

**PhosphoSens® Sox-based Homogeneous, Kinetic or Endpoint/Red Fluorescence-based Assays**  
**257 Total Assays for Protein Kinases (251) & Phosphatases (6)**

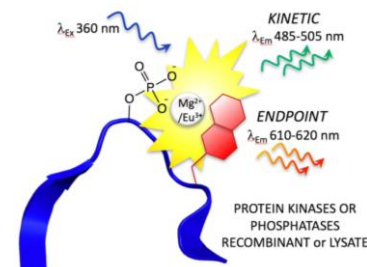
Revised March 20, 2019

**PhosphoSens®**

**List of 251 Protein Kinase Assays: 111 Tyr & 140 Ser/Thr Kinases**

If you don't see your target of interest, please inquire at [Info@assayquant.com](mailto:Info@assayquant.com)

Summary of PhosphoSens® Target Assay Strength based on Reaction Rates				
Categories	Very Strong (VS)	Strong (S)	Medium (M) <sup>1</sup>	Weak (W) <sup>1</sup>
Initial Rate (RFU/pmole/min)	>1000	500-999	200-499	<200
# Assays by Category	217	22	11	1
% Assays by Category	86%	9%	4%	0%
% Assays Very Strong or Strong	95%		<sup>1</sup> Being improved	



We offer **1) Assay Kits**, including all required reagents besides kinase, allowing 96 reactions (using 50 µL in a half-area 96-well plate, 10 µM final substrate) or 240 reactions (using 20 µL in a low-volume 384-well plate, 10 µM final substrate); **2) Bulk Sensor**, with pricing starting at 1 mg net and steep discounts with increasing scale; **3) Custom Assay Development Services** are performed under a Master Service Agreement, with 3 Milestones for a recombinant assay and 4-5 Milestones (1-2 additional beyond a recombinant assay) for a crude cell or tissue lysate assay; and **4) Custom Testing Services** including kinase profiling and IC<sub>50</sub>, K<sub>i</sub>, k<sub>inact</sub>/K<sub>i</sub>, Residence Time or Mechanism of Action (MOA) determinations.

New 2019 Target or Substrate

#	Recombinant Enzyme, HGNC (Common) Name	Enzyme Source (Cat. #)	Best Sensor	Sensor M <sub>r</sub> (Da)	Working [Sensor], µM	Strength of Assay	Alternative Sensors or Comments
<b>Tyrosine Kinases (Wild-type or mutant forms)</b>							
1	ABL1	Carna (08-001)	AQT0032	1673.8	10	VS	
2	ABL1 [E255K]	Carna (08-094)	AQT0032	1673.8	10	VS	
3	ABL1 [T315I]	Carna (08-093)	AQT0032	1673.8	10	VS	
4	ABL2	Carna (08-102)	AQT0032	1673.8	10	VS	
5	ALK	Carna (08-518)	AQT0101	1384.6	10	VS	
6	ALK [C1156Y]	Carna (08-530)	AQT0101	1384.6	10	VS	
7	ALK [F1174L]	Carna (08-519)	AQT0101	1384.6	10	VS	
8	ALK [L1196M]	Carna (08-529)	AQT0101	1384.6	10	VS	
9	ALK [G1202R]	Carna (08-544)	AQT0101	1384.6	10	VS	
10	ALK [G1269A]	Carna (08-537)	AQT0101	1384.6	10	VS	
11	ALK [L1196M/G1202R]	SignalChem (A19-12NG)	AQT0101	1384.6	10	VS	
12	ALK [R1275Q]	Carna (08-520)	AQT0101	1384.6	10	VS	
13	ALK [T1151-L1152 INS T]	Carna (08-539)	AQT0101	1384.6	10	VS	
14	NPM1-ALK	Carna (08-517)	AQT0101	1384.6	10	S	
15	AXL	Carna (08-107)	AQT0101	1384.6	10	VS	
16	BLK	Carna (08-164)	AQT0032	1673.8	10	VS	
17	BMX	Carna (08-179)	AQT0104	1361.5	10	VS	AQT0101
18	BTK	Carna (08-180)	AQT0101	1384.6	10	VS	AQT0104
19	BTK [C481S]	Carna (08-547)	AQT0101	1384.6	10	VS	
20	CSF1R (FMS)	Carna (08-155)	AQT0026	1367.3	10	VS	
21	DDR1	Carna (08-113)	AQT0259	2454.8	10	M	Need to activate (+ 2nM Src)
22	DDR2	Carna (08-113)	AQT0235	1830.1	10	VS	
23	EGFR	Carna (08-115)	AQT0001	1431.3	10	VS	AQT0099
24	EGFR [C797S/L858R]	SignalChem (E10-122ZG)	AQT0001	1431.3	10	VS	AQT0099

