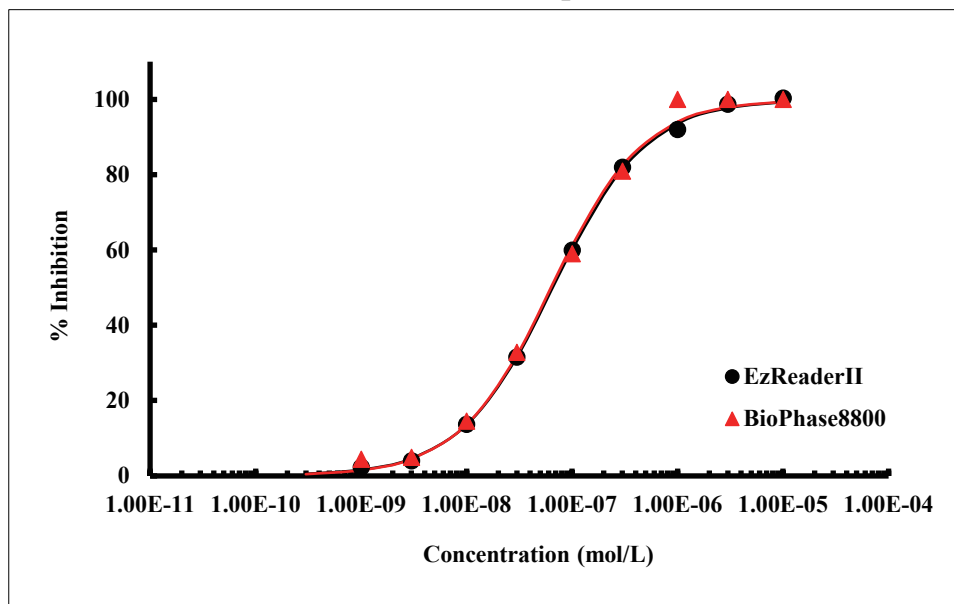


List of Substrates used in Mobility Shift Assay

A	ABLtide	01	K	Kemptide	13
	AMARA peptide	01	L	LIMKtide	13
B	Blk/Lyntide	02		LRRKtide	14
C	CDC25ctide	02	M	MCM2 peptide	14
	CDK7 peptide	03		MLCtide	15
	CDK9 substrate	03		Modified Erktide	15
	CHKtide	04		Modified Histone H1	16
	CK2tide	04		Modified I κ B α -derived peptide	16
	CKtide	05		Moesin-derived peptide	17
	CREBtide-p	05	P	PDHKtide	17
	Crosstide	06		PKC peptide	18
	CSKtide	06	R	RS peptide	18
	CTD3 peptide	07	S	S6K peptide (N-FL)	19
D	DAPK1tide	07		S6K2 peptide	19
	DYRKtide-F	08		SAMS peptide	20
E	EEF2Ktide	08		SGKtide	20
	EGFR-derived peptide	09		SPAKtide	21
G	GS peptide	09		Srctide	21
H	H2A peptide	10		Synapsin peptide	22
	Histone H3 peptide	10	T	T308tide	22
I	IRAK1 peptide	11		TAOKtide	23
	IRS1	11	W	WASP peptide	23
	I κ B α peptide	12			
J	JAK1 substrate peptide	12			

Substrate : ABLtide

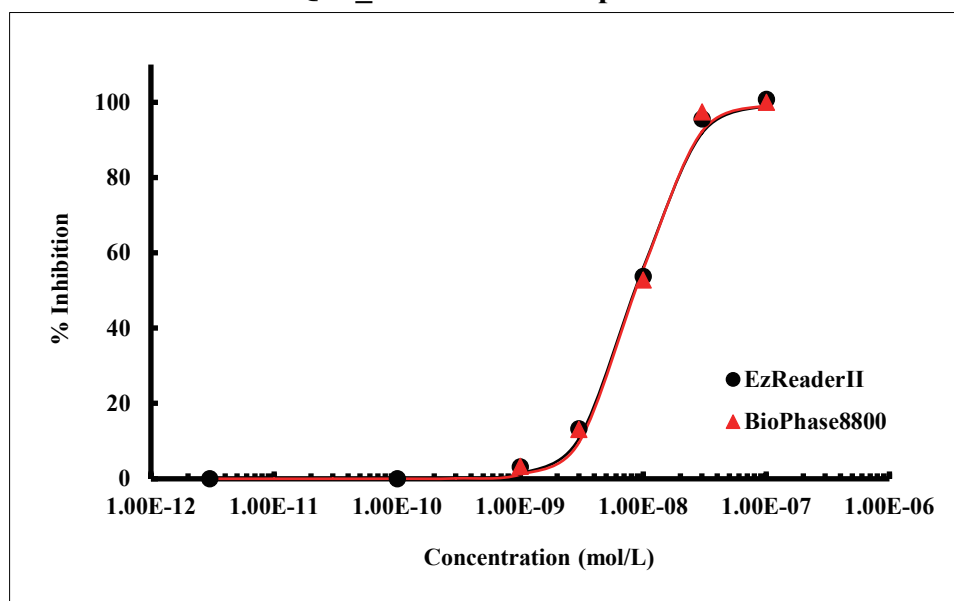
ABL vs. Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	66	63

Substrate : AMARA peptide

QIK_1mM vs Staurosporine

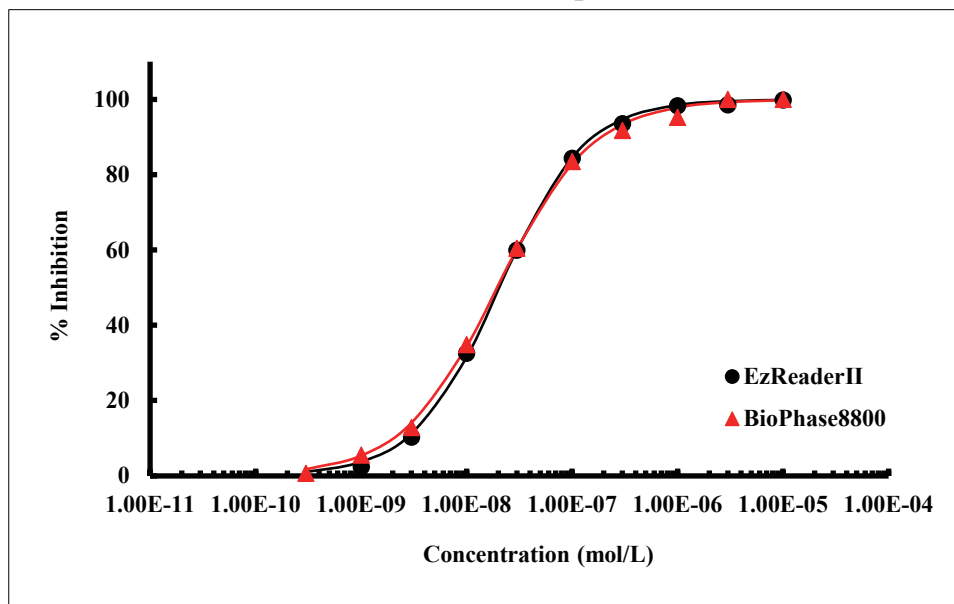


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	8.8	9.0



Substrate : **Blk/Lyntide**

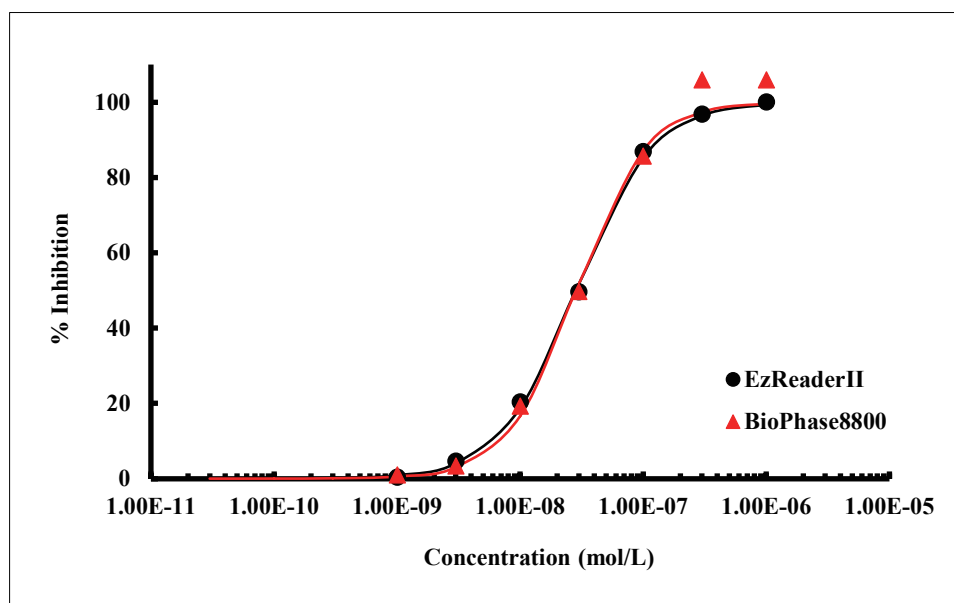
EPHA1 vs Staurosporine



	EzReaderII	BioPhase8800
IC₅₀ (nmol/L)	21	20

Substrate : **CDC25ctide**

PLK3 vs GW843682X

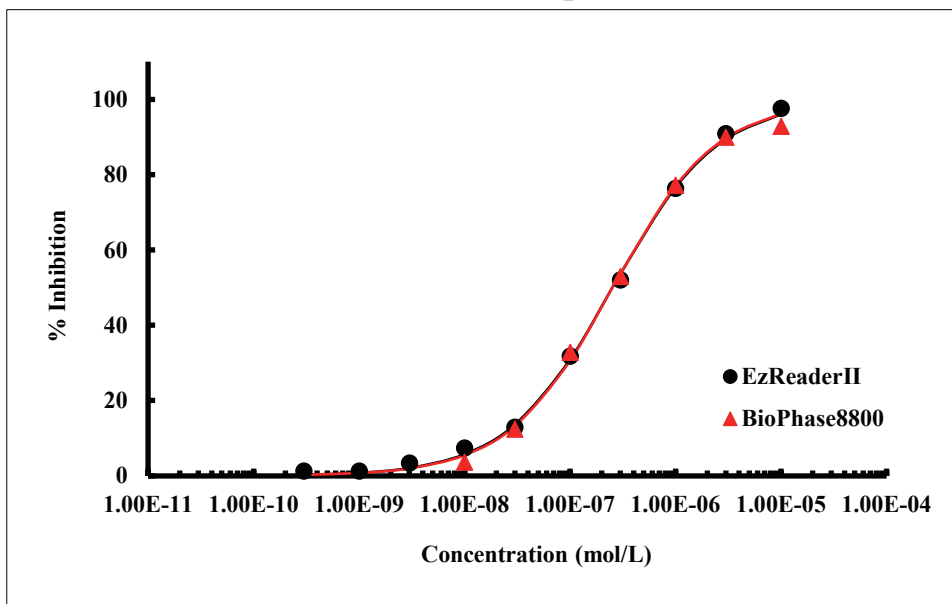


	EzReaderII	BioPhase8800
IC₅₀ (nmol/L)	29	29



Substrate : CDK7 peptide

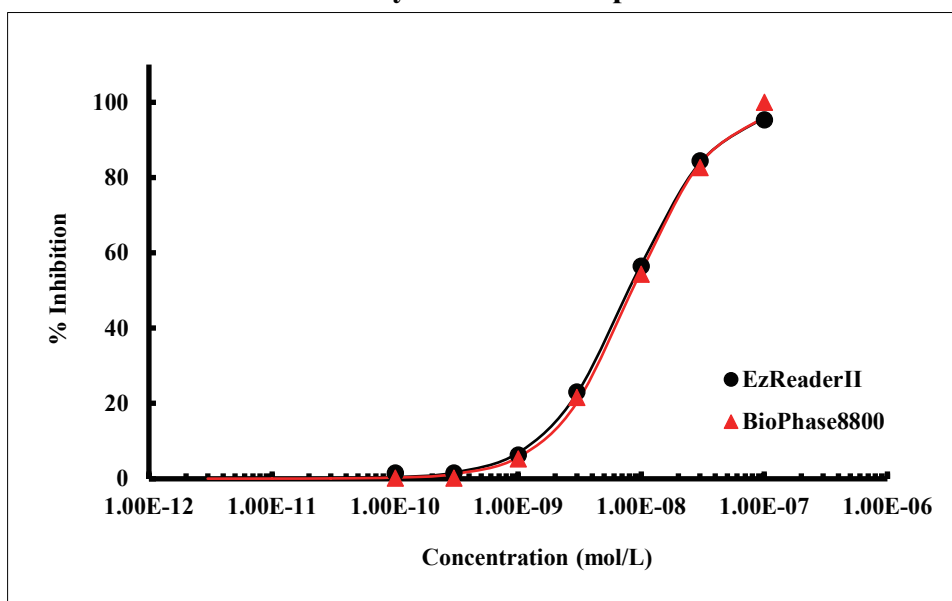
NEK9 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	250	250

