

TABLE S4

Design Protocol	CheY Interface Residues											Identical to Native	
	90	92	95	99	104	105	106	107	108	119	122	#	%
NATIVE	A	K	I	A	S	G	Y	V	V	K	K	11	
MULTI	W	+	+	G	P	S	+	F	S	+	R	4	36%
SINGLE 1F4V	R	R	+	W	N	S	H	W	S	+	I	2	18%
1FFG	H	+	Q	+	P	H	+	W	F	W	+	4	36%
1KMI	I	W	+	G	I	N	H	H	W	+	R	2	18%