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#	Recombinant Enzyme, HGNC (Common) Name	Enzyme Source (Cat. #)	Best Sensor	Sensor M <sub>r</sub> (Da)	Working [Sensor], μM	Strength of Assay	Alternative Sensors or Comments
25	EGFR [d746-750]	Carna (08-527)	AQT0001	1431.3	10	S	AQT0099
26	EGFR [d746-750/C797S]	SignalChem (E10-122TG)	AQT0001	1431.3	10	M	AQT0099
27	EGFR [d746-750/C797S/T790M]	SignalChem (E10-122UG)	AQT0001	1431.3	10	S	AQT0099
28	EGFR [d746-750/T790M]	SignalChem (E10-122KG)	AQT0001	1431.3	10	M	AQT0099
29	EGFR [L858R]	SignalChem (E10-122BG)	AQT0001	1431.3	10	VS	AQT0099
30	EGFR [L861Q]	Carna (08-513)	AQT0001	1431.3	10	VS	AQT0099
31	EGFR [T790M]	Carna (08-194)	AQT0001	1431.3	10	VS	AQT0099
32	EGFR [T790M/L858R]	Carna (08-510)	AQT0001	1431.3	10	VS	AQT0099
33	EGFR [T790M/C797S/L858R]	SignalChem (E10-122VG)	AQT0001	1431.3	10	VS	AQT0099
34	EPHA1	Carna (08-119)	AQT0025	2008.1	10	VS	
35	EPHA2	Carna (08-121)	AQT0026	1367.3	10	VS	
36	EPHA3	Carna (08-122)	AQT0026	1367.3	10	VS	
37	EPHA4	Carna (08-123)	AQT0026	1367.3	10	VS	
38	EPHA5	Carna (08-124)	AQT0026	1367.3	10	VS	
39	EPHA6	Carna (08-125)	AQT0026	1367.3	10	VS	
40	EPHA7	Carna (08-126)	AQT0102	1268.2	10	VS	
41	EPHA8	Carna (08-127)	AQT0026	1367.3	10	VS	
42	EPHB1	Carna (08-128)	AQT0025	2008.1	10	VS	
43	EPHB2	Carna (08-129)	AQT0025	2008.1	10	VS	
44	EPHB3	Carna (08-130)	AQT0025	2008.1	10	VS	
45	EPHB4	Carna (08-137)	AQT0101	1384.6	10	VS	AQT0025
46	ERBB2 (HER2)	BPS (BS40230)	AQT0001	1431.3	10	S	
47	ERBB2 (HER2) [725YVMA726]	Proqinase (1525-0000-1)	AQT0001	1431.3	10	S	
48	ERBB4 (HER4)	Carna (08-118)	AQT0001	1431.3	10	VS	
49	FER	Carna (08-139)	AQT0026	1367.3	10	VS	
50	FES	Carna (08-140)	AQT0026	1367.3	10	VS	
51	FGFR1	Carna (08-133)	AQT0101	1384.6	10	VS	
52	FGFR2	Carna (08-134)	AQT0101	1384.6	10	VS	
53	FGFR3	Carna (08-135)	AQT0101	1384.6	10	VS	
54	FGFR3 [G697C]	Proqinase (1071-0000-1)	AQT0101	1384.6	10	S	
55	FGFR3 [K650E]	Carna (08-501)	AQT0101	1384.6	10	VS	
56	FGFR3 [K650M]	Carna (08-199)	AQT0101	1384.6	10	VS	
57	FGFR3 [V555L]	Carna (08-548)	AQT0101	1384.6	10	VS	
58	FGFR3 [V555M]	Carna (08-543)	AQT0101	1384.6	10	VS	
59	FGFR4	Carna (08-136)	AQT0101	1384.6	10	VS	
60	FGR	Carna (08-166)	AQT0032	1673.8	10	VS	
61	FLT1	Carna (08-189)	AQT0001	1431.3	10	VS	
62	FLT3	Carna (08-154)	AQT0101	1384.6	10	VS	
63	FLT4	Carna (08-190)	AQT0001	1431.3	10	VS	
64	FRK	Carna (08-167)	AQT0026	1367.3	10	VS	
65	FYNa	Carna (08-168)	AQT0104	1361.5	10	VS	
66	FYNb	Carna (08-531)	AQT0104	1361.5	10	VS	
67	HCK	Carna (08-169)	AQT0026	1367.3	10	VS	
68	IGF1R	Carna (08-141)	AQT0025	2008.1	10	VS	
69	INSR	Carna (08-142)	AQT0101	1384.6	10	VS	
70	INSRR	Carna (08-143)	AQT0026	1367.3	10	VS	
71	ITK	Thermo Fisher (PV3875)	AQT0101	1384.6	10	VS	AQT0104
72	JAK1	Thermo Fisher (PV4774)	AQT0001	1431.3	10	S	
73	JAK2 [JH2]	Carna (08-045)	AQT0102	1268.2	10	VS	
74	JAK2 [JH1 JH2]	Carna (08-514)	AQT0102	1268.2	10	VS	
75	JAK3	Carna (08-046)	AQT0102	1268.2	10	VS	
76	KDR (VEGFR2)	Carna (08-191)	AQT0101	1384.6	10	VS	
77	KIT	Carna (08-156)	AQT0102	1268.2	10	VS	
78	LCK	Carna (08-170)	AQT0104	1361.5	10	VS	AQT0101
79	LTK	Carna (08-106)	AQT0026	1367.3	10	VS	
80	LYNa	Carna (08-171)	AQT0026	1367.3	10	VS	

