

**Table S1. DS-detecting performance of DynDom assessed based on Eisenberg’s DS dataset**

Closed form	Open form	Hinge loops examined by [2]		Hinge loops identified by DynDom [35]		Length difference of hinge loops <sup>1</sup> (residues)	Shift of the centers of hinge loops <sup>1</sup> (residues)
		Range <sub>e</sub>	Length <sub>e</sub>	Range <sub>i</sub>	Length <sub>i</sub>		
1brnL	<b>1yvsA</b>	37-41	5	37-44	7	-2	1.5
1griA	<b>1fyrA</b>	121-123	3	120-123	3	0	0.5
<b>1griA</b>	1fyrA	121-123	3	120-123	3	0	0.5
1mdtA	<b>1ddtA</b>	379-387	9	379-388	9	0	0.5
1hngA	<b>1cdcA</b>	44-50	7	43-50	7	0	0.5
1cunA	<b>2spcA</b>	72-75	4	76-79	3	1	4
2ezmA	<b>3ezmA</b>	50-53	4	49-50	1	3	2
1cewI	<b>1g96A</b>	55-59	5	55-57	2	3	1
1pv3A	<b>1k04A</b>	943-948	6	933-934	1	5	12
4icbA	<b>1ht9A</b>	38-47	10	42-47	5	5	2
5rsaA	<b>1bsrA</b>	15-22	8	22-23	1	7	4
1q1xA	<b>1i4mA</b>	188-198	11	203-207	4	7	12
<b>1orcA</b>	5croA	55-56	2			N/A*	
<b>1sncA</b>	1sndA	112-120	9			N/A*	
<b>1mupA</b>	1obpA	126-130	5			N/A*	
<b>1fynA</b>	1aojA	112-118	7			N/A*	
<b>1gmfA</b>	1hulA	87-99	13			N/A*	
1msbA	<b>1ixxA</b>	72-75	4			N/A*	
1hz5A	<b>1jmlA</b>	52-55	4			N/A*	
1wwwX	<b>1wwbX</b>	299-301	3			N/A*	
1orcA	<b>5croA</b>	55-55	1			N/A*	
1sncA	<b>1sndA</b>	112-120	9			N/A*	
1mupA	<b>1obpA</b>	121-124	4			N/A*	
1fynA	<b>1aojA</b>	34-49	16			N/A*	
1wwwX	<b>1wwaX</b>	297-299	3			N/A*	
1dksA	<b>1cksA</b>	60-65	6			N/A*	
1msbA	<b>1ixxA</b>	93-98	6			N/A*	
1nloC	<b>1aojA</b>	34-39	6			N/A*	
1qmpA	<b>1dz3A</b>	103-109	7			N/A*	
1wwwX	<b>1wwcA</b>	317-319	3			N/A*	
1k3sA	<b>1k3eA</b>	33-36	4			N/A*	
1eydA	<b>1sndA</b>	112-120	9			N/A*	
1qd0A	<b>1sjvA</b>	95-100	6			N/A*	
1gmfA	<b>1hulA</b>	82-89	8			N/A*	
5rsaA	<b>1f0vA</b>	112-115	4			N/A*	
5rsaA	<b>1js0A</b>	112-115	4			N/A*	
5rsaA	<b>1a2wA</b>	15-22	8			N/A*	
1a5pA	<b>1a2wA</b>	15-22	8			N/A*	
4gcrA	<b>1blbA</b>	79-87	9			N/A*	
<b>Unsigned average</b>						<b>2.8</b>	<b>3.4</b>

\*Not available because DynDom cannot identify any hinge loop.

<sup>1</sup>See Table 4 for how to calculate these values.