24.1.1	90x3	210	74	0.39931	shelx
2bw4	b.6.1.3	340	167	28	0.41039	refmac
2cws	b.29.1.18	237	159	76	0.3842	shelx
2f01	b.61.1.1	127/127	169	73	0.41268	shelx
2fdn	d.58.1.1	55	19	5	0.39841	shelx
2pvb	a.39.1.4	107	55	15	0.44366	shelx
3lzt	d.2.1.2	129	67	37	0.39768	shelx
7a3h	c.1.8.3	303	243	0	0	refmac

Table V: Average anisotropy for residues with experimental anisotropy < 0.5

PDB ID	number	experiment	HCA	ANM	ElN	DNM	BNM
1a6m	44	0.359	0.27	0.51	0.293	0.248	0.378
1byi	37	0.392	0.317	0.558	0.333	0.321	0.306
1c75	21	0.401	0.219	0.557	0.391	0.264	0.431
1c7k	41	0.402	0.31	0.591	0.439	0.348	0.364
1ea7	150	0.392	0.337	0.664	0.461	0.406	0.38
1eb6	4	0.483	0.232	0.51	0.262	0.317	0.312
1exr	39	0.317	0.088	0.076	0.082	0.058	0.228
1f94	0	0	0	0	0	0.000	0
1f9y	42	0.411	0.351	0.568	0.457	0.319	0.37
1g4i	17	0.369	0.29	0.394	0.333	0.255	0.294
1g66	65	0.41	0.33	0.629	0.46	0.368	0.371
1g6x	7	0.412	0.19	0.272	0.262	0.245	0.288
1ga6	131	0.396	0.284	0.546	0.359	0.315	0.31
1gkm	250	0.358	0.261	0.588	0.232	0.232	0.276
1gqv	32	0.375	0.224	0.412	0.32	0.262	0.252
1gvk	38	0.391	0.223	0.513	0.376	0.283	0.298
1gwe	93	0.403	0.223	0.218	0.019	0.020	0.34
1hj9	28	0.419	0.22	0.511	0.34	0.257	0.247
1i1w	67	0.434	0.302	0.587	0.392	0.335	0.375
1iqz	23	0.36	0.205	0.446	0.394	0.307	0.319
1iua	17	0.399	0.289	0.585	0.466	0.338	0.369
1ix9	222	0.356	0.289	0.583	0.283	0.287	0.277
1ixh	126	0.41	0.319	0.622	0.31	0.354	0.322
1j0p	30	0.414	0.256	0.551	0.309	0.304	0.357
1jfb	97	0.398	0.247	0.548	0.249	0.265	0.23
1k5c	9	0.45	0.274	0.563	0.336	0.340	0.391
1kth	5	0.404	0.2	0.349	0.383	0.258	0.272
1kwf	72	0.402	0.291	0.618	0.435	0.343	0.391
1l9l	4	0.483	0.199	0.443	0.35	0.243	0.334
1lkk	24	0.42	0.236	0.597	0.523	0.399	0.395
1lni	68	0.338	0.2	0.441	0.128	0.136	0.109
1lug	112	0.353	0.252	0.542	0.383	0.313	0.313
1m1q	24	0.39	0.204	0.39	0.322	0.261	0.374
1m40	6	0.446	0.317	0.512	0.424	0.313	0.355
1mc2	44	0.381	0.259	0.475	0.308	0.259	0.322
1mj5	176	0.349	0.429	0.714	0.545	0.456	0.43
1muw	102	0.371	0.241	0.369	0.147	0.088	0.184
1mwq	43	0.398	0.257	0.459	0.299	0.242	0.227
1n4w	98	0.433	0.359	0.619	0.399	0.410	0.35
1n55	45	0.418	0.251	0.579	0.345	0.304	0.33
1nki	63	0.406	0.27	0.514	0.271	0.282	0.282
1nls	137	0.382	0.33	0.668	0.477	0.420	0.333
1nwz	25	0.371	0.262	0.627	0.468	0.336	0.371
1o7j	593	0.419	0.332	0.7	0.37	0.401	0.356
1oai	6	0.456	0.356	0.424	0.29	0.336	0.441
1od3	20	0.446	0.265	0.61	0.357	0.305	0.405
1ok0	17	0.405	0.272	0.387	0.41	0.280	0.31
1pq7	35	0.419	0.249	0.559	0.355	0.318	0.304
1r2m	0	0	0	0	0	0.000	0
1r6j	3	0.459	0.248	0.633	0.38	0.245	0.281
1rb9	8	0.418	0.183	0.432	0.395	0.297	0.308
1rtq	114	0.386	0.295	0.612	0.439	0.353	0.339
1sfd	81	0.353	0.241	0.495	0.183	0.200	0.133
1ssx	33	0.406	0.262	0.548	0.376	0.297	0.297
1tg0	25	0.368	0.281	0.607	0.513	0.311	0.38
1tqg	19	0.346	0.312	0.558	0.392	0.259	0.355
1tt8	71	0.407	0.27	0.634	0.481	0.341	0.362
1u2h	12	0.449	0.239	0.418	0.362	0.283	0.316
1ufy	33	0.383	0.27	0.516	0.37	0.283	0.325
1ug6	96	0.446	0.311	0.613	0.402	0.382	0.345
1unq	18	0.392	0.208	0.38	0.32	0.215	0.246

1us0	91	0.386	0.323	0.595	0.379	0.367	0.346
1v0l	61	0.433	0.349	0.622	0.438	0.380	0.395
1v6p	9	0.378	0.149	0.477	0.293	0.262	0.244
1vbw	14	0.386	0.29	0.403	0.441	0.300	0.367
1vyr	127	0.396	0.32	0.594	0.343	0.312	0.343
1vyy	3	0.469	0.235	0.533	0.405	0.304	0.341
1w0n	30	0.441	0.204	0.588	0.397	0.271	0.288
1x6z	0	0	0	0	0	0.000	0
1x8q	41	0.382	0.261	0.557	0.396	0.309	0.334
1xmk	21	0.409	0.283	0.483	0.401	0.319	0.361
1y55	0	0	0	0	0	0.000	0
1ylj	56	0.417	0.276	0.566	0.404	0.324	0.343
1zk4	0	0	0	0	0	0.000	0
1zzk	19	0.372	0.245	0.424	0.416	0.244	0.309
2bt9	74	0.399	0.25	0.594	0.306	0.254	0.252
2bw4	28	0.41	0.144	0.307	0.171	0.003	0.273
2cws	76	0.384	0.32	0.572	0.377	0.304	0.305
2f01	73	0.413	0.248	0.573	0.355	0.292	0.263
2fdn	5	0.398	0.338	0.539	0.442	0.436	0.368
2pvb	15	0.444	0.237	0.601	0.408	0.280	0.373
3lzt	37	0.398	0.302	0.551	0.432	0.315	0.321
7a3h	0	0	0	0	0	0.000	0

Table VI: Average dot product by structure (P-values for hypothesis that prediction is no better from random).