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81	LYNb	Carna (08-172)	AQT0026	1367.3	10	VS	
82	MERTK	Carna (08-108)	AQT0101	1384.6	10	VS	
83	MET	Carna (08-151)	AQT0104	1361.5	10	VS	
84	MST1R (RON)	Carna (08-152)	AQT0001	1431.3	10	S	
85	NTRK1 (TRKA)	BPS (BS40280)	AQT0104	1361.5	10	VS	
86	NTRK2 (TRKB)	BPS (BS40281)	AQT0104	1361.5	10	VS	
87	NTRK3 (TRKC)	BPS (BS40282)	AQT0104	1361.5	10	VS	
88	PDGFRα	Carna (08-157)	AQT0001	1431.3	10	S	
89	PDGFRβ	Carna (08-158)	AQT0025	2008.1	10	VS	
90	PTK2 (FAK)	Carna (08-137)	AQT0061	2122.9	20	S	Need to activate (+ 2nM Src)
91	PTK2B (PYK2)	Carna (08-138)	AQT0101	1384.6	10	VS	
92	PTK6 (BRK)	Carna (08-165)	AQT0101	1384.6	10	VS	
93	RET	Carna (08-159)	AQT0102	1268.2	10	VS	
94	RET [G691S]	Carna (08-522)	AQT0102	1268.2	10	VS	
95	RET [M918T]	Carna (08-508)	AQT0102	1268.2	10	VS	
96	RET [S891A]	Carna (08-523)	AQT0102	1268.2	10	VS	
97	RET [Y791F]	Carna (08-521)	AQT0102	1268.2	10	VS	
98	RET-CCDC6	SignalChem (R02-19BG)	AQT0102	1268.2	10	VS	
99	ROS1	Carna (08-163)	AQT0101	1384.6	10	VS	
100	ROS1 [G2032R]	SignalChem (R14-12BG)	AQT0101	1384.6	10	VS	
101	SRC	Carna (08-173)	AQT0104	1361.5	10	VS	
102	SRMS	Carna (08-174)	AQT0026	1367.3	10	VS	
103	SYK	Carna (08-176)	AQTY7	1455.5	10	VS	
104	TEC	Carna (08-182)	AQT0101	1384.6	10	VS	AQT0104
105	TEK (TIE2)	Carna (08-185)	AQT0101	1384.6	10	VS	
106	TNK2 (ACK)	Carna (08-196)	AQT0066	1101.0	10	M	
107	TXK	Carna (08-183)	AQT0104	1361.5	10	VS	AQT0101
108	Tyk2	Thermo Fisher (PV4790)	AQT0249	1382.6	10	S	
109	TYRO3	Carna (08-109)	AQT0104	1361.5	10	VS	
110	YES	Carna (8-175)	AQT0104	1361.5	10	VS	
111	ZAP70	Carna (08-177)	AQT0001	1431.3	10	VS	
<b>Serine/Threonine Kinases (rapidly being expanded)</b>							
1	AKT1	Carna (01-101)	AQT0233	1488.4	10	VS	
2	AKT2	Carna (01-102)	AQT0233	1488.4	10	VS	
3	AKT3	Carna (01-103)	AQT0233	1488.4	10	VS	
4	AURA	Carna (05-101)	AQT0186	1398.7	10	VS	
5	AURB	Carna (05-102)	AQT0186	1398.7	10	VS	
6	AURC	Carna (05-103)	AQT0186	1398.7	10	VS	
7	CAMK1γ	SignalChem (C10-11G)	AQT0420	1699.8	10	VS	
8	CAMK1δ	SignalChem (C09-10G)	AQT0420	1699.8	10	VS	
9	CAMK2α	Carna (02-109)	AQT0425	2143.5	10	VS	
10	CAMK2γ	SignalChem (C14-10BG)	AQT0425	2143.5	10	VS	
11	CAMK2δ	SignalChem (C13-10G)	AQT0425	2143.5	10	VS	
12	CDK1/CycB1	Proqinase (0134-0135-1)	AQT0297	1401.5	10	VS	
13	CDK1/CycE1	Proqinase (0134-0055-1)	AQT0297	1401.5	10	VS	
14	CDK2/CycA2	Carna (04-103)	AQT0255	1449.6	10	VS	
15	CDK2/CycE1	Carna (04-165)	AQT0296	948.8	10	VS	
16	CDK3/CycE1	Carna (04-104)	AQT0296	948.8	10	VS	
17	CDK4 /CycD3	Proqinase (0142-0375-1)	AQT0258	2506.9	10	S	
18	CDK5/p25	Carna (04-106)	AQT0255	1449.6	10	VS	
19	CDK5/p35NCK	Proqinase (0356-0355-1)	AQT0255	1449.6	10	VS	
20	CDK6/CycD1	Proqinase (0051-0143-2)	AQT0258	2506.9	10	VS	
21	CDK6/CycD3	Carna (04-108)	AQT0258	2506.9	10	S	
22	CDK7/CycH/MAT1	Carna (04-108)	AQT0459	3256.7	10	S	
23	CDK9/CycT1	Carna (04-110)	AQT0448	2630.0	10	VS	
24	CDK16/CycY	Carna (04-116)	AQT0258	2506.9	10	S	

