

Table S1. Thermodynamic parameters of *ctfF5B(517-858)* binding to GTP γ S, GDPNP

and GDP at different temperatures.

Ligand	T [°C]	K _d [μ M]	Δ H [kcal/mol]	Δ G [kcal/mol]	T Δ S [kcal/mol]
GTP γ S	10			-8.06	
		0.58	-5.06		3.0
GTP γ S	20			-8.27	
		0.67	-9.67		-1.4
GTP γ S	25			-8.83	
		0.82	-12.93		-4.1
GTP γ S	30			-8.41	
		0.92	-15.81		-7.4
GDPNP	10	10.67	-5.89	-6.44	0.55
GDPNP	15	12.3	-7.31	-6.48	-0.83
GDPNP	20	15.47	-8.09	-6.49	-1.6
GDPNP	25	15.0	-9.58	-6.68	-2.9
GDPNP	30	20.8	-9.67	-6.47	-3.2
GDP	10	3.37	-6.94	-7.09	0.15
	20	5.85	-9.06	-7.76	-2.3
	30	10.4	-11.51	-6.91	-4.6

Measurements were performed two to three times.

K_d, dissociation equilibrium constant; calculated as 1/K_a.K_a, association equilibrium constant; standard deviation did not exceed \pm 15%. Δ H, standard enthalpy change; standard deviation did not exceed \pm 15%.

ΔG , Gibbs energy; calculated from equation $\Delta G = -R \cdot T \cdot \ln K_a$.

$T\Delta S$, standard entropy change; calculated from equation $\Delta G = \Delta H - T\Delta S$.