PDB ID	number	HCA	ANM	ElN	DNM	BNM
1a6m	44	0.529 (2.66E-01)	0.441 (9.04E-01)	0.463 (7.85E-01)	0.548 (1.55E-01)	0.612 (3.97E-03)
1byi	37	0.69 (6.72E-05)	0.601 (1.71E-02)	0.689 (1.18E-04)	0.710 (4.11E-06)	0.694 (3.43E-05)
1c75	21	0.623 (3.42E-02)	0.53 (3.47E-01)	0.399 (9.41E-01)	0.546 (2.67E-01)	0.655 (2.53E-02)
1c7k	41	0.506 (4.57E-01)	0.627 (2.86E-03)	0.702 (1.39E-05)	0.637 (3.33E-03)	0.564 (9.72E-02)
1ea7	150	0.577 (1.64E-03)	0.639 (1.03E-07)	0.649 (1.37E-09)	0.656 (5.89E-10)	0.595 (8.97E-05)
1eb6	4	0.754 (4.54E-02)	0.604 (2.24E-01)	0.822 (6.63E-03)	0.758 (1.12E-01)	0.729 (7.71E-02)
1exr	39	0.588 (3.04E-02)	0.684 (1.69E-05)	0.74 (5.22E-08)	0.766 (1.60E-09)	0.573 (6.05E-02)
1f94	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1f9y	42	0.487 (6.00E-01)	0.466 (7.78E-01)	0.565 (1.02E-01)	0.534 (2.44E-01)	0.592 (2.41E-02)
1g4i	17	0.718 (2.62E-03)	0.624 (9.13E-02)	0.741 (2.21E-03)	0.819 (1.64E-05)	0.858 (9.02E-08)
1g66	65	0.694 (2.25E-07)	0.52 (2.97E-01)	0.632 (1.90E-04)	0.625 (7.51E-04)	0.677 (5.88E-06)
1g6x	7	0.689 (2.52E-02)	0.799 (2.29E-03)	0.854 (6.86E-05)	0.804 (2.83E-03)	0.854 (8.26E-04)
1ga6	131	0.586 (3.92E-04)	0.604 (6.28E-05)	0.753 (1.89E-21)	0.709 (1.67E-14)	0.697 (4.80E-15)
1gkm	250	0.65 (1.08E-16)	0.567 (5.13E-05)	0.718 (2.48E-31)	0.746 (3.44E-41)	0.673 (4.49E-19)
1gqv	32	0.611 (3.79E-02)	0.675 (1.66E-03)	0.839 (5.97E-10)	0.833 (5.47E-11)	0.811 (7.28E-09)
1gvk	38	0.578 (9.00E-02)	0.622 (1.82E-02)	0.636 (5.06E-03)	0.664 (9.04E-04)	0.633 (1.08E-03)
1gwe	93	0.634 (7.16E-06)	0.616 (1.11E-04)	0.69 (1.24E-12)	0.645 (9.65E-09)	0.584 (2.27E-03)
1hj9	28	0.678 (4.05E-03)	0.683 (5.47E-04)	0.716 (3.23E-04)	0.772 (1.49E-06)	0.726 (4.67E-04)
1i1w	67	0.624 (6.11E-04)	0.493 (5.68E-01)	0.629 (1.10E-04)	0.650 (4.72E-05)	0.619 (7.10E-04)
1iqz	23	0.609 (5.52E-02)	0.692 (1.95E-03)	0.707 (1.18E-03)	0.738 (8.67E-04)	0.675 (3.64E-03)
1iua	17	0.497 (5.18E-01)	0.493 (5.39E-01)	0.457 (7.04E-01)	0.638 (2.65E-02)	0.623 (5.46E-02)
1ix9	222	0.519 (1.79E-01)	0.533 (5.03E-02)	0.577 (1.20E-05)	0.617 (3.91E-11)	0.562 (7.30E-04)
1ixh	126	0.494 (5.82E-01)	0.486 (6.96E-01)	0.548 (4.81E-02)	0.503 (4.54E-01)	0.575 (6.01E-03)
1j0p	30	0.526 (3.31E-01)	0.668 (1.37E-03)	0.733 (5.79E-06)	0.681 (3.11E-04)	0.765 (1.59E-06)
1jfb	97	0.629 (2.21E-05)	0.592 (2.25E-03)	0.721 (4.04E-12)	0.718 (3.09E-11)	0.745 (6.79E-14)
1k5c	9	0.616 (1.54E-01)	0.661 (8.59E-02)	0.553 (3.10E-01)	0.683 (5.68E-02)	0.622 (7.60E-02)
1kth	5	0.632 (2.20E-01)	0.643 (9.35E-02)	0.747 (5.77E-02)	0.733 (6.31E-02)	0.826 (1.31E-02)
1kwf	72	0.704 (2.24E-08)	0.596 (3.19E-03)	0.666 (3.60E-06)	0.659 (1.15E-05)	0.7 (8.69E-09)
1l9l	4	0.634 (2.27E-01)	0.387 (6.92E-01)	0.615 (1.52E-01)	0.790 (3.36E-04)	0.438 (6.34E-01)
1lkk	24	0.579 (9.68E-02)	0.533 (2.87E-01)	0.471 (6.73E-01)	0.600 (4.00E-02)	0.606 (3.87E-02)
1lni	68	0.603 (6.65E-04)	0.502 (4.82E-01)	0.643 (1.74E-05)	0.597 (4.44E-03)	0.573 (1.51E-02)
1lug	112	0.549 (4.99E-02)	0.538 (9.78E-02)	0.622 (2.84E-05)	0.626 (8.60E-06)	0.659 (8.15E-08)
1m1q	24	0.453 (8.28E-01)	0.758 (1.08E-05)	0.765 (3.27E-05)	0.702 (7.91E-04)	0.672 (5.71E-03)
1m40	6	0.515 (4.53E-01)	0.692 (5.99E-02)	0.557 (3.53E-01)	0.607 (2.51E-01)	0.609 (1.96E-01)
1mc2	44	0.747 (2.52E-08)	0.616 (7.17E-03)	0.758 (1.66E-09)	0.787 (2.54E-11)	0.746 (2.85E-09)
