

## BDY FL Staurosporine Binding Data

### Background

BDY FL Staurosporine (Cat. No. 7985) is a fluorescent tracer that binds unselectively to kinases, it can be paired with antibodies labelled with TR-FRET donors such as CoraFluor™ for high throughput binding and protein quantification assays.

The measured  $K_D$  values, from TR-FRET based saturation binding assay data, are as follows:

Kinase	Kinase family	Kd (Mean±SD) nM	S/B ratio
		<b>BDY FL Staurosporine</b>	<b>BDY FL Staurosporine</b>
CDK2	CMGC	94±15	1.7
ABL1	Unknown	918±92	2.0
JAK2	TK	14±2	2.6
PIM3	CAMK	4±3	2.0
CHEK2	CAMK	147±41	1.3
EPHA4	TK	1096±161	1.4
CDC42BPG	AGC	7±3	1.5
MARK4	CAMK	6±1	1.3
MYLK3	CAMK	146±73	1.4
ZAP70	TK	109±24	1.4
CHEK1	CAMK	20±3	1.4
EPHA3	TK	747±104	1.4
PRKX	AGC	43±5	2.2
EPHB2	TK	985±232	1.3
PIM2	CAMK	15±7	1.4
CDK5	CMGC	87±9	1.8
MAP2K7	STE	293±159	1.5
EPHB4	TK	1799±344	1.3
ROS1	TK	238±22	1.8
TXK	TK	1005±148	1.4
SIK3	CAMK	10±1	2.0
EPHA6	TK	570±103	1.3
EPHA8	TK	1565±271	1.4
STK38L	AGC	759±167	1.3

Kinase	Kinase family	Kd (Mean±SD) nM	S/B ratio
		<b>BDY FL Staurosporine</b>	<b>BDY FL Staurosporine</b>
YES1	TK	601±125	1.6
TGFBR2	TKL	854±296	1.4
TYK2	TK	8±1	3.0
LIMK1	TKL	6±0	7.5
MAP4K5	STE	87±11	2.9
TNK1	TK	4±1	1.7
IRAK4	TKL	23±3	2.0
CAMKK2	Other	2±0	11.2
MAPK15	CMGC	113±19	1.9
CASK	CAMK	454±71	3.1
FGFR1	TK	268±33	1.8
PHKG1	CAMK	1±0	4.9
ULK1	Other	135±23	1.8
RPS6KA1	CAMK	16±3	1.9
STK32B	AGC	446±136	1.4
FGFR4	TK	718±55	2.2
FGFR3	TK	409±39	3.3
ULK2	Other	30±6	1.9
IRAK1	TKL	299±73	1.5
ITK	TK	379±36	2.9
TYRO3	TK	531±181	1.3
MAPK8	CMGC	286±81	1.6
LYN	TK	63±19	3.0
MAP3K5	STE	136±17	4.4
AXL	TK	313±57	1.6
ABL2	Unknown	531±54	2.7
DAPK2	CAMK	34±2	9.8
BRSK1	CAMK	109±7	4.4
PRKD2	CAMK	79±16	2.4
STK24	STE	436±63	1.8
DCLK3	Unknown	60±6	5.2
SGK1	Unknown	331±50	2.3
LATS2	AGC	135±15	1.9
ERBB4	TK	496±51	2.8
CAMK2D	CAMK	4±0	9.2
PDGFRB	TK	165±21	2.3
SYK	TK	26±9	1.8
FGFR2	TK	242±29	2.7

Kinase	Kinase family	Kd (Mean±SD) nM	S/B ratio
		<b>BDY FL Staurosporine</b>	<b>BDY FL Staurosporine</b>
SGK2	AGC	1221±150	1.6
MST4	STE	687±71	1.8
MAP4K1	STE	17±1	3.6
TNNI3K	TKL	844±145	1.4
STK17A	CAMK	258±34	2.2
MAP3K2	STE	38±7	2.3
PIM1	CAMK	207±26	1.5
TEC	TK	1063±107	1.9
RET	TK	40±6	3.3
MAP3K7	TKL	44±3	3.9
CLK1	CMGC	93±13	2.0
MAP3K11	TKL	3±0	10.4
DDR1	TK	674±80	3.3
MKNK1	CAMK	28±4	2.4
MAP2K1	STE	328±113	1.5
PAK7	STE	40±4	3.4
PAK4	STE	5±1	4.3
HIPK3	CMGC	798±150	1.5
MAP3K9	TKL	2±0	14.9
FLT4	TK	61±8	2.3
SRC	TK	452±37	2.2
MAP3K14	STE	352±51	1.7
MKNK2	CAMK	162±11	3.4
CLK2	CMGC	318±69	1.5
PRKCI	AGC	255±69	1.6
PTK2B	TK	59±5	2.4
CAMKK1	Other	11±1	14.2
BMX	TK	696±38	4.2
SLK	STE	5±0	5.8
FYN	TK	267±25	2.5
FGR	TK	101±7	3.3
BTK	TK	374±32	4.5
CSF1R	TK	279±17	2.9
TNK2	TK	36±2	12.8
EPHA7	TK	766±75	1.9
CSK	TK	879±62	2.5
AURKA	Other	45±3	3.9
PRKAA1	CAMK	13±1	13.7