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25	CDK19(CDC2L6)/CycC	Carna (04-112)	AQT0091	1318.3	10	M	
26	CDPK1 (toxoplasma gondii)	Academic Lab	AQT0124	1748.0	10	VS	
27	CDPK3 (toxoplasma gondii)	Academic Lab	AQT0124	1748.0	10	VS	
28	CHEK1	Carna (02-117)	AQT0185	2234.6	10	VS	
29	CHEK2	Carna (02-162)	AQT0185	2234.6	10	VS	
30	CSNK1A1 (CK1α)	Carna (03-101)	AQTST24	1939.7	10	VS	
31	CSNK1D (CK1δ)	Carna (03-103)	AQTST24	1939.7	10	VS	
32	CSNK1E (CK1ε)	Carna (03-104)	AQTST24	1939.7	10	VS	
33	CSNK1G1 (CK1γ1)	Carna (03-105)	AQTST24	1939.7	10	VS	
34	DAPK1	SignalChem (D01-11G)	AQT0173	2438.9	10	VS	
35	DAPK2	SignalChem (D02-10G)	AQT0236	2476.9	10	VS	
36	DAPK3	SignalChem (D03-10G)	AQT0237	2444.8	10	VS	
37	DYRK1A	Carna (04-130)	AQT0260	1608.9	10	VS	
38	DYRK1B	Carna (04-131)	AQT0260	1608.9	10	VS	
39	DYRK2	Carna (04-132)	AQT0260	1608.9	10	VS	
40	DYRK3	Carna (04-133)	AQT0260	1608.9	10	VS	
41	DYRK4	Carna (04-434)	AQT0260	1608.9	10	VS	
42	EIF2AK2 (PKR)	Academic Lab	AQT0355	2704.7	10	VS	Full length + poly(rI:C)
43	EIF2AK3 (PERK)	Carna (05-155)	AQT0356	2713.0	10	VS	Full length + 0.2 mg/ml tRNA
44	EIF2AK4 (GCN2)	Carna (05-153)	AQT0349	2699.0	10	VS	
45	GSK3α	Carna (04-140)	AQT0157	2004.7	10	VS	
46	GSK3β	Carna (04-141)	AQT0157	2004.7	10	VS	
47	HIPK2	SignalChem (H04-11BG)	AQT0134	2357.5	10	M	
48	IKKβ	Thermo Fisher (PV3836)	AQT0215	1474.4	10	VS	
49	IKKε	Thermo Fisher (PV4875)	AQT0215	1474.4	10	VS	
50	IRAK1	Carna (09-101)	AQT0326	2079.5	10	VS	
51	IRAK4	Carna (09-145)	AQT0326	2079.5	10	VS	
52	LATS1	Carna (01-123)	AQT0476	2349.7	10	VS	
53	LATS2	Carna (01-124)	AQT0476	2349.7	10	VS	
54	LRRK2	Thermo Fisher (PV48783)	AQT0614	2748.1	10	VS	CSx-Substrate in Production