1mj5	176	0.502 (4.68E-01)	0.513 (2.76E-01)	0.476 (8.64E-01)	0.488 (6.91E-01)	0.549 (1.69E-02)
1muw	102	0.599 (9.48E-04)	0.468 (8.79E-01)	0.611 (9.10E-05)	0.600 (4.99E-04)	0.616 (3.55E-05)
1mwq	43	0.719 (2.98E-06)	0.599 (2.97E-02)	0.846 (3.62E-15)	0.774 (1.82E-08)	0.826 (6.43E-13)
1n4w	98	0.607 (2.23E-04)	0.626 (7.71E-05)	0.608 (5.64E-04)	0.681 (2.34E-10)	0.665 (1.49E-08)
1n55	45	0.649 (1.65E-04)	0.634 (3.59E-03)	0.748 (7.28E-08)	0.750 (4.60E-08)	0.744 (2.92E-07)
1nki	63	0.65 (8.99E-05)	0.61 (4.38E-03)	0.725 (7.10E-09)	0.748 (1.35E-11)	0.734 (6.01E-11)
1nls	137	0.65 (9.00E-09)	0.532 (1.24E-01)	0.662 (2.63E-10)	0.643 (7.46E-08)	0.71 (2.76E-15)
1nwz	25	0.616 (4.45E-02)	0.439 (9.03E-01)	0.634 (1.40E-02)	0.600 (7.47E-02)	0.663 (3.72E-03)
1o7j	593	0.53 (9.22E-03)	0.553 (1.24E-05)	0.602 (3.66E-16)	0.598 (2.86E-15)	0.613 (2.48E-19)
1oai	6	0.698 (7.59E-02)	0.45 (6.30E-01)	0.648 (2.03E-02)	0.550 (3.18E-01)	0.833 (5.43E-03)
1od3	20	0.519 (3.99E-01)	0.599 (1.15E-01)	0.78 (1.77E-05)	0.683 (4.49E-03)	0.702 (1.08E-03)
1ok0	17	0.723 (1.81E-03)	0.566 (2.00E-01)	0.538 (3.22E-01)	0.623 (6.31E-02)	0.595 (1.52E-01)
1pq7	35	0.727 (7.45E-06)	0.632 (3.83E-03)	0.663 (1.57E-03)	0.768 (3.12E-07)	0.708 (2.98E-06)
1r2m	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1r6j	3	0.639 (1.61E-01)	0.933 (9.74E-05)	0.862 (2.31E-02)	0.945 (9.11E-04)	0.936 (1.44E-03)
1rb9	8	0.381 (8.59E-01)	0.639 (1.74E-01)	0.752 (8.57E-03)	0.651 (6.62E-02)	0.535 (3.50E-01)
1rtq	114	0.605 (1.23E-04)	0.568 (1.22E-02)	0.589 (1.85E-03)	0.625 (7.85E-06)	0.63 (3.21E-06)
1sfd	81	0.593 (1.19E-03)	0.571 (2.41E-02)	0.748 (3.04E-16)	0.667 (1.01E-06)	0.643 (4.89E-06)
1ssx	33	0.715 (4.59E-06)	0.576 (8.87E-02)	0.63 (6.95E-03)	0.760 (1.67E-06)	0.742 (4.93E-07)
1tg0	25	0.591 (6.19E-02)	0.563 (1.34E-01)	0.61 (1.60E-02)	0.639 (5.86E-03)	0.603 (5.07E-02)
1tqg	19	0.685 (1.21E-02)	0.719 (1.63E-03)	0.537 (2.99E-01)	0.569 (1.37E-01)	0.463 (7.25E-01)
1tt8	71	0.708 (2.30E-08)	0.584 (9.01E-03)	0.646 (1.02E-05)	0.729 (1.06E-10)	0.707 (1.57E-09)
1u2h	12	0.516 (4.33E-01)	0.635 (2.66E-02)	0.638 (7.60E-02)	0.487 (5.56E-01)	0.686 (2.52E-02)
1ufy	33	0.76 (5.12E-07)	0.677 (5.57E-04)	0.747 (1.18E-06)	0.797 (2.92E-10)	0.816 (8.29E-12)

1ug6	96	0.678 (1.57E-08)	0.592 (3.82E-03)	0.71 (7.57E-12)	0.651 (1.32E-07)	0.704 (2.44E-12)
1unq	18	0.734 (4.22E-04)	0.523 (4.02E-01)	0.818 (4.54E-06)	0.794 (5.26E-06)	0.713 (5.12E-03)
1us0	91	0.575 (9.73E-03)	0.531 (1.64E-01)	0.552 (6.15E-02)	0.578 (6.97E-03)	0.717 (7.86E-12)
1v0l	61	0.631 (1.14E-03)	0.445 (9.34E-01)	0.6 (7.26E-03)	0.556 (8.85E-02)	0.672 (7.53E-06)
1v6p	9	0.695 (4.26E-02)	0.661 (6.58E-02)	0.605 (1.12E-01)	0.670 (4.30E-02)	0.623 (1.48E-01)
1vbw	14	0.591 (1.33E-01)	0.427 (8.25E-01)	0.57 (1.91E-01)	0.569 (2.31E-01)	0.689 (5.82E-03)
1vyr	127	0.631 (2.34E-06)	0.554 (2.31E-02)	0.665 (8.02E-09)	0.712 (4.66E-15)	0.716 (4.39E-17)
1vyy	3	0.735 (1.54E-01)	0.559 (3.73E-01)	0.577 (3.71E-01)	0.551 (4.23E-01)	0.755 (4.20E-03)
1w0n	30	0.617 (2.67E-02)	0.623 (1.60E-02)	0.623 (1.80E-02)	0.649 (1.01E-02)	0.72 (6.89E-05)
1x6z	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1x8q	41	0.682 (2.36E-04)	0.62 (3.72E-03)	0.624 (1.16E-02)	0.649 (1.32E-03)	0.7 (3.18E-05)
1xmk	21	0.613 (4.49E-02)	0.601 (3.92E-02)	0.717 (1.75E-04)	0.718 (2.06E-04)	0.713 (1.03E-04)
1y55	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1ylj	56	0.656 (3.54E-04)	0.552 (1.20E-01)	0.676 (1.65E-05)	0.771 (1.58E-12)	0.74 (8.65E-09)
