

**TABLE S13**

Design Protocol		Actin Interface Residues																	Identical to Native				
		113	143	144	145	146	147	148	166	167	169	173	286	287	288	290	345	355	371	372	373	#	%
<b>NATIVE</b>		K	Y	A	S	G	R	T	Y	E	Y	H	D	V	D	R	I	M	H	R	K	20	
<b>MULTI</b>		R	+	S	R	+	+	S	+	H	+	E	+	H	W	+	+	W	R	N	N	8	40%
SINGLE	1EQY	S	+	S	F	S	P	S	S	W	+	F	R	A	P	L	+	F	Q	E	W	3	15%
	1HLU	R	W	I	H	F	T	+	+	W	+	F	+	R	+	W	H	W	R	+	M	6	30%
	1LOT	R	F	L	R	+	+	M	+	H	Q	E	H	H	W	+	F	W	Q	N	H	4	20%