55	LRRK2 [G2019S]	Thermo Fisher (PV4881)	AQT0614	2748.1	10	VS	CSx-Substrate in Production
56	MAP2K1 (MEK1), Cascade	Carna (07-141)	AQT0082	1025.0	10	VS	Uses inactive ERK2
57	MAP2K2 (MEK2), Cascade	Carna (07-142)	AQT0082	1025.0	10	VS	Uses inactive ERK2
58	MAP3K5 (ASK1)	Thermo Fisher (PV3809)	AQT0557	2120.5	10	VS	Uses full-length kinase
59	MAP3K9 (MLK1)	SignalChem (M17-11G)	AQT0136	1413.5	10	S	
60	MAP4K1 (HPK1)	Thermo Fisher (PV6355)	AQT0505	2183.6	10	VS	AQT0135, 136, 176, 178
61	MAP4K2 (GCK)	SignalChem (M24-10G)	AQT0178	1434.7	10	VS	
62	MAP4K3 (GLK)	SignalChem (M25-11G)	AQT0176	1375.6	10	S	
63	MAP4K4 (HGK)	SignalChem (M26-11G)	AQT0135	2563.7	10	VS	
64	MAP4K5 (KHS1)	SignalChem (M27-10G)	AQT0178	1434.7	10	VS	
65	MAPK1 (ERK2)	Carna (04-143)	AQT0490	3114.8	5	VS	AQT0376
66	MAPK3 (ERK1)	Carna (04-142)	AQT0490	3114.8	5	VS	AQT0376
67	MAPK7 (ERK5)	Carna (04-146)	AQT0373	3610.3	5	VS	
68	MAPK8 (JNK1)	Carna (04-163)	AQT0365	3140.6	5	VS	
69	MAPK9 (JNK2)	Carna (04-164)	AQT0365	3140.6	5	VS	
70	MAPK10 (JNK3)	Carna (04-150)	AQT0365	3140.6	5	VS	
71	MAPK11 (p38β)	Carna (04-153)	AQT0376	3114.8	5	VS	
72	MAPK12 (p38γ)	Carna (04-155)	AQT0376	3114.8	5	VS	
73	MAPK13 (p38δ)	Carna (04-154)	AQT0376	3114.8	5	VS	
74	MAPK14 (p38α)	Carna (04-152)	AQT0376	3114.8	5	VS	
75	MAPKAPK2	Carna (02-142)	AQT0185	2234.6	10	VS	
76	MAPKAPK3	Carna (02-143)	AQT0185	2234.6	10	VS	
77	MAPKAPK5	Carna (02-144)	AQT0185	2234.6	10	VS	
78	MARK1	Carna (02-120)	AQT0393	2581.7	10	VS	
79	MARK2	Carna (02-121)	AQT0393	2581.7	10	VS	
80	MARK3	Carna (02-122)	AQT0393	2581.7	10	VS	
81	MARK4	Carna (02-123)	AQT0393	2581.7	10	VS	