1zk4	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1zzk	19	0.62 (3.77E-02)	0.538 (3.01E-01)	0.505 (4.69E-01)	0.648 (2.32E-02)	0.858 (3.49E-08)
2bt9	74	0.613 (6.43E-04)	0.584 (1.11E-02)	0.774 (4.26E-15)	0.703 (2.20E-09)	0.729 (6.82E-13)
2bw4	28	0.729 (5.94E-06)	0.458 (7.45E-01)	0.486 (5.91E-01)	0.511 (4.29E-01)	0.638 (1.08E-02)
2cws	76	0.657 (1.41E-05)	0.619 (5.81E-04)	0.747 (1.43E-12)	0.759 (4.47E-15)	0.68 (3.02E-08)
2f01	73	0.669 (5.52E-07)	0.499 (5.14E-01)	0.511 (3.83E-01)	0.587 (5.30E-03)	0.652 (1.79E-06)
2fdn	5	0.413 (9.03E-01)	0.484 (5.46E-01)	0.516 (4.62E-01)	0.658 (1.19E-01)	0.432 (6.58E-01)
2pvb	15	0.709 (2.83E-03)	0.587 (1.70E-01)	0.75 (5.55E-04)	0.746 (1.02E-03)	0.813 (1.19E-05)
3lzt	37	0.58 (3.33E-02)	0.533 (2.58E-01)	0.55 (1.59E-01)	0.611 (4.16E-03)	0.529 (2.82E-01)
7a3h	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)

Table VII: Average overlap fraction by structure (P-values for hypothesis that prediction is no better from random).

PDB ID	number	HCA	ANM	EIN	DNM	BNM
1a6m	44	0.484 (6.26E-09)	0.53 (1.10E-07)	0.476 (6.27E-06)	0.500 (2.25E-07)	0.598 (3.64E-13)
1byi	37	0.572 (7.57E-10)	0.546 (3.89E-07)	0.631 (8.62E-13)	0.621 (3.66E-12)	0.625 (4.21E-12)
1c75	21	0.445 (6.01E-03)	0.499 (7.87E-04)	0.342 (1.72E-01)	0.427 (1.20E-02)	0.565 (2.59E-05)
1c7k	41	0.422 (1.18E-03)	0.568 (8.65E-10)	0.59 (1.75E-10)	0.543 (4.19E-09)	0.543 (7.63E-09)
1ea7	150	0.535 (1.88E-24)	0.547 (1.12E-27)	0.605 (8.11E-35)	0.614 (4.57E-36)	0.568 (1.24E-30)
1eb6	4	0.662 (1.13E-02)	0.882 (3.08E-05)	0.74 (1.47E-03)	0.736 (4.01E-03)	0.684 (1.39E-02)
1exr	39	0.399 (1.26E-03)	0.397 (5.82E-04)	0.415 (1.51E-04)	0.374 (5.96E-03)	0.569 (3.35E-09)
1f94	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1f9y	42	0.443 (2.51E-04)	0.414 (9.72E-04)	0.488 (2.15E-06)	0.465 (4.44E-05)	0.521 (2.48E-09)
1g4i	17	0.535 (4.83E-04)	0.726 (1.02E-06)	0.738 (9.88E-10)	0.705 (2.20E-07)	0.773 (3.22E-08)
1g66	65	0.592 (1.83E-16)	0.532 (4.99E-14)	0.566 (2.22E-13)	0.583 (8.69E-17)	0.618 (8.58E-19)
1g6x	7	0.496 (6.94E-03)	0.778 (1.05E-05)	0.708 (5.64E-05)	0.630 (6.32E-04)	0.721 (1.01E-04)
1ga6	131	0.515 (5.08E-24)	0.609 (4.46E-34)	0.699 (3.10E-54)	0.657 (2.23E-46)	0.661 (1.41E-49)
1gkm	250	0.519 (1.96E-43)	0.527 (2.15E-43)	0.583 (1.13E-63)	0.589 (3.65E-68)	0.608 (9.10E-68)
1gqv	32	0.524 (1.29E-05)	0.733 (2.52E-12)	0.745 (1.85E-17)	0.678 (2.11E-17)	0.716 (4.69E-18)
1gvk	38	0.588 (5.45E-14)	0.717 (1.46E-17)	0.709 (2.72E-17)	0.683 (7.27E-17)	0.663 (2.62E-15)
1gwe	93	0.538 (2.24E-24)	0.543 (4.44E-24)	0.201 (1.00E+00)	0.213 (1.00E+00)	0.524 (2.11E-22)
1hj9	28	0.558 (7.68E-09)	0.671 (2.09E-10)	0.647 (9.51E-12)	0.616 (1.07E-13)	0.655 (2.74E-12)
1i1w	67	0.528 (1.77E-11)	0.59 (2.17E-16)	0.598 (1.86E-18)	0.580 (3.70E-15)	0.586 (5.63E-16)
1iqz	23	0.511 (2.88E-04)	0.762 (1.77E-12)	0.646 (2.46E-06)	0.661 (2.52E-06)	0.607 (2.16E-06)
1iua	17	0.435 (4.97E-03)	0.483 (5.78E-04)	0.422 (1.08E-02)	0.462 (6.84E-04)	0.494 (1.49E-03)
1ix9	222	0.462 (9.79E-22)	0.491 (3.08E-28)	0.566 (2.68E-54)	0.579 (7.05E-60)	0.556 (1.02E-45)
1ixh	126	0.529 (3.68E-23)	0.523 (1.03E-21)	0.561 (1.64E-26)	0.559 (1.71E-26)	0.613 (8.59E-32)
1j0p	30	0.399 (4.59E-03)	0.564 (3.21E-07)	0.612 (3.76E-11)	0.574 (2.65E-10)	0.667 (5.11E-13)