Substrate : CDK9 substrate

CDK9/CycT1 vs Staurosporine

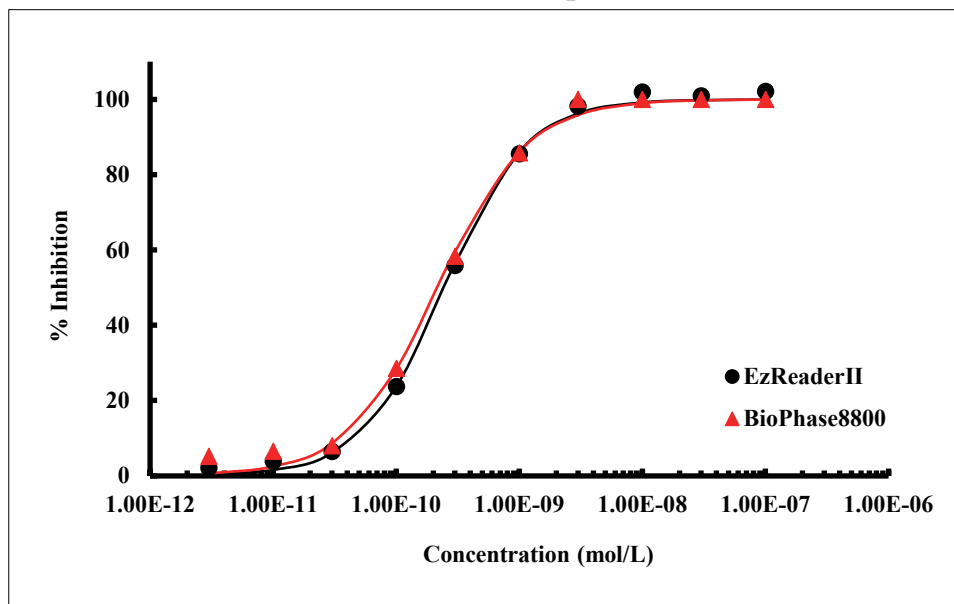


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	8.0	8.6



Substrate : **CHKtide**

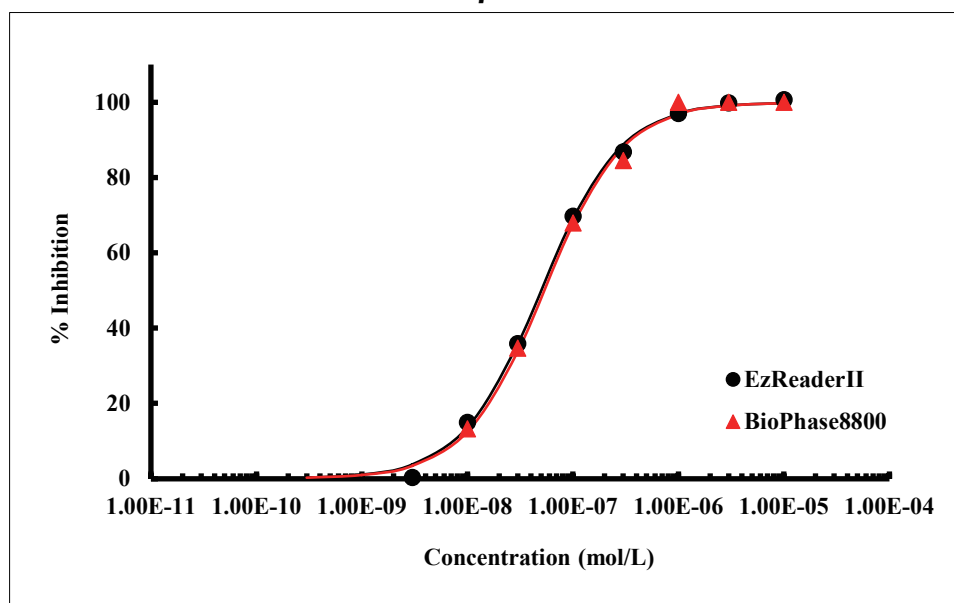
CHK1 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	0.25	0.22

Substrate : **CK2tide**

CK2 α 1/ β vs TBB

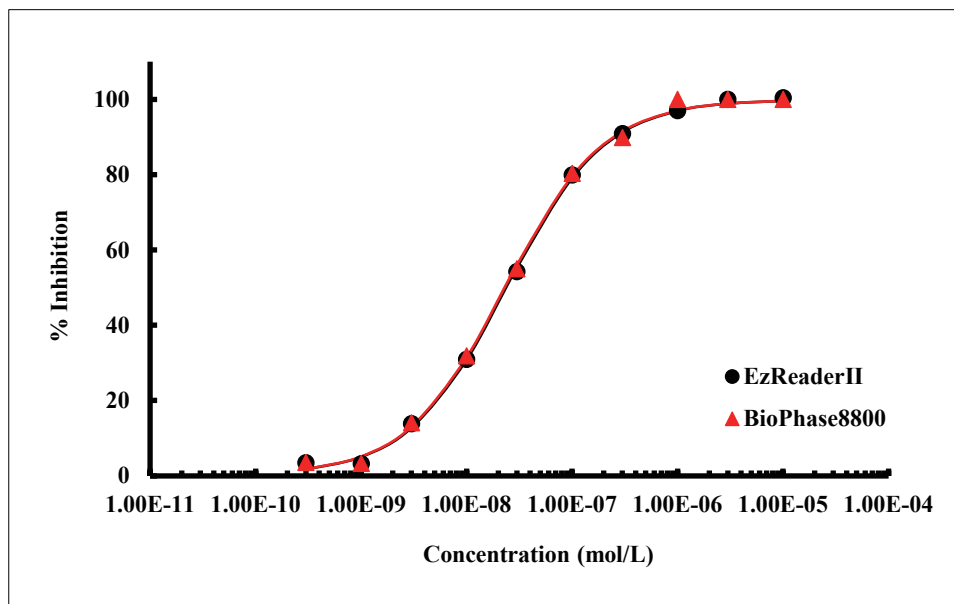


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	50	54



Substrate : CKtide

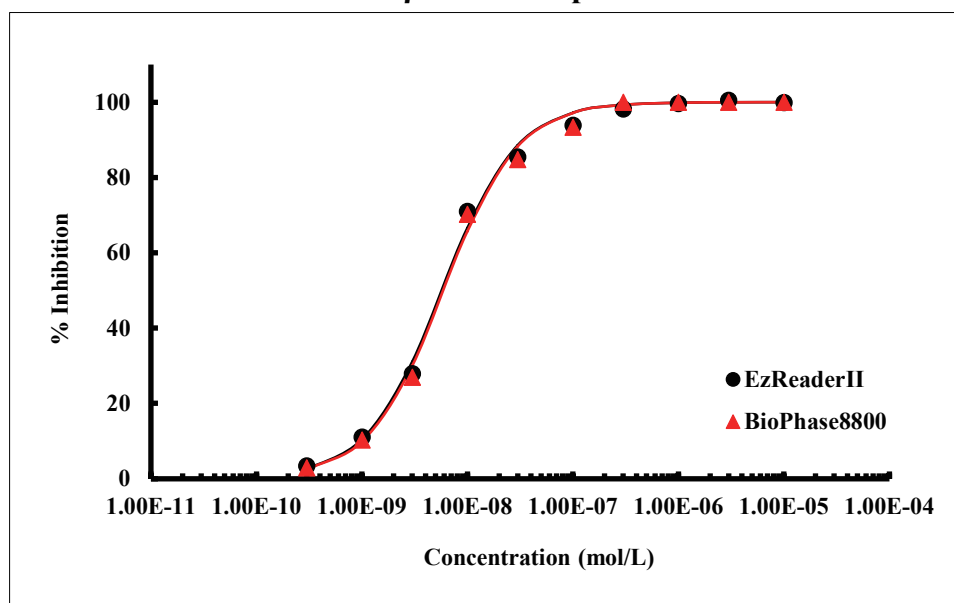
CK1δ vs 5-Iodotubercidin



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	24	23

Substrate : CREBtide-p

GSK3β vs Staurosporine

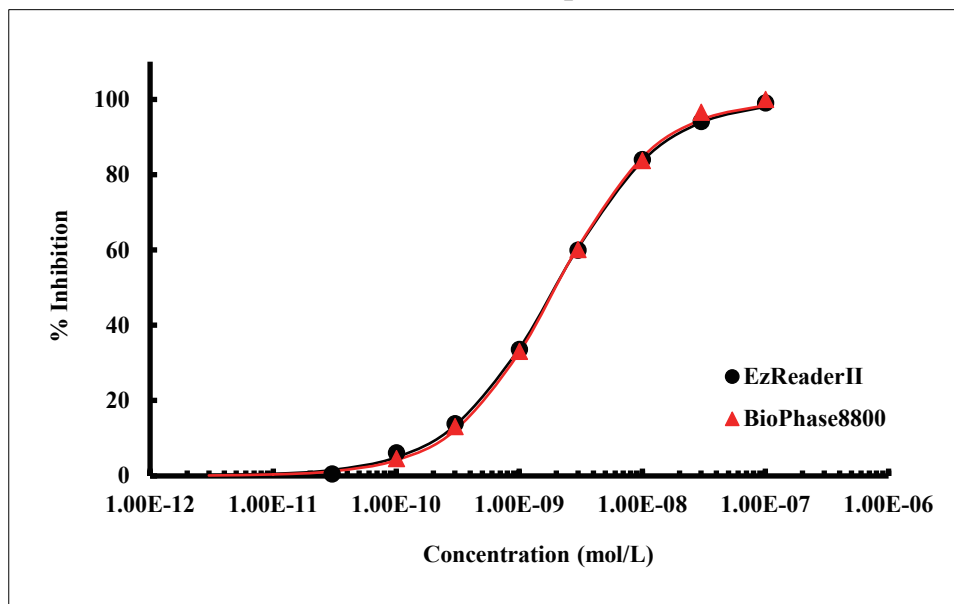


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	5.7	5.9



Substrate : Crosstide

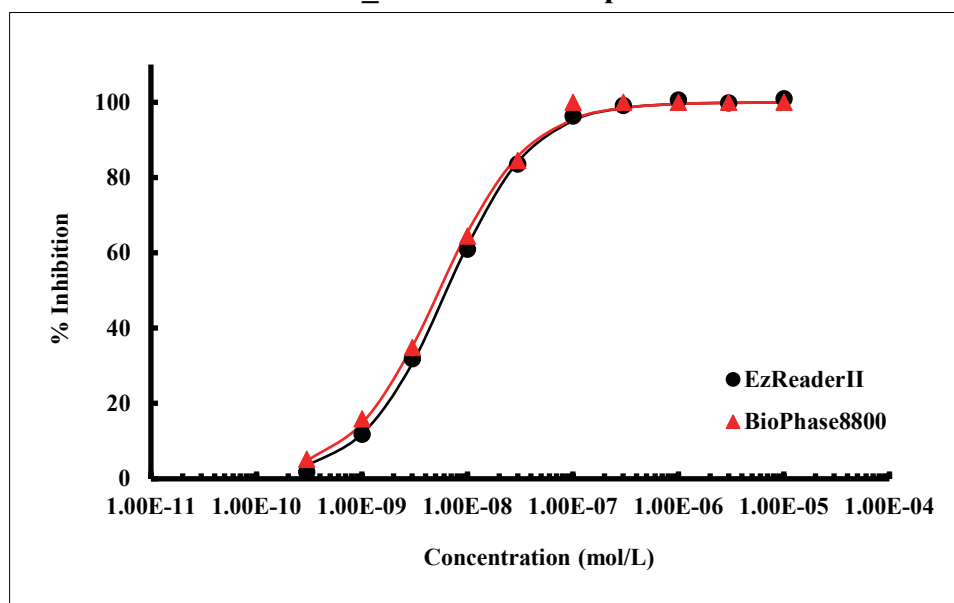
AKT1 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	2.0	2.0

