A.

Monomer	Homomer		
	All mutations	Interface	Non-interface
2372 (104)	276 (27)	135 (19)	141 (21)

B.

Dataset	# of proteins (# of mutations)	# of mapped redundant structures (# of mapped mutations)
S2648	99 (2297)	6012 (331648)
S921	103 (824)	4429 (172253)

C.

Method	# of proteins (# of muts)	# of mapped structs (# of mapped muts)	# of proteins (# of muts)	# of mapped structs (# of mapped muts)
	S2297		**S824**	
X-ray	82 (2088)		96 (760)	
NMR	17 (209)		7 (64)	
	RS2297		**RS824**	
X-ray	90 (2227)	5667 (322671)	102 (795)	4127 (169138)
NMR	68 (1781)	319 (8223)	49 (741)	269 (2998)
Cryo-EM	8 (157)	26 (754)	9 (50)	33 (117)
X-ray, NMR and Cryo-EM				
X-ray		1249 (51061)		1258 (3039)
NMR	7 (94)	92 (1008)	8 (43)	127 (431)
Cryo-EM		25 (691)		32 (110)
X-ray and NMR				
X-ray	59 (1711)	5011 (306441)	48 (715)	4047 (166405)
NMR		285 (8042)		264 (2878)
X-ray and Cryo-EM				
X-ray	8 (157)	1252 (51250)	9 (46)	1261 (3048)
Cryo-EM		26 (754)		33 (113)
NMR and Cryo-EM				
NMR	7 (94)	92 (1008)	8 (44)	127 (432)
Cryo-EM		25 (691)		32 (111)

D.

Resolution	# of proteins (# of muts)	# of mapped structs (# of mapped muts)	# of proteins (# of muts)	# of mapped structs (# of mapped muts)
	S2297		**S824**	
≤ 3Å	82 (2088)		96 (760)	
≤ 2Å	60 (1607)		78 (596)	
2Å ~ 3Å	22 (481)		18 (164)	
	RS2297		**RS824**	
≤ 3Å	89 (2225)	5533 (318413)	101 (794)	3993 (162479)
> 3Å	28 (518)	157 (4939)	27 (435)	164 (6768)
≤ 2Å	80 (2176)	4178 (262487)	94 (782)	2967 (124944)
2Å ~ 3Å	77 (2050)	1355 (55926)	67 (683)	1026 (37535)
3Å ~ 4Å	26 (453)	146 (4737)	25 (402)	147 (6487)
> 4Å	9 (194)	11 (202)	11 (262)	17 (281)
≤ 3Å and > 3Å				
≤ 3Å	27 (516)	2972 (132705)	26 (430)	2886 (140969)
> 3Å		156 (4937)		164 (6763)
≤ 2Å, 2Å ~ 3Å, 3Å ~ 4Å and > 4Å				
≤ 2Å	7 (129)	822 (47424)	9 (229)	821 (84838)
2Å ~ 3Å		478 (17901)		486 (30974)
3Å ~ 4Å		90 (3541)		95 (6134)
> 4Å		9 (137)		15 (248)

E.

State	# of proteins (# of muts)	# of mapped structs (# of mapped muts)	# of proteins (# of muts)	# of mapped structs (# of mapped muts)
	S2297		**S824**	
Monomer	68 (1760)		82 (600)	
Homomer	25 (501)		20 (200)	
Heteromer	6 (36)		1 (24)	
	RS2297		**RS824**	
Monomer	90 (2160)	3841 (269705)	95 (812)	2723 (136629)
Homomer	71 (2101)	1382 (42214)	65 (716)	1099 (24486)
Heteromer	49 (1564)	789 (19729)	33 (489)	607 (11138)
Monomers, homomers and heteromers				
Monomer	35 (1462)	2326 (248857)	30 (450)	2212 (114594)
Homomer		1077 (36894)		1008 (23036)
Heteromer		653 (18476)		579 (10803)

F.

Sequence identity	# of proteins (# of muts)	# of modeled structs (# of mapped muts)	# of proteins (# of muts)	# of modeled structs (# of mapped muts)
	S2297		**S824**	
20-30%	37 (607)	415 (7617)	19 (172)	211 (6071)
30-40%	68 (1246)	824 (13810)	35 (314)	369 (3044)
40-50%	57 (1128)	417 (7184)	75 (503)	264 (2235)
50-60%	44 (771)	177 (3307)	26 (212)	102 (582)
60-70%	46 (939)	120 (2910)	31 (371)	76 (656)
70-80%	41 (803)	102 (2235)	69 (466)	119 (893)
80-90%	44 (923)	173 (3306)	28 (369)	153 (2185)
90-100%	87 (2131)	561 (17802)	99 (780)	4797 (25598)

G.

RMSD	# of proteins (# of muts)	# of modeled structs (# of mapped muts)	# of proteins (# of muts)	# of modeled structs (# of mapped muts)
	S2297		**S824**	
≤ 3Å	90 (2144)	1926 (42012)	101 (791)	5106 (32764)
3Å ~ 5Å	71 (1308)	494 (9571)	82 (555)	755 (7098)
5Å ~ 10Å	50 (997)	224 (2698)	74 (439)	167 (1035)
> 10Å	45 (716)	145 (2890)	17 (174)	63 (367)