1jfb	97	0.53 (2.68E-19)	0.605 (2.07E-24)	0.65 (2.95E-40)	0.652 (2.05E-40)	0.663 (1.04E-39)
1k5c	9	0.54 (4.48E-03)	0.658 (9.74E-05)	0.547 (7.52E-03)	0.642 (1.45E-05)	0.603 (5.01E-04)
1kth	5	0.508 (8.96E-02)	0.616 (7.03E-03)	0.681 (3.62E-03)	0.715 (9.17E-04)	0.642 (1.80E-02)
1kwf	72	0.589 (2.52E-20)	0.499 (9.24E-09)	0.628 (9.59E-24)	0.573 (7.82E-16)	0.663 (1.73E-27)
1l9l	4	0.372 (2.38E-01)	0.651 (6.53E-04)	0.516 (5.14E-03)	0.478 (9.89E-03)	0.33 (4.25E-01)
1lkk	24	0.393 (1.80E-02)	0.412 (1.22E-02)	0.396 (4.48E-02)	0.525 (8.46E-06)	0.564 (5.00E-07)
1lni	68	0.514 (1.71E-17)	0.588 (5.06E-16)	0.434 (8.44E-09)	0.467 (9.13E-13)	0.41 (1.74E-08)
1lug	112	0.463 (1.35E-14)	0.521 (1.28E-18)	0.614 (4.49E-30)	0.587 (3.04E-30)	0.622 (1.54E-33)
1m1q	24	0.328 (2.17E-01)	0.685 (5.51E-12)	0.661 (1.78E-08)	0.622 (1.56E-10)	0.65 (6.83E-08)
1m40	6	0.467 (1.08E-01)	0.622 (3.84E-03)	0.581 (2.65E-02)	0.678 (9.16E-04)	0.713 (4.65E-05)
1mc2	44	0.592 (9.45E-13)	0.688 (5.24E-18)	0.656 (1.59E-19)	0.646 (1.62E-18)	0.645 (1.87E-18)
1mj5	176	0.459 (1.66E-16)	0.365 (1.86E-05)	0.423 (4.11E-12)	0.461 (3.73E-16)	0.506 (6.68E-26)
1muw	102	0.545 (3.15E-23)	0.551 (5.96E-22)	0.471 (1.75E-12)	0.400 (6.40E-07)	0.498 (1.30E-16)
1mwq	43	0.568 (3.31E-09)	0.749 (2.67E-18)	0.72 (4.66E-18)	0.650 (2.11E-14)	0.688 (1.77E-22)
1n4w	98	0.543 (2.66E-21)	0.54 (1.68E-16)	0.568 (1.70E-19)	0.594 (7.10E-23)	0.633 (7.16E-38)
1n55	45	0.561 (1.06E-11)	0.633 (9.70E-15)	0.721 (8.47E-23)	0.654 (1.43E-19)	0.686 (3.59E-21)
1nki	63	0.54 (5.73E-13)	0.633 (1.09E-14)	0.666 (4.90E-24)	0.636 (2.09E-22)	0.665 (1.33E-24)
1nls	137	0.577 (7.53E-32)	0.501 (1.56E-22)	0.609 (1.86E-34)	0.601 (4.64E-36)	0.684 (8.33E-48)
1nwz	25	0.471 (9.89E-04)	0.412 (6.72E-03)	0.513 (3.04E-05)	0.511 (1.54E-04)	0.614 (1.76E-07)
1o7j	593	0.504 (6.96E-68)	0.409 (1.90E-27)	0.601 (6.61E-141)	0.609 (9.42E-145)	0.585 (6.87E-128)
1oai	6	0.585 (1.78E-03)	0.7 (3.54E-05)	0.546 (2.06E-03)	0.548 (3.36E-03)	0.786 (8.48E-05)
1od3	20	0.402 (2.51E-02)	0.597 (4.10E-06)	0.696 (3.20E-10)	0.615 (6.97E-09)	0.655 (2.68E-07)
1ok0	17	0.558 (4.90E-05)	0.599 (5.89E-05)	0.6 (3.59E-06)	0.612 (2.32E-05)	0.643 (1.97E-06)
1pq7	35	0.545 (2.10E-10)	0.598 (3.92E-11)	0.63 (4.11E-13)	0.660 (1.05E-15)	0.66 (3.89E-17)
1r2m	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1r6j	3	0.504 (1.41E-02)	0.687 (2.14E-02)	0.829 (2.36E-03)	0.762 (5.48E-03)	0.76 (7.22E-03)
1rb9	8	0.521 (1.60E-04)	0.84 (6.15E-07)	0.842 (1.69E-07)	0.697 (2.72E-05)	0.7 (1.23E-04)
1rtq	114	0.522 (8.86E-21)	0.543 (8.92E-22)	0.592 (2.19E-26)	0.573 (1.05E-26)	0.623 (2.86E-33)
1sfd	81	0.491 (1.87E-15)	0.58 (7.45E-19)	0.585 (2.28E-26)	0.597 (3.92E-24)	0.501 (3.10E-16)
1ssx	33	0.665 (1.64E-16)	0.62 (3.34E-09)	0.61 (6.59E-10)	0.682 (2.54E-15)	0.681 (6.48E-14)
1tg0	25	0.453 (1.39E-04)	0.513 (9.45E-05)	0.531 (3.57E-08)	0.548 (2.65E-06)	0.504 (2.76E-04)
1tqg	19	0.7 (2.98E-08)	0.548 (3.84E-08)	0.54 (1.95E-04)	0.654 (7.47E-10)	0.622 (1.10E-06)
1tt8	71	0.563 (5.21E-16)	0.555 (1.46E-17)	0.573 (2.07E-14)	0.597 (1.23E-19)	0.588 (7.30E-18)
1u2h	12	0.419 (3.43E-02)	0.487 (9.49E-03)	0.502 (1.20E-02)	0.409 (3.60E-02)	0.505 (6.78E-03)
1ufy	33	0.64 (4.47E-11)	0.615 (2.70E-11)	0.7 (3.18E-13)	0.689 (1.29E-14)	0.693 (9.57E-14)

1ug6	96	0.556 (9.24E-25)	0.578 (8.95E-22)	0.658 (1.61E-34)	0.578 (1.22E-23)	0.648 (5.49E-37)