Substrate : CSKtide

FLT1_1mM vs Staurosporine

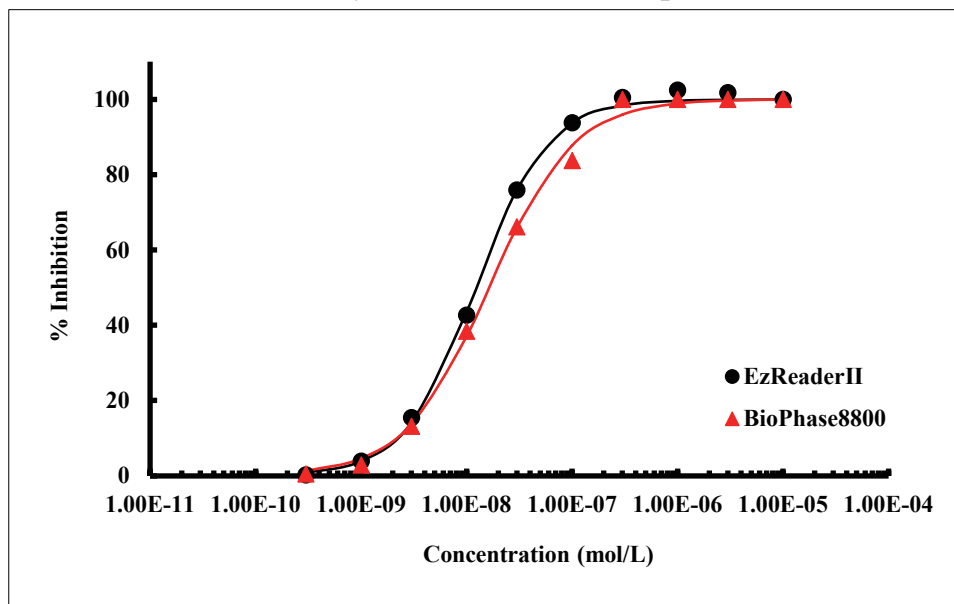


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	6.4	5.4



Substrate : CTD3 peptide

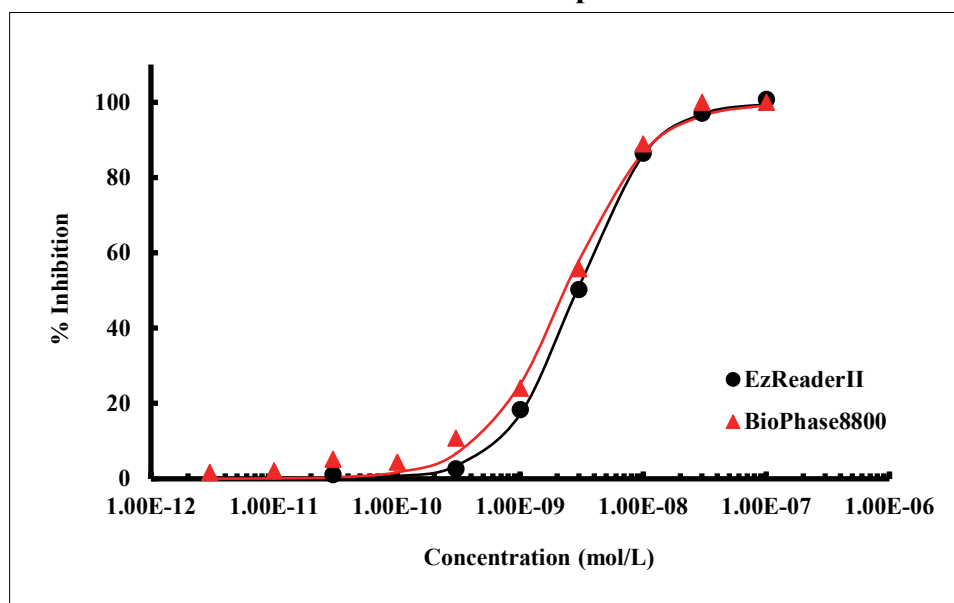
CDK7/CycH/MAT1 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	12	16

Substrate : DAPK1tide

DAPK1 vs Staurosporine

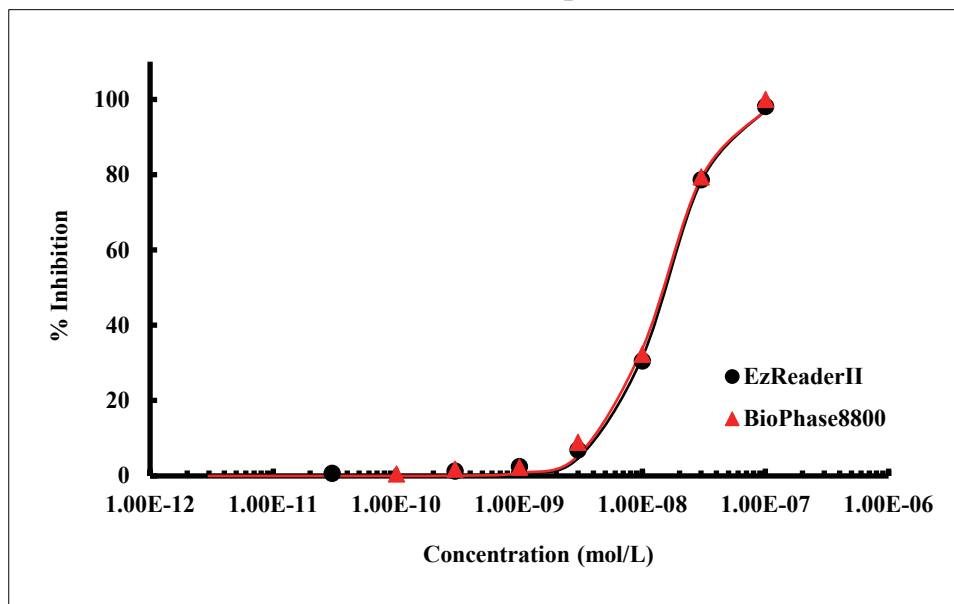


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	2.9	2.3



Substrate : **DYRKtide-F**

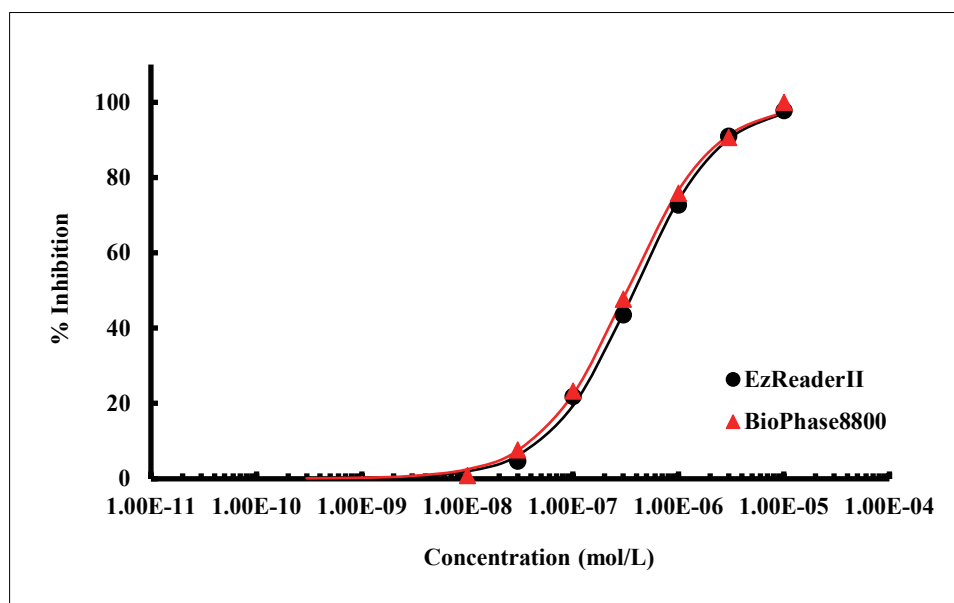
CLK1 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	15	14

Substrate : **EEF2Ktide**

EEF2K vs A-484954

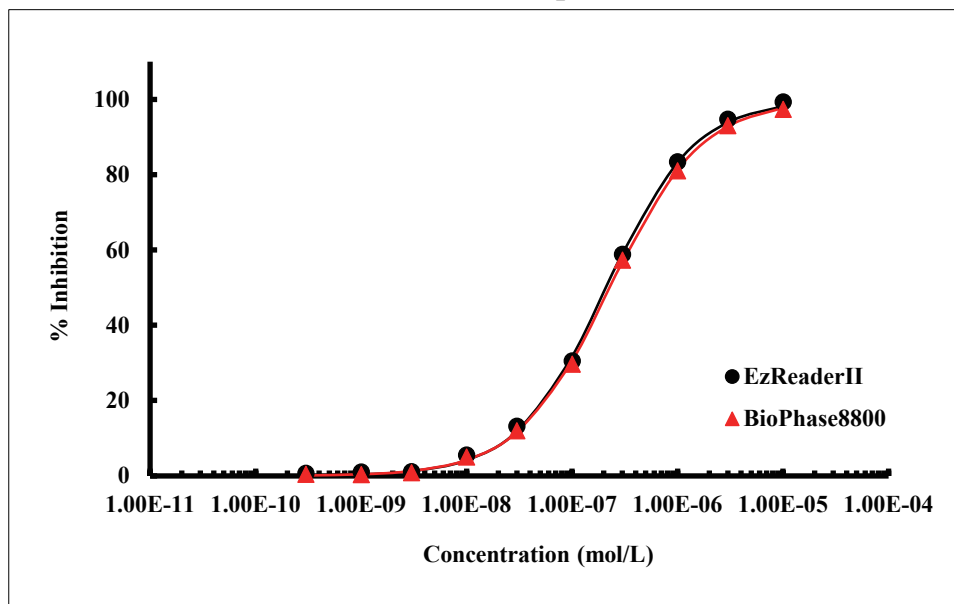


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	380	330



Substrate : EGFR-derived peptide

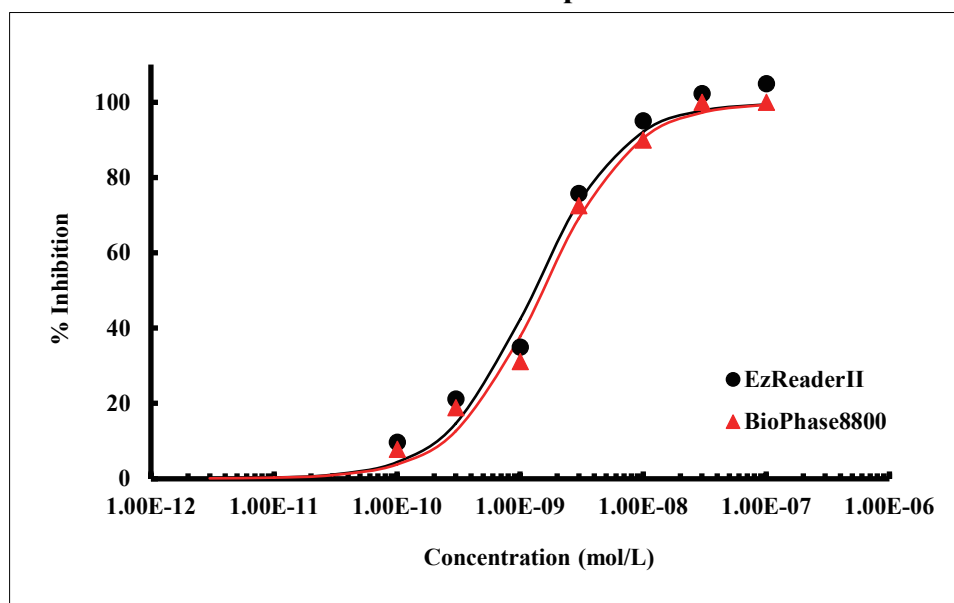
Erk5 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	210	230

Substrate : GS peptide

PKD1 vs Staurosporine

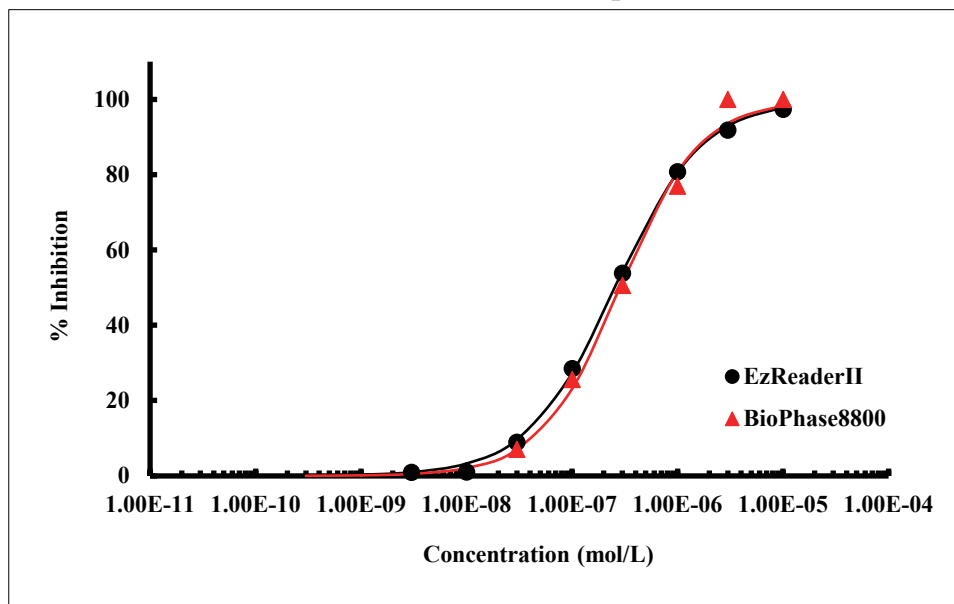


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	1.3	1.5



Substrate : H2A peptide

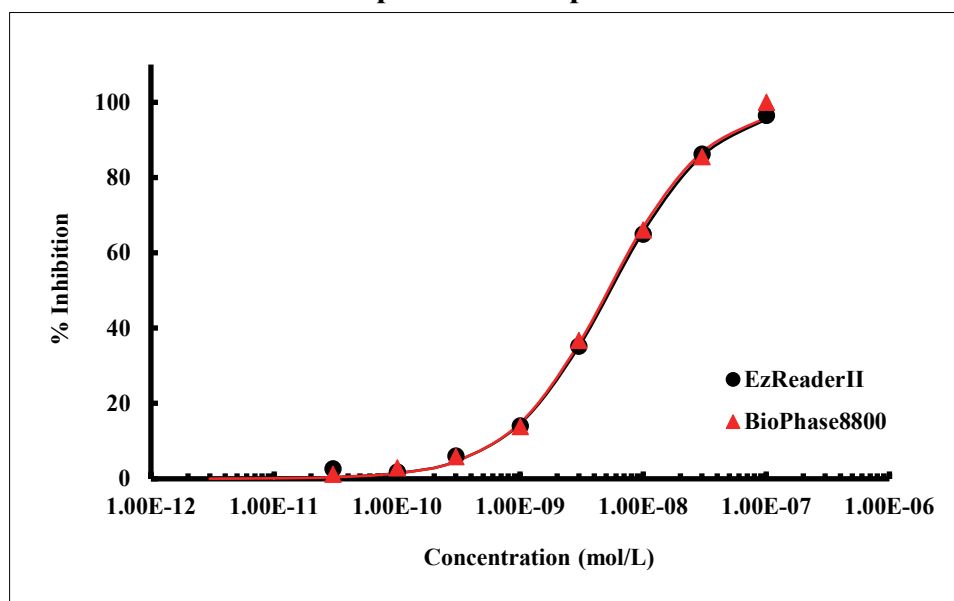
BUB1/BUB3 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	260	290