#	Recombinant Enzyme, HGNC (Common) Name	Enzyme Source (Cat. #)	Best Sensor	Sensor M <sub>r</sub> (Da)	Working [Sensor], μM	Strength of Assay	Alternative Sensors or Comments
82	MINK1 (MAP4K6)	SignalChem (M53-11G)	AQT0183	1354.7	10	VS	
83	MYLK (MLCK)	SignalChem (M62-11G)	AQT0151	2342.5	10	M	
84	MYLK2	SignalChem (M63-10H)	AQT0250	2435.8	10	VS	
85	MYLK4	SignalChem (M74-10G)	AQT0151	2342.5	10	M	
86	NEK1	Carna (05-123)	AQT0418	1450.5	10	VS	
87	NEK2	Carna (05-226)	AQT0415	2724.1	10	VS	
88	NEK4	Carna (05-128)	AQT0418	1450.5	10	S	
89	NEK9	Carna (05-133)	AQT0415	2724.1	10	VS	
90	NUAK1 (ARK5)	SignalChem (N19-10G)	AQT0123	3012.5	10	VS	
91	PHKG2	Carna (02-153)	AQT0074	2037.1	10	M	
92	PIM1	Carna (02-054)	AQT0474	1331.6	10	VS	AQT0230
93	PIM2	Carna (02-055)	AQT0230	1393.6	10	VS	
94	PIM3	Carna (02-056)	AQT0473	1331.6	10	VS	AQT0230
95	PRKAA1-B1-G1 (AMPKα1β1γ1)	Carna (02-113)	AQT0426	1798.1	10	VS	
96	PRKAA1-B2-G1 (AMPKα1β2γ1)	Carna (02-147)	AQT0426	1798.1	10	VS	
97	PRKAA2-B1-G1 (AMPKα2β1γ1)	Carna (02-114)	AQT0426	1798.1	10	VS	
98	PRKAA2-B2-G1 (AMPKα2β2γ1)	Carna (02-148)	AQT0426	1798.1	10	VS	
99	PRKACA (PKACα)	Carna (01-127)	AQT0458	1124.4	10	VS	AQT0129
100	PRKACB (PKACβ)	Carna (01-128)	AQT0458	1124.4	10	VS	AQT0129
101	PRKCA (PKCα [alpha])	Carna (01-133)	AQT0316	1544.9	10	VS	
102	PRKCB1 (PKCβ1 [beta1])	Carna (01-134)	AQT0316	1544.9	10	VS	
103	PRKCB2 (PKCβ2 [beta2])	Carna (01-165)	AQT0462	1648.0	10	VS	
104	PRKCG (PKCγ [gamma])	Carna (01-137)	AQT0316	1544.9	10	VS	
105	PRKCD (PKCδ [delta])	Carna (01-135)	AQT0462	1648.0	10	VS	
106	PRKCE (PKCε [epsilon])	Carna (01-136)	AQT0465	1618.9	10	VS	
107	PRKCH (PKCη [eta])	Carna (01-138)	AQT0462	1648.0	10	VS	