1unq	18	0.555 (3.66E-05)	0.669 (1.02E-06)	0.746 (2.73E-09)	0.660 (4.83E-09)	0.692 (1.76E-08)
1us0	91	0.527 (2.91E-17)	0.458 (6.70E-11)	0.551 (3.69E-18)	0.582 (1.18E-22)	0.726 (1.60E-46)
1v0l	61	0.549 (1.39E-11)	0.51 (2.68E-09)	0.587 (7.39E-16)	0.542 (1.47E-14)	0.649 (4.80E-26)
1v6p	9	0.629 (8.22E-06)	0.685 (5.39E-05)	0.575 (1.22E-03)	0.645 (6.92E-04)	0.527 (5.46E-03)
1vbw	14	0.461 (3.20E-03)	0.556 (3.00E-05)	0.541 (6.24E-04)	0.599 (1.37E-05)	0.659 (1.49E-06)
1vyr	127	0.559 (3.95E-25)	0.592 (3.27E-31)	0.642 (1.30E-39)	0.624 (1.07E-41)	0.654 (1.69E-44)
1vyy	3	0.482 (9.76E-02)	0.519 (1.58E-01)	0.49 (1.69E-01)	0.382 (3.07E-01)	0.624 (3.05E-02)
1w0n	30	0.524 (4.30E-08)	0.648 (6.58E-11)	0.61 (2.75E-11)	0.614 (5.02E-11)	0.672 (5.11E-14)
1x6z	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1x8q	41	0.533 (3.38E-09)	0.522 (4.27E-08)	0.579 (3.98E-10)	0.536 (4.47E-08)	0.613 (2.80E-11)
1xmk	21	0.517 (2.10E-07)	0.637 (3.20E-08)	0.628 (3.34E-09)	0.618 (4.35E-08)	0.602 (1.57E-08)
1y55	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1ylj	56	0.596 (2.52E-16)	0.635 (2.12E-17)	0.641 (6.78E-19)	0.657 (1.20E-20)	0.717 (4.89E-28)
1zk4	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)
1zzk	19	0.509 (1.23E-04)	0.554 (3.20E-06)	0.483 (1.25E-05)	0.544 (1.83E-05)	0.716 (4.97E-10)
2bt9	74	0.586 (1.16E-19)	0.585 (9.87E-19)	0.676 (2.32E-29)	0.594 (1.15E-20)	0.634 (1.14E-25)
2bw4	28	0.493 (1.22E-08)	0.504 (2.23E-05)	0.456 (2.46E-04)	0.041 (1.00E+00)	0.545 (2.30E-09)
2cws	76	0.559 (7.69E-14)	0.595 (4.94E-19)	0.701 (4.03E-31)	0.671 (8.43E-30)	0.632 (2.18E-28)
2f01	73	0.565 (3.75E-17)	0.521 (3.45E-13)	0.537 (2.59E-13)	0.547 (9.54E-18)	0.638 (1.47E-30)
2fdn	5	0.323 (4.00E-01)	0.502 (3.60E-02)	0.367 (2.87E-01)	0.411 (1.70E-01)	0.432 (8.19E-03)
2pvb	15	0.576 (1.68E-05)	0.599 (1.03E-04)	0.657 (1.85E-06)	0.674 (4.97E-07)	0.709 (7.88E-07)
3lzt	37	0.461 (2.15E-05)	0.55 (1.11E-08)	0.556 (9.57E-09)	0.535 (1.72E-08)	0.516 (3.11E-07)
7a3h	0	0 (1.00E+00)	0 (1.00E+00)	0 (1.00E+00)	0.000 (1.00E+00)	0 (1.00E+00)

Table VIII: Isotropic correlation by structure (P-values for hypothesis that prediction is no better from random).

PDB ID	number	HCA	ANM	ElN	DNM	BNM
1a6m	104	0.516 (1.07E-08)	0.635 (2.25E-13)	0.616 (1.72E-12)	0.595 (1.35E-11)	0.303 (8.77E-04)
1byi	139	0.726 (2.55E-24)	0.576 (6.17E-14)	0.79 (3.47E-31)	0.729 (1.27E-24)	0.789 (4.32E-31)
1c75	38	0.562 (1.21E-04)	0.679 (1.42E-06)	0.081 (3.15E-01)	0.498 (7.24E-04)	0.668 (2.30E-06)
1c7k	85	0.62 (1.24E-10)	0.626 (7.45E-11)	0.555 (1.79E-08)	0.606 (4.00E-10)	0.51 (3.12E-07)
1ea7	251	0.739 (6.63E-45)	0.658 (7.08E-33)	0.659 (6.06E-33)	0.680 (1.01E-35)	0.696 (5.77E-38)
1eb6	125	0.728 (3.05E-22)	0.758 (7.45E-25)	0.666 (1.21E-17)	0.713 (5.78E-21)	0.4 (1.85E-06)
1exr	55	0.782 (9.26E-13)	0.413 (8.71E-04)	0.313 (9.97E-03)	0.422 (6.63E-04)	0.81 (3.41E-14)
1f94	23	0.835 (3.65E-07)	0.467 (1.23E-02)	0.844 (2.06E-07)	0.782 (5.30E-06)	0.675 (2.07E-04)
1f9y	97	0.699 (8.90E-16)	0.724 (2.83E-17)	0.746 (9.77E-19)	0.728 (1.50E-17)	0.674 (1.87E-14)
1g4i	61	0.507 (1.54E-05)	0.783 (4.64E-14)	0.732 (9.87E-12)	0.753 (1.28E-12)	0.616 (6.35E-08)
1g66	145	0.677 (4.58E-21)	0.702 (4.20E-23)	0.728 (1.52E-25)	0.769 (7.04E-30)	0.728 (1.63E-25)
1g6x	21	0.853 (4.57E-07)	0.775 (1.85E-05)	0.769 (2.29E-05)	0.962 (1.84E-12)	0.728 (9.30E-05)