Substrate : Histone H3 peptide

Haspin vs Staurosporine

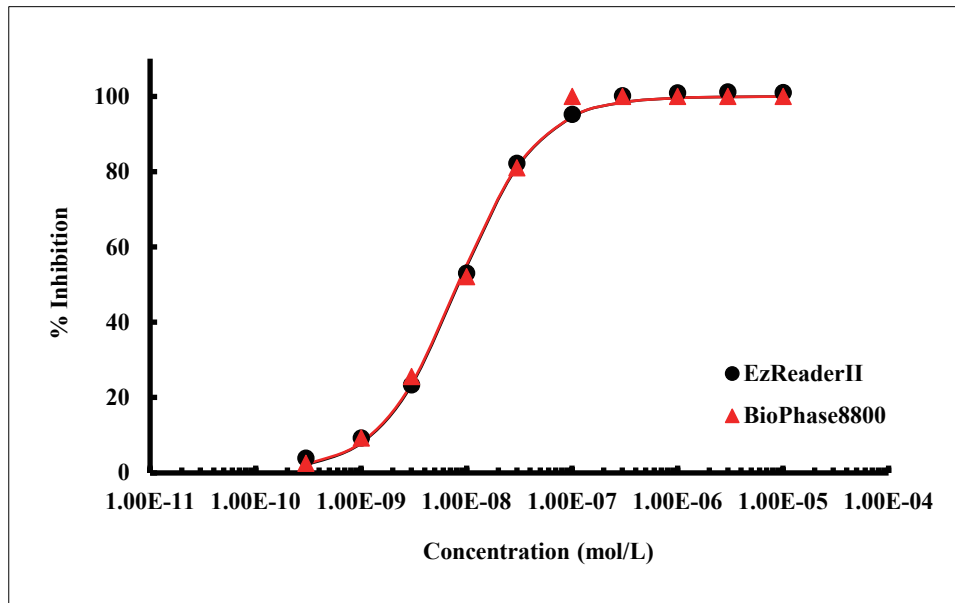


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	5.4	5.2



Substrate : **IRAK1** peptide

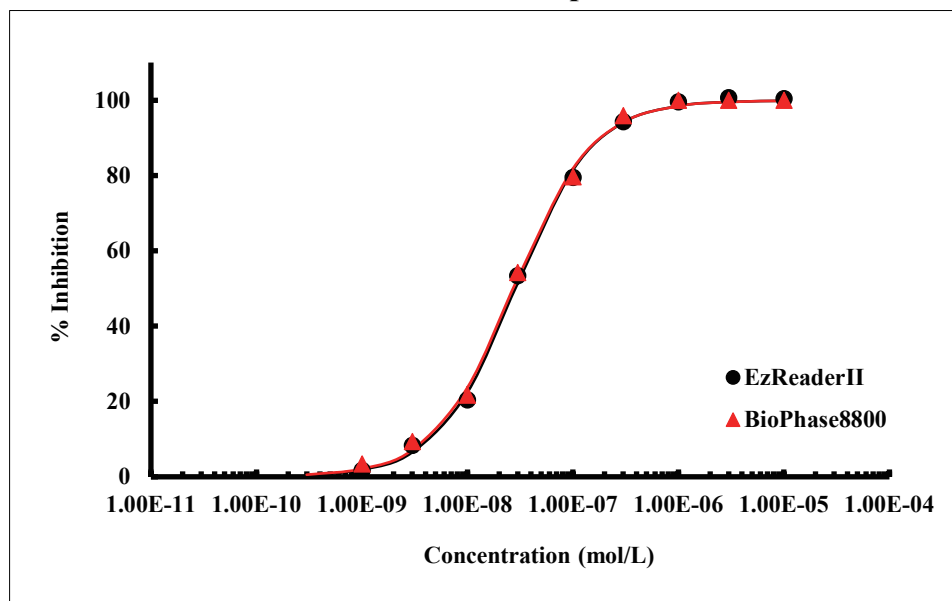
IRAK4 vs Staurosporine



	EzReaderII	BioPhase8800
IC₅₀ (nmol/L)	8.5	8.3

Substrate : **IRS1**

IGF1R vs Staurosporine

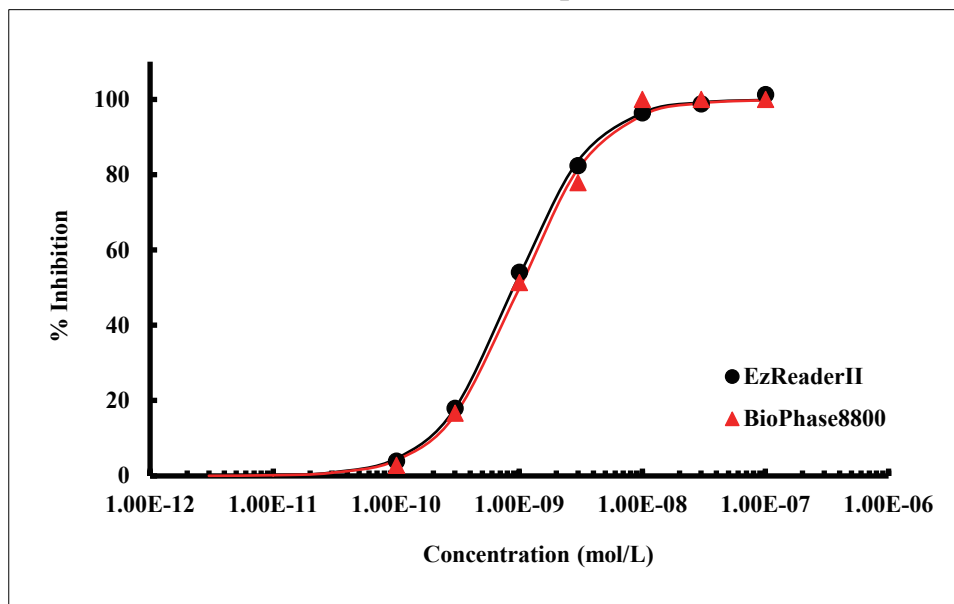


	EzReaderII	BioPhase8800
IC₅₀ (nmol/L)	29	27



Substrate : $\text{I}\kappa\text{B}\alpha$ peptide

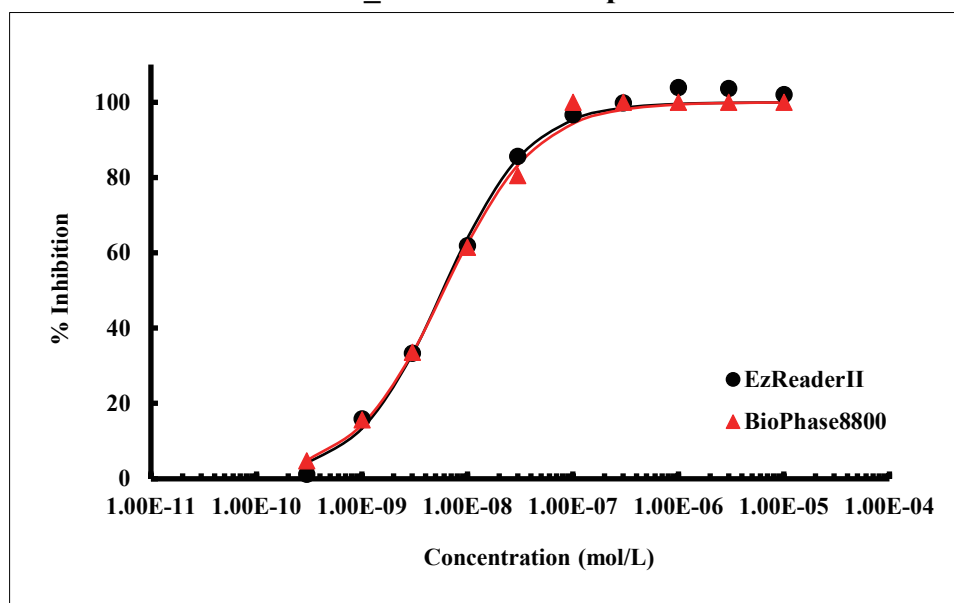
IKK ϵ vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	0.91	1.0

Substrate : JAK1 substrate peptide

JAK1_1mM vs Staurosporine

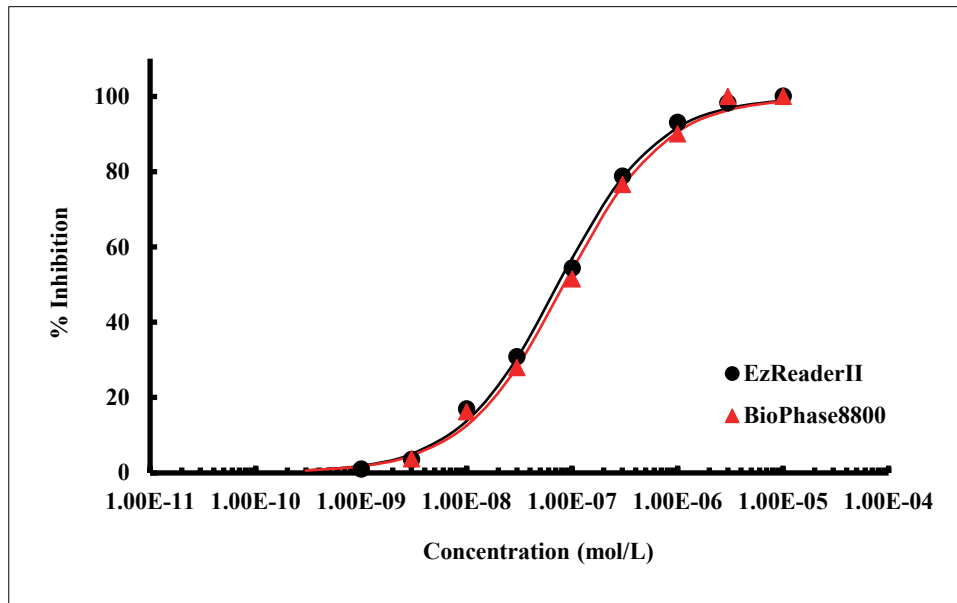


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	5.8	6.0



Substrate : **Kemptide**

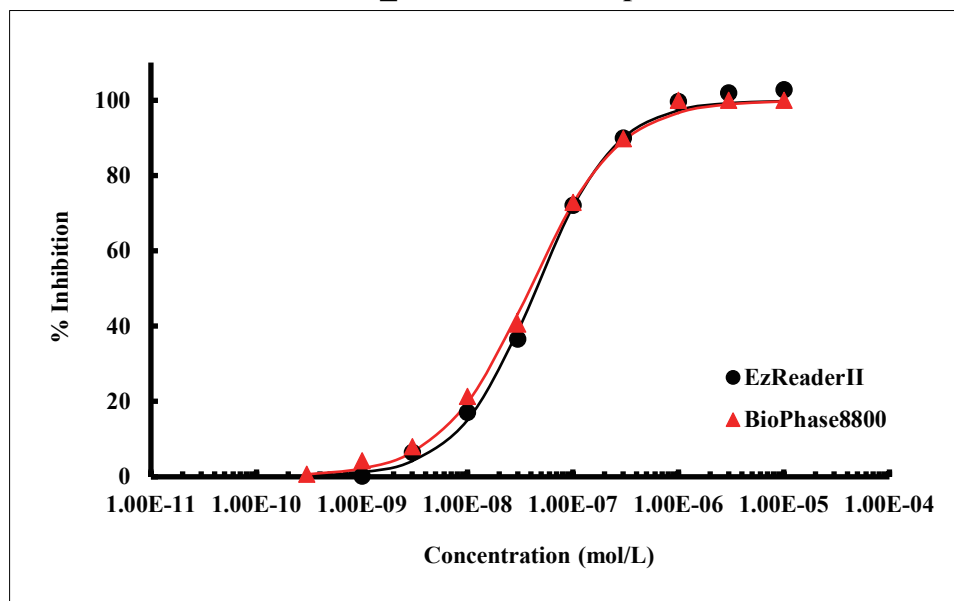
AurB/INCENP_1mM vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	74	85