Kinase	Kinase family	Kd (Mean±SD) nM	S/B ratio
		<b>BDY FL Staurosporine</b>	<b>BDY FL Staurosporine</b>
PAK6	STE	22±2	3.2
STK32A	AGC	1544±519	1.4
MAP4K2	STE	6±0	4.3
NUAK2	CAMK	10±1	3.5
CAMK2G	CAMK	8±1	4.8
FRK	TK	332±30	3.5
HIPK4	CMGC	424±113	1.3
TSSK1B	CAMK	18±6	1.6
FER	TK	27±3	2.8
MAPK12	CMGC	948±173	1.4
PRKCZ	AGC	1254±242	1.4
FES	TK	106±9	4.0
HCK	TK	263±25	2.6
SGK3	AGC	322±30	2.5
DMPK	AGC	90±5	11.3
PRKACG	AGC	148±17	2.2
PRKACB	AGC	64±6	2.6
TEK	TK	395±17	2.8
PHKG2	CAMK	71±3	4.9
PRKAA2	CAMK	45±4	2.3
MERTK	TK	107±10	3.3
EPHA1	TK	586±43	2.0
PDPK1	AGC	8±0	8.5
STK25	STE	444±40	2.7
LTK	TK	193±17	4.4
AKT2	AGC	365±69	8.6
LCK	TK	94±6	6.4
CIT	AGC	747±82	3.3
SIK1	CAMK	3±0	2.5
CAMK1G	CAMK	326±46	1.8
NUAK1	CAMK	15±1	7.8
CDK7	CMGC	894±138	1.9
INSR	TK	1859±358	1.4
CLK4	CMGC	90±12	1.7
MYO3B	STE	328±62	3.1
SIK2	CAMK	4±0	11.9
GRK1	AGC	122±16	4.1
AAK1	Other	6±1	4.5

Kinase	Kinase family	Kd (Mean±SD) nM	S/B ratio
		<b>BDY FL Staurosporine</b>	<b>BDY FL Staurosporine</b>
ULK3	Other	16±1	5.8
JAK3	TK	14±1	4.5
MET	TK	930±144	1.4
TSSK3	CAMK	380±73	1.9
DAPK1	CAMK	69±6	15.9
MELK	CAMK	50±4	2.9
TAOK3	STE	360±24	1.9
MYLK	CAMK	369±40	3.7
NTRK3	TK	23±2	2.0
TNIK	STE	121±13	3.7
BMP2K	Other	24±2	2.5
PRKG1	AGC	109±20	2.2
MAPK10	CMGC	315±31	2.5
PTK2	TK	401±30	2.3
IKBKE	Other	58±4	3.9
STK33	CAMK	8±1	2.2
ALK	TK	230±20	5.0
DYRK1A	CMGC	138±12	1.9
STK32C	AGC	448±81	2.0
ROCK1	AGC	35±5	3.7
RPS6KA5	CAMK	345±38	2.3
AKT3	AGC	749±52	4.1
CDK9	CMGC	162±14	2.7
BLK	TK	63±3	3.1
KDR	TK	193±20	4.0
NTRK1	TK	35±2	2.2
ROCK2	AGC	23±4	3.7
MINK1	STE	228±40	4.7
PRKCQ	AGC	28±4	1.9
PRKG2	AGC	65±4	4.4
RPS6KA6	CAMK	21±1	4.5
CAMK2B	CAMK	19±2	6.7
PRKCG	AGC	72±13	2.1
GSK3A	CMGC	329±20	1.8
GSK3B	CMGC	230±16	2.0
PDK1	aPK	5±1	3.8
PKN2	AGC	6±0	3.3
PLK4	Other	33±2	3.9

Kinase	Kinase family	Kd (Mean±SD) nM	S/B ratio
		<b>BDY FL Staurosporine</b>	<b>BDY FL Staurosporine</b>
DAPK3	CAMK	41±3	2.6
PRKCH	AGC	61±7	2.6
TAOK1	STE	25±1	9.6
CAMK2A	CAMK	15±2	6.8
MAP2K6	STE	28±4	6.4
CDC42BPA	AGC	43±1	14.3
PKN1	AGC	11±1	4.2
STK3	STE	6±0	12.9
TBK1	Other	17±1	8.7
STK4	STE	7±0	9.6
MARK2	CAMK	6±0	4.9
CDK8	CMGC	299±14	2.6
CDK19	CMGC	259±13	2.9
MARK3	CAMK	13±1	4.1
PRKCA	AGC	92±5	4.2
RPS6KA3	CAMK	4±0	5.8
RPS6KA2	CAMK	8±0	6.5
DYRK1B	CMGC	107±11	1.8
PRKCE	AGC	41±11	2.6
PRKACA	AGC	116±22	8.8
RPS6KB1	AGC	40±2	8.6
MARK1	CAMK	9±1	2.4
STK16	Other	365±17	2.3
PRKCB	AGC	65±5	3.3
PRKCD	AGC	13±2	2.7
MAPK9	CMGC	ND	1.2
HIPK2	CMGC	ND	1.1