1ga6	315	0.827 (1.28E-80)	0.788 (2.93E-68)	0.889 (2.37E-108)	0.844 (6.58E-87)	0.754 (2.48E-59)
1gkm	373	0.719 (6.65E-61)	0.693 (5.69E-55)	0.744 (3.60E-67)	0.719 (8.38E-61)	0.757 (7.00E-71)
1gqv	71	0.59 (3.11E-08)	0.737 (1.14E-13)	0.821 (9.39E-19)	0.734 (1.73E-13)	0.794 (6.85E-17)
1gvk	169	0.826 (1.21E-43)	0.842 (6.80E-47)	0.905 (5.00E-64)	0.728 (1.57E-29)	0.897 (2.02E-61)
1gwe	301	0.462 (1.33E-17)	0.55 (1.84E-25)	0.569 (1.76E-27)	0.606 (6.37E-32)	0.654 (1.83E-38)
1hj9	168	0.478 (2.90E-11)	0.755 (1.55E-32)	0.693 (1.26E-25)	0.688 (3.81E-25)	0.802 (2.67E-39)
1i1w	238	0.631 (4.23E-28)	0.723 (5.04E-40)	0.75 (1.61E-44)	0.686 (9.37E-35)	0.663 (7.95E-32)
1iqz	60	0.575 (7.75E-07)	0.888 (1.65E-21)	0.783 (7.63E-14)	0.921 (9.28E-26)	0.67 (2.40E-09)
1iua	29	0.166 (1.94E-01)	0.33 (4.03E-02)	0.844 (4.47E-09)	0.348 (3.22E-02)	0.669 (3.60E-05)
1ix9	331	0.701 (1.77E-50)	0.71 (2.14E-52)	0.708 (7.58E-52)	0.720 (1.73E-54)	0.698 (7.39E-50)
1ixh	271	0.616 (5.17E-30)	0.704 (3.02E-42)	0.713 (1.25E-43)	0.715 (4.98E-44)	0.61 (2.65E-29)
1j0p	71	0.36 (1.03E-03)	0.413 (1.69E-04)	0.455 (3.40E-05)	0.611 (7.58E-09)	0.248 (1.86E-02)
1jfb	314	0.658 (1.32E-40)	0.703 (2.31E-48)	0.609 (1.42E-33)	0.639 (1.13E-37)	0.554 (6.18E-27)
1k5c	288	0.608 (8.90E-31)	0.716 (6.87E-47)	0.759 (1.48E-55)	0.739 (3.49E-51)	0.805 (3.08E-67)
1kth	21	0.789 (1.07E-05)	0.539 (5.86E-03)	0.894 (2.38E-08)	0.788 (1.12E-05)	0.935 (2.78E-10)
1kwf	288	0.528 (2.27E-22)	0.499 (7.18E-20)	0.569 (2.15E-26)	0.432 (8.02E-15)	0.654 (7.60E-37)
1l9l	33	0.265 (6.83E-02)	0.14 (2.18E-01)	0.557 (3.85E-04)	0.453 (4.04E-03)	0.415 (8.23E-03)
1lkk	55	0.394 (1.47E-03)	0.848 (1.59E-16)	0.706 (8.92E-10)	0.707 (8.28E-10)	0.802 (8.87E-14)
1lni	103	0.2 (2.15E-02)	0.418 (5.58E-06)	0.538 (2.30E-09)	0.449 (9.63E-07)	0.507 (2.25E-08)
1lug	187	0.603 (3.40E-20)	0.704 (1.27E-29)	0.698 (6.79E-29)	0.611 (8.64E-21)	0.672 (3.18E-26)
1m1q	47	0.188 (1.02E-01)	0.831 (2.44E-13)	0.407 (2.28E-03)	0.597 (4.76E-06)	0.586 (7.67E-06)
1m40	95	0.617 (1.42E-11)	0.725 (5.21E-17)	0.603 (4.81E-11)	0.655 (3.09E-13)	0.734 (1.23E-17)
1mc2	77	0.704 (4.79E-13)	0.65 (7.76E-11)	0.872 (3.03E-25)	0.819 (4.46E-20)	0.723 (5.67E-14)
1mj5	211	0.741 (2.63E-38)	0.634 (2.17E-25)	0.68 (2.86E-30)	0.733 (4.25E-37)	0.657 (9.34E-28)
1muw	202	0.58 (7.19E-20)	0.304 (5.51E-06)	0.322 (1.52E-06)	0.283 (2.28E-05)	0.303 (5.90E-06)
1mwq	147	0.583 (4.64E-15)	0.593 (1.21E-15)	0.697 (4.88E-23)	0.747 (8.64E-28)	0.736 (1.31E-26)
1n4w	404	0.657 (1.19E-51)	0.675 (2.50E-55)	0.74 (1.64E-71)	0.751 (8.92E-75)	0.633 (5.58E-47)
1n55	181	0.874 (2.27E-58)	0.711 (2.01E-29)	0.831 (1.03E-47)	0.861 (8.04E-55)	0.842 (4.26E-50)
1nki	203	0.627 (7.32E-24)	0.785 (5.11E-44)	0.751 (2.18E-38)	0.772 (1.02E-41)	0.716 (1.45E-33)
1nls	166	0.746 (4.97E-31)	0.822 (3.23E-42)	0.887 (3.06E-57)	0.877 (1.71E-54)	0.937 (5.57E-77)
1nwz	58	0.485 (5.64E-05)	0.496 (3.75E-05)	0.648 (1.96E-08)	0.596 (3.91E-07)	0.447 (2.19E-04)
1o7j	1237	0.463 (3.73E-67)	0.662 (2.57E-157)	0.587 (6.32E-116)	0.522 (1.18E-87)	0.646 (3.44E-147)
1oai	27	0.826 (5.56E-08)	0.743 (4.56E-06)	0.713 (1.50E-05)	0.729 (8.12E-06)	0.63 (2.13E-04)
1od3	90	0.465 (1.94E-06)	0.724 (3.60E-16)	0.592 (4.04E-10)	0.698 (1.02E-14)	0.555 (6.78E-09)
1ok0	30	0.722 (3.31E-06)	0.569 (5.17E-04)	0.691 (1.17E-05)	0.720 (3.57E-06)	0.873 (1.61E-10)
1pq7	163	0.624 (2.96E-19)	0.775 (3.59E-34)	0.747 (1.24E-30)	0.738 (1.20E-29)	0.659 (5.81E-22)