Substrate : **LIMKtide**

ROCK1_1mM vs Staurosporine

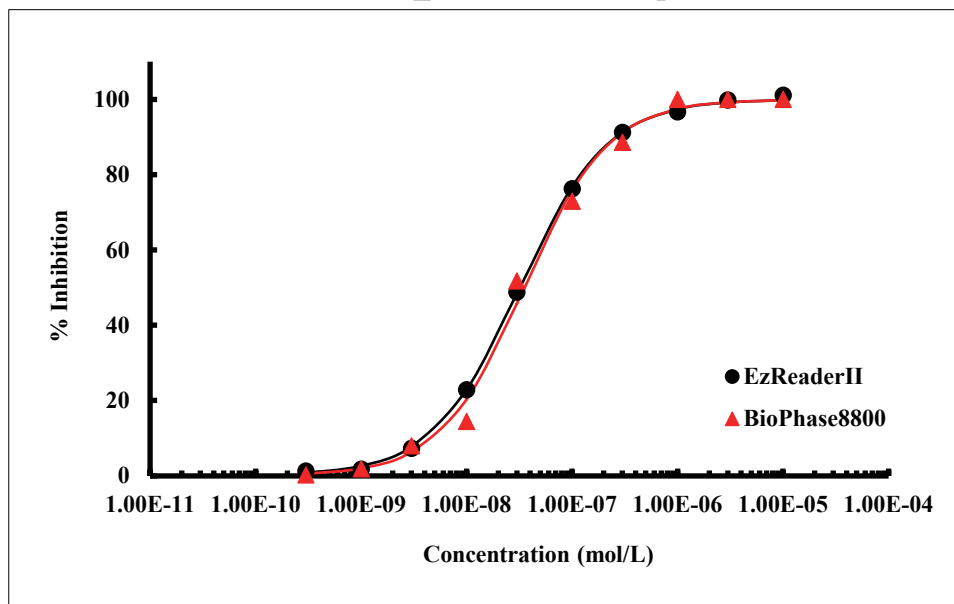


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	45	39



Substrate : LRRKtide

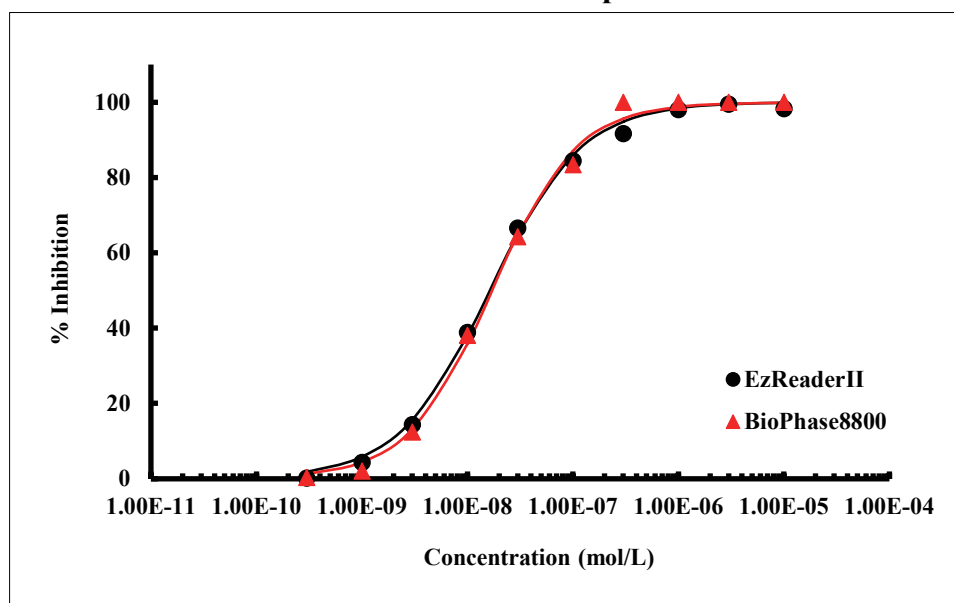
TAK1-TAB1_1mM vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	32	35

Substrate : MCM2 peptide

CDC7/ASK vs Staurosporine

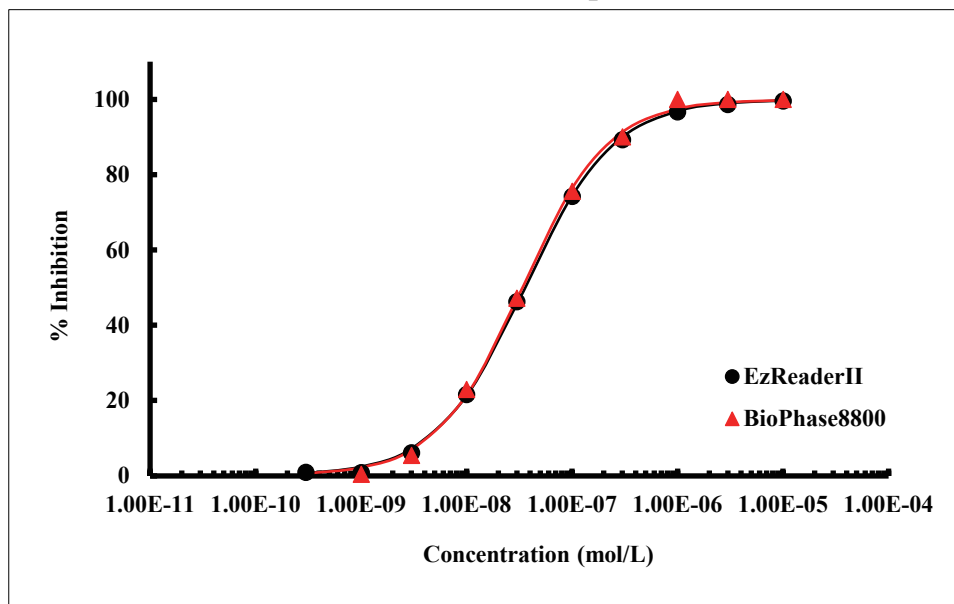


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	16	17



Substrate : **MLCtide**

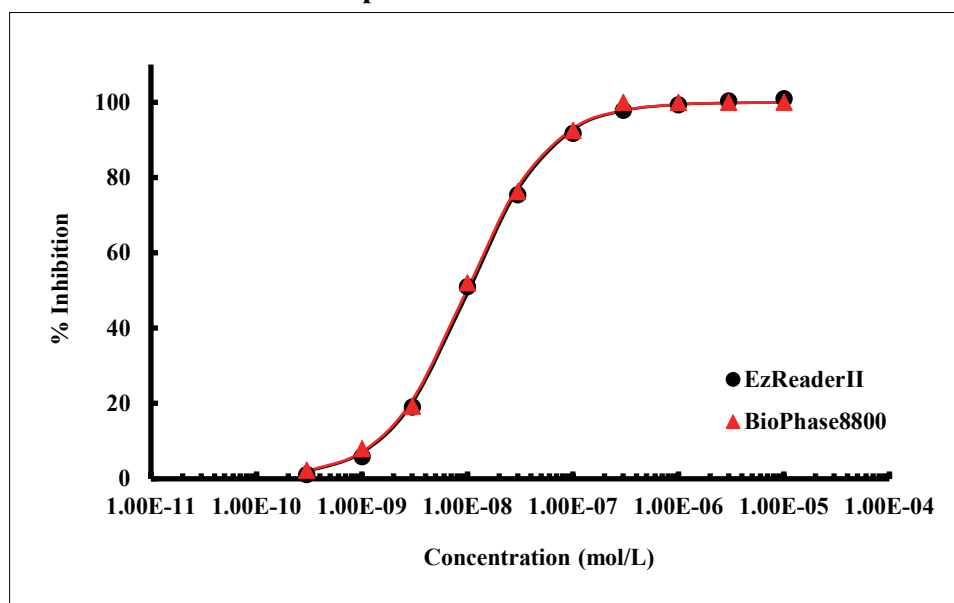
skMLCK vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	36	34