1r2m	85	0.517 (2.08E-07)	0.562 (1.07E-08)	0.661 (2.89E-12)	0.627 (6.81E-11)	0.505 (4.17E-07)
1r6j	27	0.401 (1.90E-02)	0.358 (3.33E-02)	0.309 (5.81E-02)	0.650 (1.20E-04)	0.601 (4.60E-04)
1rb9	18	0.631 (2.50E-03)	0.837 (7.25E-06)	0.806 (2.69E-05)	0.658 (1.49E-03)	0.825 (1.25E-05)
1rtq	245	0.442 (1.91E-13)	0.681 (5.17E-35)	0.755 (8.73E-47)	0.649 (5.85E-31)	0.6 (1.28E-25)
1sfd	164	0.737 (1.15E-29)	0.715 (2.74E-27)	0.802 (2.20E-38)	0.764 (5.72E-33)	0.715 (3.22E-27)
1ssx	134	0.777 (1.43E-28)	0.713 (2.25E-22)	0.843 (1.35E-37)	0.847 (2.58E-38)	0.752 (6.17E-26)
1tg0	29	0.765 (6.90E-07)	0.845 (4.15E-09)	0.629 (1.27E-04)	0.619 (1.73E-04)	0.421 (1.15E-02)
1tqg	31	0.557 (5.61E-04)	0.38 (1.75E-02)	0.253 (8.53E-02)	0.371 (2.01E-02)	0.276 (6.64E-02)
1tt8	117	0.684 (9.62E-18)	0.675 (3.44E-17)	0.724 (1.49E-20)	0.617 (6.54E-14)	0.619 (5.06E-14)
1u2h	47	0.753 (5.04E-10)	0.823 (6.40E-13)	0.877 (3.01E-16)	0.849 (2.31E-14)	0.797 (1.08E-11)
1ufy	63	0.641 (7.55E-09)	0.748 (8.83E-13)	0.665 (1.38E-09)	0.695 (1.26E-10)	0.785 (1.31E-14)

1ug6	385	0.513 (1.55E-27)	0.844 (4.86E-106)	0.616 (5.90E-42)	0.503 (2.37E-26)	0.632 (1.06E-44)
1unq	69	0.625 (4.63E-09)	0.815 (8.36E-18)	0.834 (3.02E-19)	0.722 (1.27E-12)	0.809 (2.09E-17)
1us0	203	0.748 (7.25E-38)	0.708 (1.97E-32)	0.767 (7.25E-41)	0.807 (4.28E-48)	0.598 (2.26E-21)
1v0l	241	0.609 (3.73E-26)	0.753 (1.37E-45)	0.731 (6.63E-42)	0.720 (4.88E-40)	0.715 (2.97E-39)
1v6p	41	0.704 (1.38E-07)	0.168 (1.47E-01)	0.016 (4.60E-01)	0.129 (2.11E-01)	0.026 (4.36E-01)
1vbw	20	0.53 (8.08E-03)	0.826 (3.65E-06)	0.838 (2.00E-06)	0.905 (2.11E-08)	0.721 (1.69E-04)
1vyr	317	0.64 (3.46E-38)	0.641 (2.10E-38)	0.519 (1.56E-23)	0.531 (9.62E-25)	0.555 (2.64E-27)
1vyy	59	0.682 (1.32E-09)	0.771 (4.74E-13)	0.883 (1.05E-20)	0.879 (2.74E-20)	0.773 (3.72E-13)
1w0n	72	0.235 (2.37E-02)	0.493 (5.30E-06)	0.574 (6.98E-08)	0.540 (4.97E-07)	0.312 (3.79E-03)
1x6z	58	0.509 (2.29E-05)	0.73 (4.06E-11)	0.626 (7.27E-08)	0.682 (1.87E-09)	0.727 (4.97E-11)
1x8q	94	0.693 (5.14E-15)	0.675 (4.50E-14)	0.616 (1.96E-11)	0.564 (1.58E-09)	0.669 (8.65E-14)
1xmk	34	0.815 (2.22E-09)	0.651 (1.55E-05)	0.93 (8.97E-16)	0.812 (2.72E-09)	0.945 (1.94E-17)
1y55	167	0.617 (3.15E-19)	0.651 (8.48E-22)	0.701 (2.52E-26)	0.665 (5.53E-23)	0.69 (2.85E-25)
1ylj	193	0.734 (3.39E-34)	0.668 (1.31E-26)	0.712 (1.92E-31)	0.644 (2.93E-24)	0.521 (4.27E-15)
1zk4	146	0.715 (2.00E-24)	0.618 (4.54E-17)	0.754 (2.37E-28)	0.742 (4.41E-27)	0.68 (2.00E-21)
1zzk	32	0.727 (1.24E-06)	0.795 (2.82E-08)	0.759 (2.41E-07)	0.880 (1.60E-11)	0.915 (1.13E-13)
2bt9	210	0.547 (4.11E-18)	0.631 (4.65E-25)	0.604 (1.48E-22)	0.518 (3.88E-16)	0.605 (1.11E-22)
2bw4	167	0.568 (6.18E-16)	0.642 (4.09E-21)	0.65 (1.08E-21)	0.244 (7.51E-04)	0.767 (5.70E-34)
2cws	159	0.748 (5.07E-30)	0.618 (2.12E-18)	0.841 (5.54E-44)	0.787 (4.15E-35)	0.615 (3.25E-18)
2f01	169	0.584 (3.84E-17)	0.605 (1.45E-18)	0.613 (4.19E-19)	0.680 (1.40E-24)	0.634 (1.09E-20)
2fdn	19	0.372 (5.86E-02)	0.421 (3.62E-02)	0.558 (6.51E-03)	0.411 (4.02E-02)	-0.027 (5.43E-01)
2pvb	55	0.253 (3.15E-02)	0.487 (8.20E-05)	0.448 (2.98E-04)	0.605 (5.07E-07)	0.616 (2.71E-07)
3lzt	67	0.719 (3.51E-12)	0.781 (3.09E-15)	0.758 (5.90E-14)	0.748 (1.69E-13)	0.642 (2.36E-09)
7a3h	243	0.713 (2.42E-39)	0.789 (2.76E-53)	0.774 (4.38E-50)	0.755 (2.17E-46)	0.767 (1.24E-48)