Substrate : **Modified Erktide**

p38α vs SB202190

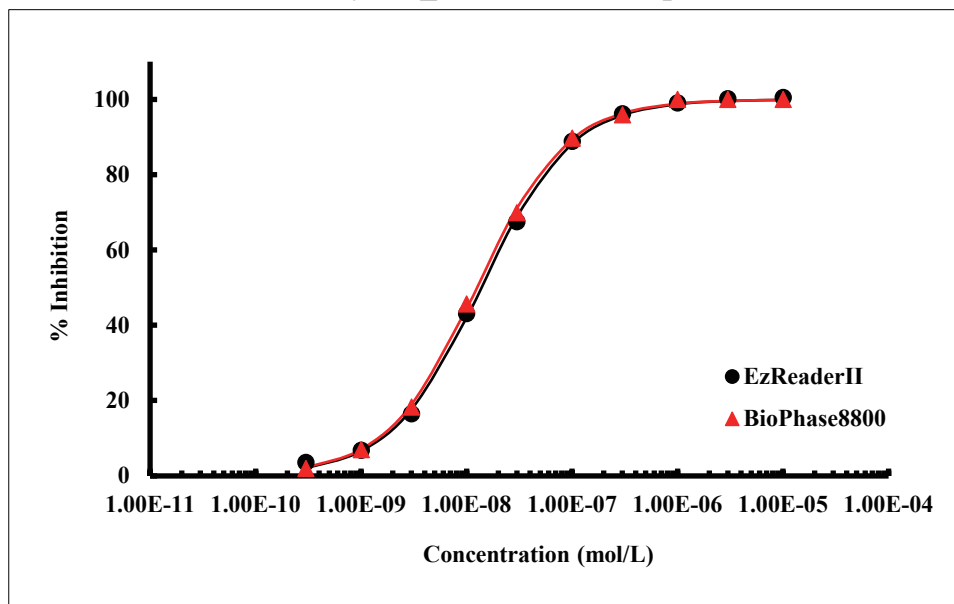


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	10	9.9



Substrate : **Modified Histone H1**

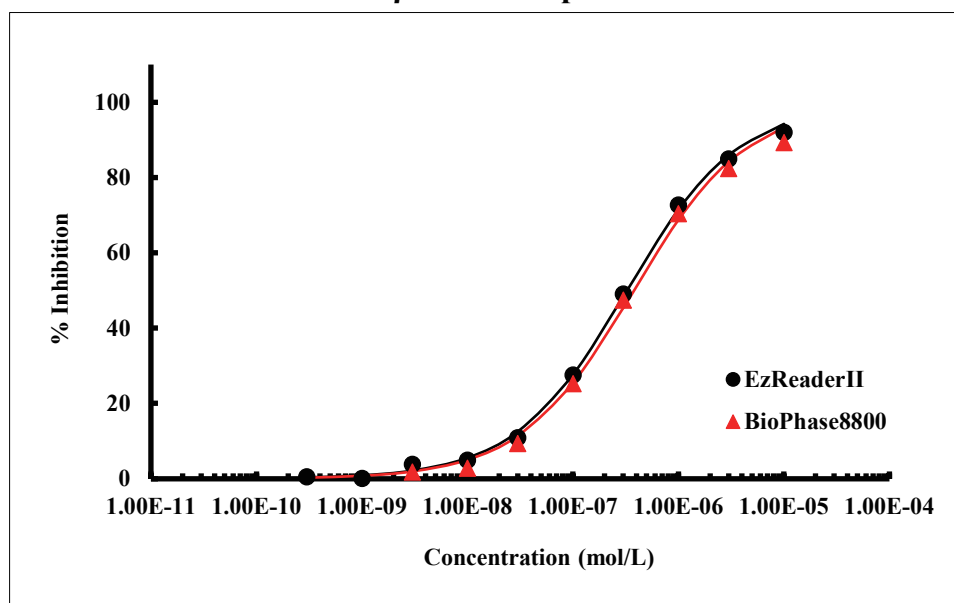
CDK2/CycA2_1mM vs Staurosporine



	EzReaderII	BioPhase8800
IC₅₀ (nmol/L)	14	12

Substrate : **Modified IκBα-derived peptide**

IKKβ vs Staurosporine

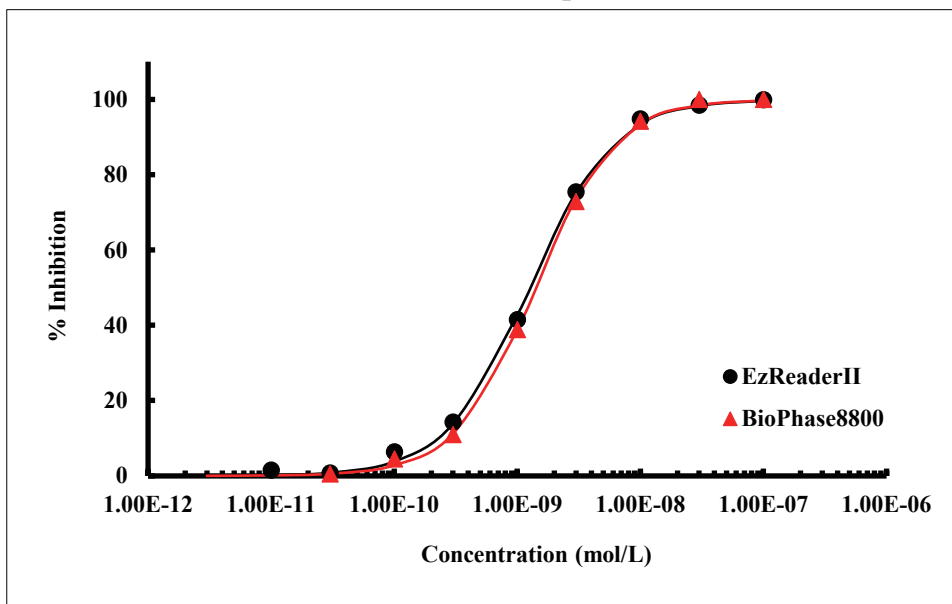


	EzReaderII	BioPhase8800
IC₅₀ (nmol/L)	320	380



Substrate : Moesin-derived peptide

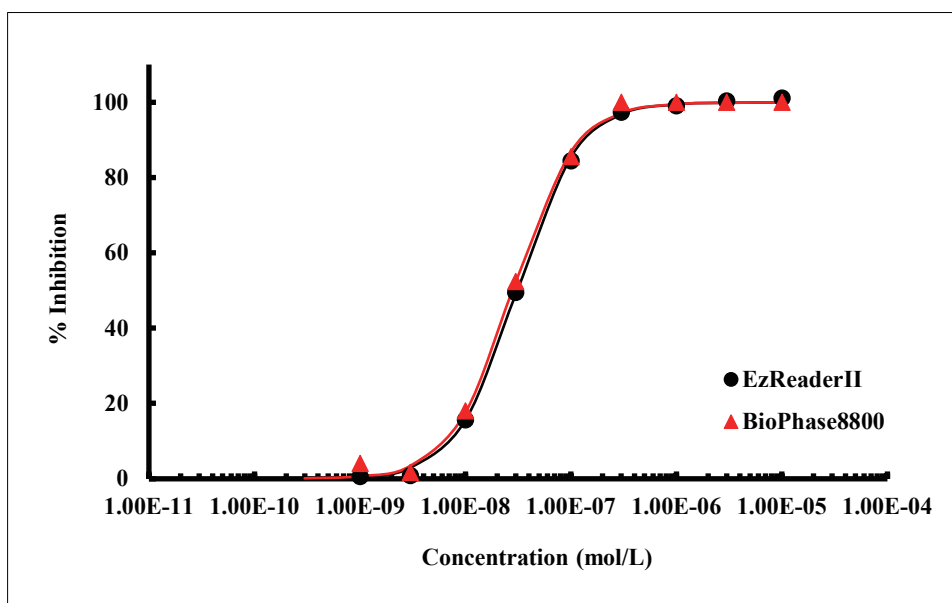
TNIK vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	1.3	1.4

Substrate : PDHKtide

PDHK2 vs VER-246608

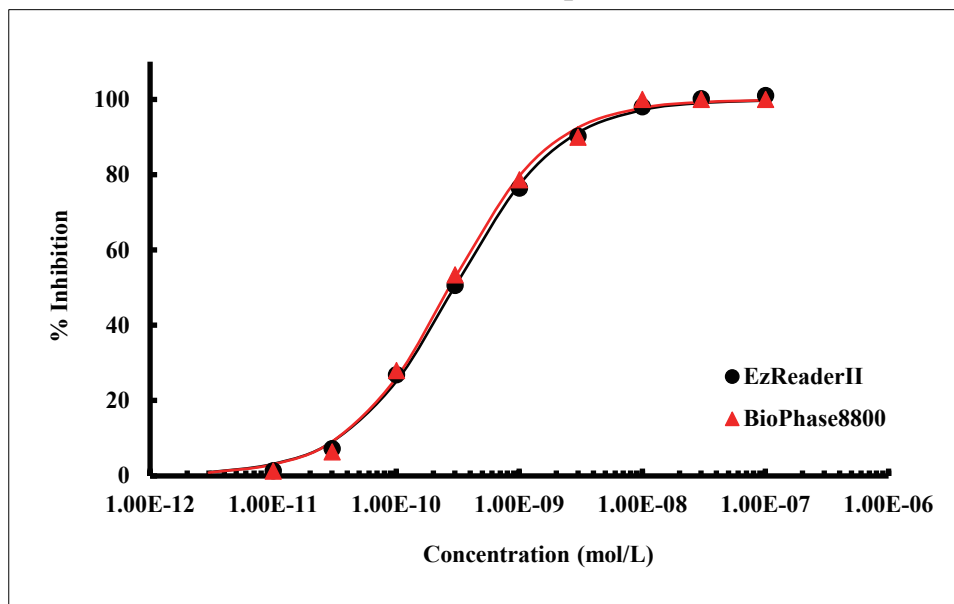


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	31	28



Substrate : PKC peptide

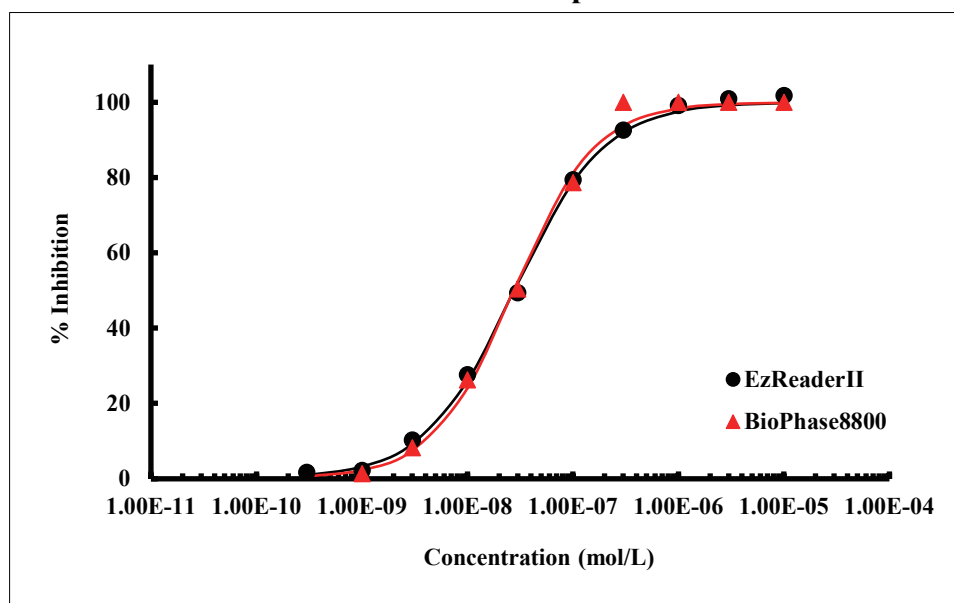
PKC α vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	0.30	0.27

Substrate : RS peptide

MNK1 vs Staurosporine

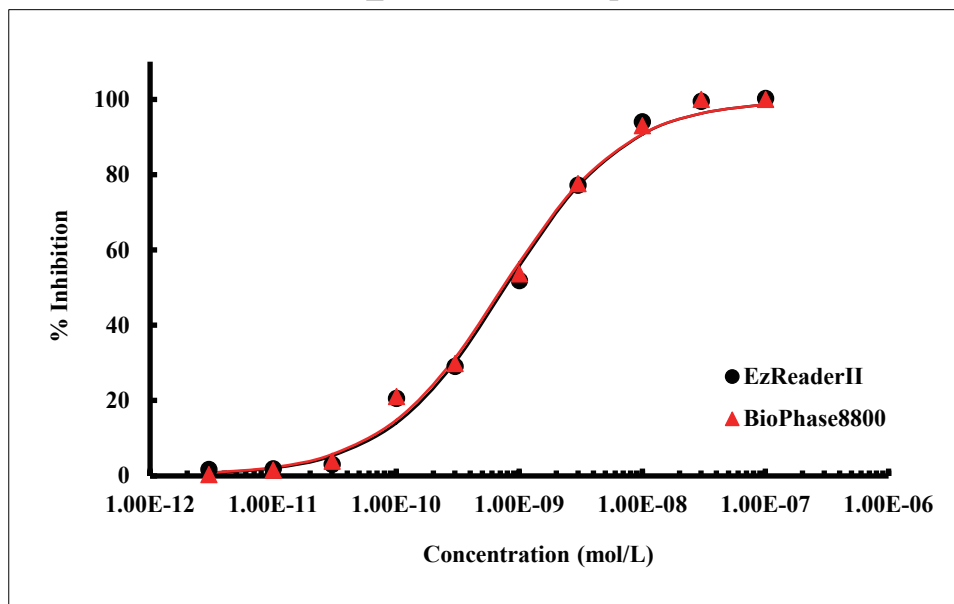


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	28	28



Substrate : S6K peptide(N-FL)

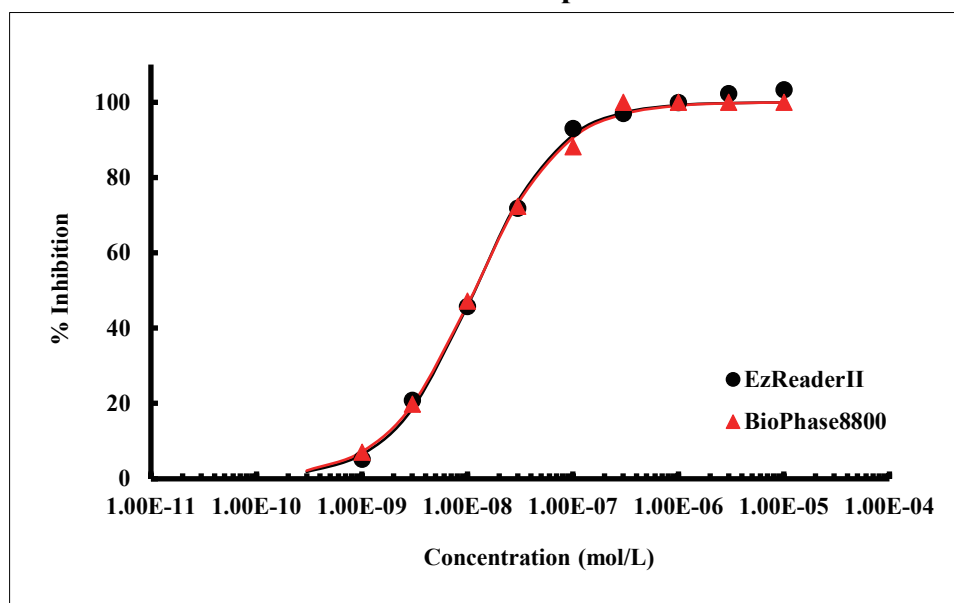
RSK4_1mM vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	0.77	0.73

Substrate : S6K2 peptide

PIM1 vs Staurosporine

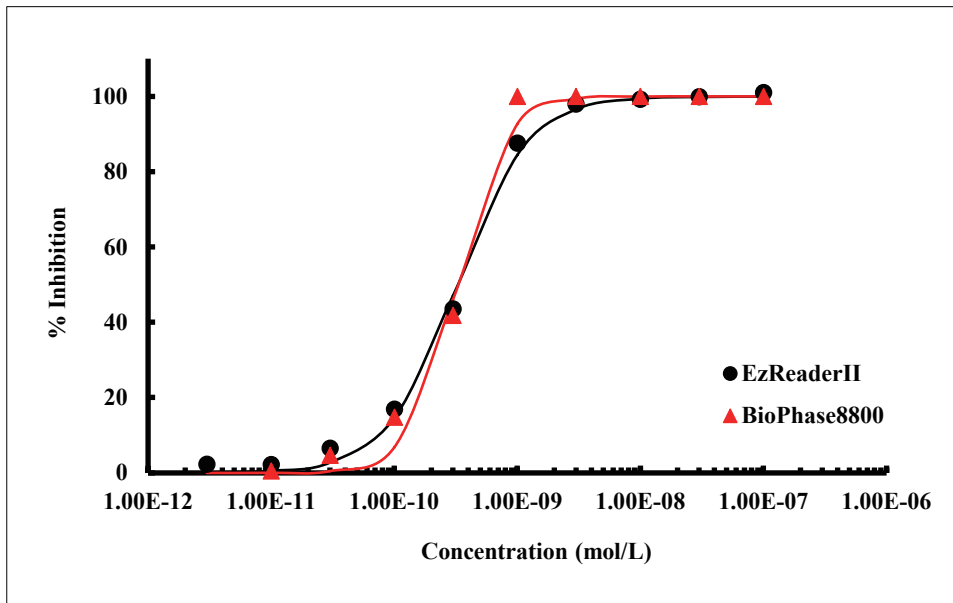


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	12	12



Substrate : SAMS peptide

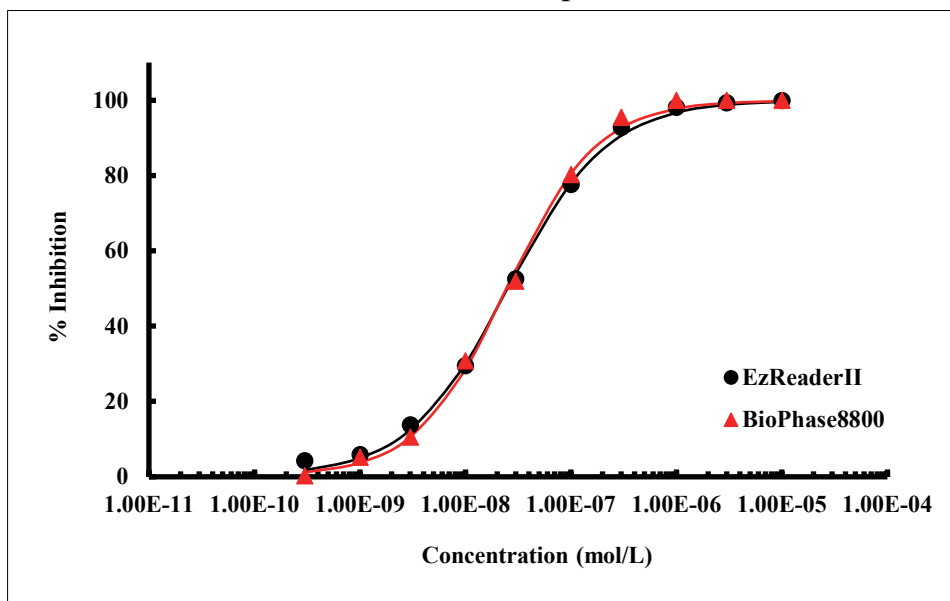
AMPK α 1/ β 1/ γ 1 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	0.32	0.32

Substrate : SGKtide

SGK2 vs Staurosporine

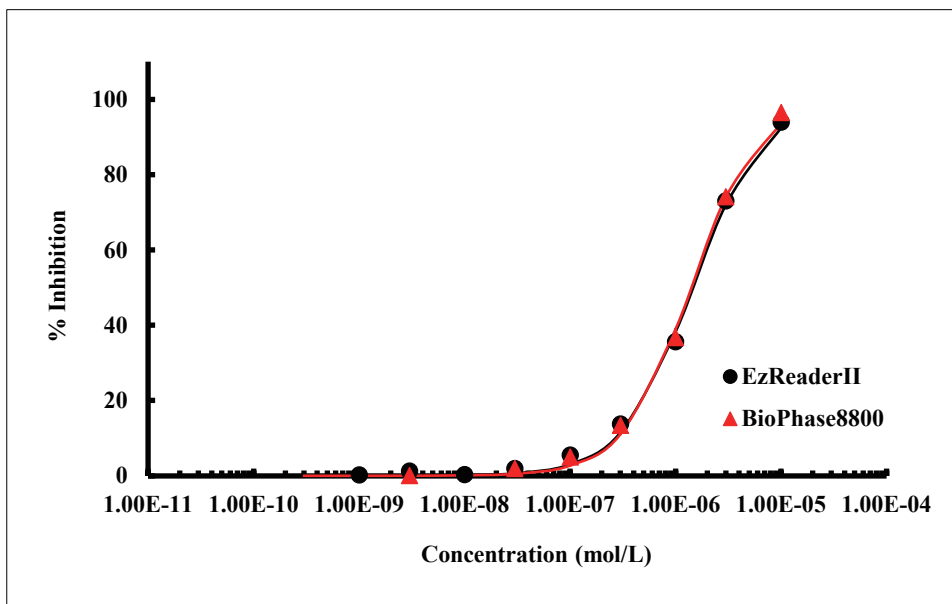


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	25	25



Substrate : SPAKtide

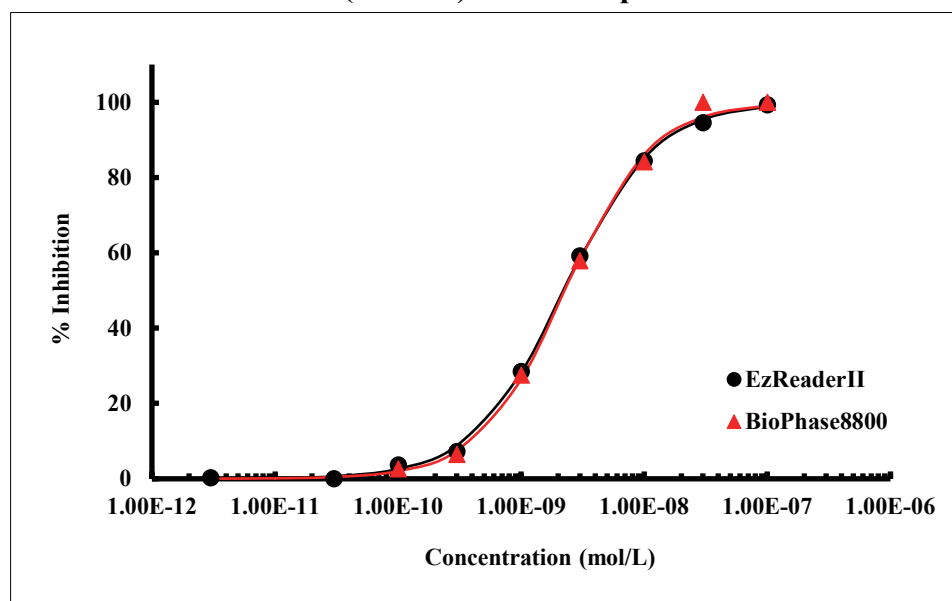
WNK3 vs K252a



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	1400	1400

Substrate : Srcptide

ALK(F1174L) vs Staurosporine

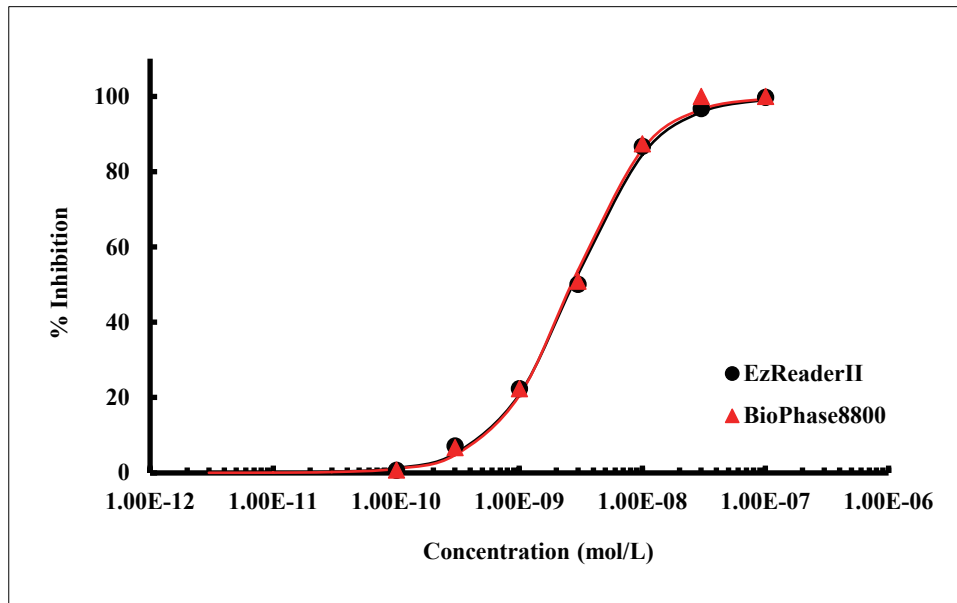


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	2.2	2.3



Substrate : Synapsin peptide

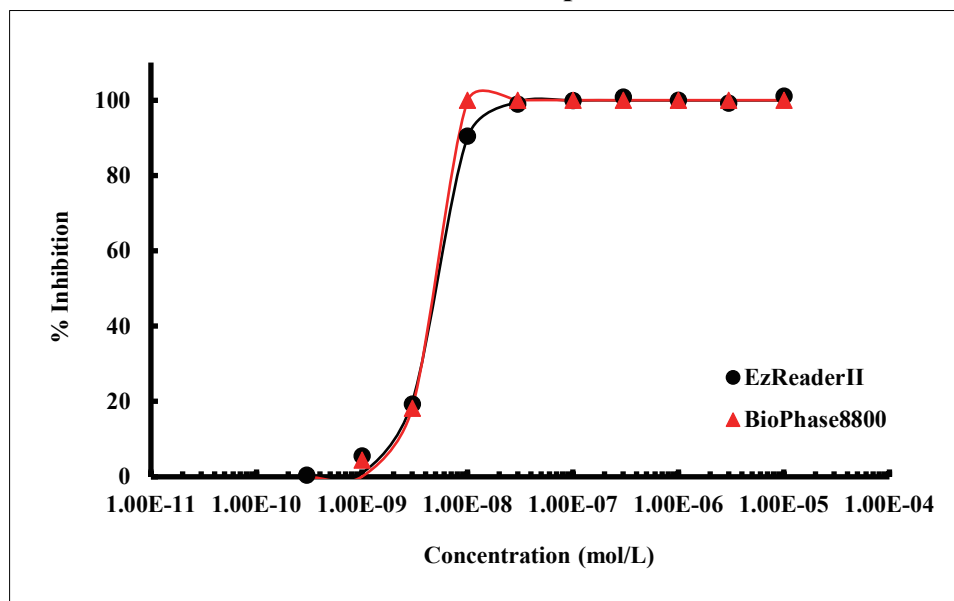
CaMK1δ vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	2.8	2.7

Substrate : T308tide

PDK1 vs Staurosporine

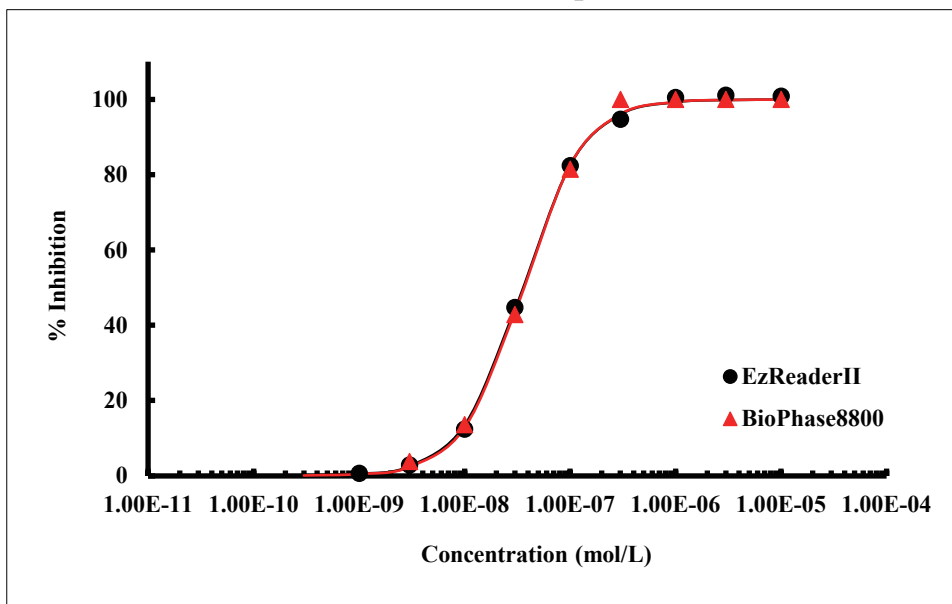


	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	4.8	3.9



Substrate : **TAOKtide**

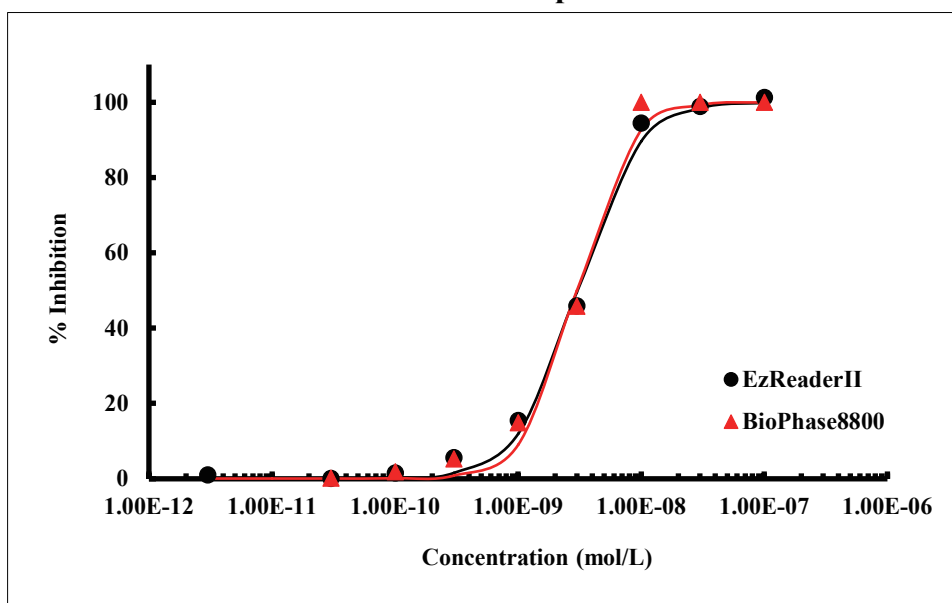
TAOK2 vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	35	36

Substrate : **WASP peptide**

ACK vs Staurosporine



	EzReaderII	BioPhase8800
IC ₅₀ (nmol/L)	3.0	3.0



Kinase-based Substrate List

Correspondence table of a kinase and substrate used in our Mobility Shift Assay. Click on each substrate name will take you to an overlay of the IC₅₀ data for the substrate from the new and previous systems (BioPhase™ 8800 & EZReader).

	Kinase	Substrate		Kinase	Substrate
A	ABL	ABLTide		CDK5/p25	Modified Histone H1
	ABL [E255K]	ABLTide		CDK6/CycD3	DYRKtide-F
	ABL [T315I]	ABLTide		CDK7/CycH/MAT1	CTD3 peptide
	ACK	WASP peptide		CDK9/CycT1	CDK9 substrate
	AKT1	Crosstide		CGK2	Kemptide
	AKT2	Crosstide		CHK1	CHKtide
	AKT3	Crosstide		CHK2	CHKtide
	ALK	Srctide		CK1α	CKtide
	ALK [C1156Y]	Srctide		CK1γ1	CKtide
	ALK [F1174L]	Srctide		CK1γ2	CKtide
	ALK [G1202R]	Srctide		CK1γ3	CKtide
	ALK [G1269A]	Srctide		CK1δ	CKtide
	ALK [L1196M]	Srctide		CK1ε	CKtide
	ALK [R1275Q]	Srctide		CK2α1/β	CK2tide
	ALK [T1151_L1152insT]	Srctide		CK2α2/β	CK2tide
	AMPKα1/β1/γ1	SAMS peptide		CLK1	DYRKtide-F
	AMPKα2/β1/γ1	SAMS peptide		CLK2	DYRKtide-F
	ARG	ABLTide		CLK3	DYRKtide-F
	AurA	Kemptide		COT	Modified Erktide
	AurA/TPX2	Kemptide		CRIK	Histone H3 peptide
AurB/INCENP	Kemptide	CSK	Srctide		
AurC	Kemptide				
AXL	CSKtide				
B	BLK	Srctide		D DAPK1	DAPK1tide
	BMX	Srctide		DCAMKL2	GS peptide
	BRAF	Modified Erktide		DDR1	IRS1
	BRAF [V600E]	Modified Erktide		DDR2	IRS1
	BRK	Blk/Lyntide		DLK	Modified Erktide
	BRSK1	CHKtide		DYRK1A	DYRKtide-F
	BRSK2	CHKtide		DYRK1B	DYRKtide-F
	BTK	Srctide		DYRK2	DYRKtide-F
	BTK [C481S]	Srctide		DYRK3	DYRKtide-F
	BUB1/BUB3	H2A peptide			
C	CaMK1α	GS peptide		E EEF2K	EEF2Ktide
	CaMK1δ	Synapsin peptide		EGFR	Srctide
	CaMK2α	GS peptide		EGFR [C797S/L858R]	Srctide
	CaMK2β	GS peptide		EGFR [d746-750]	Srctide
	CaMK2γ	GS peptide		EGFR [d746-750/C797S]	Srctide
	CaMK2δ	GS peptide		EGFR [d746-750/T790M]	Srctide
	CaMK4	GS peptide		EGFR [d746-750/T790M/C797S]	Srctide
	CDC7/ASK	MCM2 peptide		EGFR [d770_N771insNPG]	Srctide
	CDK1(CDC2)/CycB1	Modified Histone H1		EGFR [L858R]	Srctide
	CDK2/CycA2	Modified Histone H1		EGFR [L861Q]	Srctide
	CDK2/CycE1	Modified Histone H1		EGFR [T790M]	Srctide
	CDK3/CycE1	Modified Histone H1		EGFR [T790M/C797S/L858R]	Srctide
	CDK4/CycD3	DYRKtide-F		EGFR [T790M/L858R]	Srctide
				EML4-ALK	Srctide
		EPHA1	Blk/Lyntide		
		EPHA2	Blk/Lyntide		

Kinase-based Substrate List

Correspondence table of a kinase and substrate used in our Mobility Shift Assay. Click on each substrate name will take you to an overlay of the IC₅₀ data for the substrate from the new and previous systems (BioPhase™ 8800 & EZReader).

	Kinase	Substrate		Kinase	Substrate
E	EPHA3	Blk/Lyntide	H	HIPK2	DYRKtide-F
	EPHA4	Blk/Lyntide		HIPK3	DYRKtide-F
	EPHA5	Blk/Lyntide		HIPK4	DYRKtide-F
	EPHA6	Blk/Lyntide		HPK1	S6K2 peptide
	EPHA7	Blk/Lyntide			
	EPHA8	Blk/Lyntide	I	IGF1R	IRS1
	EPHB1	Blk/Lyntide		IKKβ	Modified IκBα-derived peptide
	EPHB2	Blk/Lyntide		IKKε	IκBα peptide
	EPHB3	Blk/Lyntide		INSR	IRS1
	EPHB4	Blk/Lyntide		IRAK4	IRAK1 peptide
	Erk1	Modified Erktide		IRR	IRS1
	Erk2	Modified Erktide		ITK	Srctide
	Erk5	EGFR-derived peptide			
F	FAK	Blk/Lyntide	J	JAK1	JAK1 substrate peptide
	FER	Srctide		JAK2	Srctide
	FES	Srctide		JAK3	Srctide
	FGFR1	CSKtide		JNK1	Modified Erktide
	FGFR1 [V561M]	CSKtide		JNK2	Modified Erktide
	FGFR2	CSKtide	JNK3	Modified Erktide	
	FGFR2 [V564I]	CSKtide	K	KDR	CSKtide
	FGFR3	CSKtide		KIT	Srctide
	FGFR3 [K650E]	CSKtide		KIT [D816E]	Srctide
	FGFR3 [K650M]	CSKtide		KIT [D816V]	Srctide
	FGFR3 [V555L]	CSKtide		KIT [D816Y]	Srctide
	FGFR3 [V555M]	CSKtide		KIT [T670I]	Srctide
	FGFR4	CSKtide		KIT [V560G]	Srctide
	FGFR4 [N535K]	CSKtide	KIT [V654A]	Srctide	
	FGFR4 [V550E]	CSKtide	L	LATS1/MOBKL1A	SGKtide
	FGFR4 [V550L]	CSKtide		LATS2/MOBKL1A	SGKtide
	FGR	Srctide		LCK	Srctide
	FLT1	CSKtide		LOK	Moesin-derived peptide
	FLT3	Srctide		LTK	Srctide
	FLT4	CSKtide		LYNa	Srctide
	FMS	Srctide		LYNb	Srctide
FRK	Srctide	M	MAP2K1	Modified Erktide	
FYN[isoform a]	Srctide		MAP2K2	Modified Erktide	
FYN[isoform b]	Srctide		MAP2K3	Modified Erktide	
			MAP2K4	Modified Erktide	
			MAP2K5	EGFR-derived peptide	
			MAP2K6	Modified Erktide	
			MAP2K7	Modified Erktide	
G	GSK3α	CREBtide-p	MAP3K1	Modified Erktide	
	GSK3β	CREBtide-p	MAP3K2	Modified Erktide	
H	Haspin	Histone H3 peptide	MAP3K3	Modified Erktide	
	HCK	Srctide	MAP3K4	Modified Erktide	
	HER2	Srctide			
	HER4	Srctide			
	HGK	Moesin-derived peptide			
	HIPK1	DYRKtide-F			

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	Kinase	Substrate		Kinase	Substrate
M	MAP3K5	Modified Erktide	P	p38γ	Modified Erktide
	MAP4K2	S6K2 peptide		p38δ	Modified Erktide
	MAPKAPK2	GS peptide		p70S6K	S6K2 peptide
	MAPKAPK3	GS peptide		p70S6Kβ	S6K2 peptide
	MAPKAPK5	GS peptide		PAK1	LIMKtide
	MARK1	CHKtide		PAK2	DAPK1tide
	MARK2	CHKtide		PAK4	SGKtide
	MARK3	CHKtide		PAK5	DAPK1tide
	MARK4	CHKtide		PAK6	SGKtide
	MELK	GS peptide		PASK	GS peptide
	MER	CSKtide		PBK	Histone H3 peptide
	MET	Srctide		PDGFRα	CSKtide
	MET [D1228H]	Srctide		PDGFRα [D842V]	CSKtide
	MET [M1250T]	Srctide		PDGFRα [T674I]	CSKtide
	MET [Y1235D]	Srctide		PDGFRα [V561D]	CSKtide
	MINK	Modified Erktide		PDGFRβ	CSKtide
	MLK1	Modified Erktide		PDHK2	PDHKtide
	MLK2	Modified Erktide		PDHK4	PDHKtide
	MLK3	Modified Erktide		PDK1	T308tide
	MNK1	RS peptide		PGK	Kemptide
	MNK2	RS peptide		PHKG1	GS peptide
	MOS	Modified Erktide		PHKG2	GS peptide
	MRCKα	DAPK1tide		PIM1	S6K2 peptide
	MRCKβ	DAPK1tide		PIM2	S6K2 peptide
	MSK1	Crosstide		PIM3	S6K2 peptide
	MSK2	Crosstide		PKACα	Kemptide
	MSSK1	DYRKtide-F		PKACβ	Kemptide
	MST1	IRS1		PKACγ	Kemptide
	MST2	IRS1		PKCα	PKC peptide
	MST3	Moesin-derived peptide		PKCβ1	PKC peptide
	MST4	Moesin-derived peptide		PKCβ2	PKC peptide
	MUSK	CSKtide		PKCγ	PKC peptide
				PKCδ	PKC peptide
		PKCε	PKC peptide		
		PKCζ	PKC peptide		
		PKCη	PKC peptide		
		PKCθ	PKC peptide		
		PKCι	PKC peptide		
		PKD1	GS peptide		
		PKD2	GS peptide		
		PKD3	GS peptide		
		PLK1	CDC25ctide		
		PLK3	CDC25ctide		
		PRKX	Kemptide		
		PYK2	Blk/Lyntide		
N	NDR1	SGKtide	Q	QIK	AMARA peptide
	NDR2	SGKtide			
NEK1	CDK7 peptide				
NEK2	CDK7 peptide				
NEK4	GS peptide				
NEK6	CDK7 peptide				
NEK7	CDK7 peptide				
NEK9	CDK7 peptide				
NIM1K	CHKtide				
NPM1-ALK	Srctide				
NuaK1	CHKtide				
NuaK2	CHKtide				
P	p38α	Modified Erktide			
	p38β	Modified Erktide			

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	Kinase	Substrate		Kinase	Substrate	
R	RAF1	Modified Erktide	Y	YES [T348I]	Srctide	
	RET	CSKtide				
	RET [G691S]	CSKtide	Z	ZAP70	Blk/Lyntide	
	RET [M918T]	CSKtide				
	RET [S891A]	CSKtide				
	RET [Y791F]	CSKtide				
	ROCK1	LIMKtide				
	ROCK2	LIMKtide				
	RON	Srctide				
	ROS	IRS1				
	RSK1	S6K peptide(N-FL)				
	RSK2	S6K peptide(N-FL)				
	RSK3	S6K peptide(N-FL)				
	RSK4	S6K peptide(N-FL)				
S	SGK	SGKtide				
	SGK2	SGKtide				
	SGK3	SGKtide				
	SIK	AMARA peptide				
	skMLCK	MLCtide				
	SLK	Moesin-derived peptide				
	SRC	Srctide				
	SRM	Blk/Lyntide				
	SRPK2	DYRKtide-F				
	SYK	Blk/Lyntide				
T	TAK1-TAB1	LRRKtide				
	TAOK2	TAOKtide				
	TBK1	CKtide				
	TEC	Srctide				
	TIE2	Blk/Lyntide				
	TNIK	Moesin-derived peptide				
	TNK1	CSKtide				
	TRKA	CSKtide				
	TRKB	Srctide				
	TRKC	Srctide				
	TSSK1	GS peptide				
	TSSK2	GS peptide				
	TSSK3	GS peptide				
	TXK	Srctide				
	TYK2	Srctide				
	TYRO3	CSKtide				
	W	WNK1	SPAKtide			
		WNK2	SPAKtide			
WNK3		SPAKtide				
Y	YES	Srctide				