108	PRKCQ (PKC <sup>θ</sup> [theta])	Carna (01-140)	AQT0465	1618.9	10	VS	
109	PRKCI (PKCι [iota])	Carna (01-139)	AQT0462	1648.0	10	VS	
110	PRKCZ (PKCζ [zeta])	Carna (01-141)	AQT0462	1648.0	10	VS	
111	PRKDC (DNA-PK)	Thermo Fisher (PV5866)	AQT0439	1934.0	10	VS	
112	PRKG1(PKG1)	Carna (01-142)	AQT0452	1525.8	10	VS	
113	PLK1	SignalChem (P41-10H)	AQT0143	3144.3	10	S	
114	PDPK1 (PDK1)	SignalChem (P14-10H)	AQT0126	1563.6	10	VS	
115	Raf, b- (V599E), Cascade	Thermo Fisher (PR7304A)	AQT0082	1025.0	10	VS	Uses inactive MEK1 & ERK2
116	RAF1 (Y340D/Y341D), Cascade	Thermo Fisher (PV3805)	AQT0082	1025.0	10	VS	Uses inactive MEK1 & ERK2
117	RIPK2	Thermo Fisher (PV4213)	AQT0209	3068.5	10	S	AQT0210
118	ROCK1	Carna (01-109)	AQT0231	1370.6	10	S	
119	ROCK2	Carna (01-110)	AQT0231	1370.6	10	VS	
120	RPS6KA1 (RSK1)	Carna (01-149)	AQT0232	1665.7	10	VS	
121	RPS6KA2 (RSK2)	Carna (01-151)	AQT0232	1665.7	10	VS	
122	RPS6KA3 (RSK3)	Carna (01-150)	AQT0232	1665.7	10	VS	
123	RPS6KB1 (p70S6K)	Carna (01-158)	AQT0232	1665.7	10	VS	
124	SGK	Carna (01-157)	AQT0233	1488.4	10	VS	
125	SGK2	Carna (01-159)	AQT0233	1488.4	10	VS	
126	SGK3	Carna (01-160)	AQT0232	1665.7	10	VS	
127	SIK1	Carna (02-131)	AQT0252	1713.8	10	VS	
128	SIK2	Thermo Fisher (PV4792)	AQT0252	1713.8	10	VS	
129	SIK3	Thermo Fisher (PV6403)	AQT0508	2040.4	10	VS	
130	SLK	Carna (07-129)	AQT0505	2183.6	10	VS	
131	SRPK2	Carna (04-161)	AQT0360	2741.0	10	VS	
132	STK3 (MST2)	Carna (07-117)	AQT0135	2563.7	10	VS	
133	STK4 (MST1)	SignalChem (S25-10G)	AQT0135	2563.7	10	VS	
134	STK10 (LOK)	Carna (07-315)	AQT0505	2183.6	10	VS	
135	STK17A (DRAK1)	Carna (02-137)	AQT0173	2438.9	10	S	
136	STK17B (DRAK2)	SignalChem (S34-10G)	AQT0174	2383.5	10	VS	
137	STK24 (MST3)	Carna (07-118)	AQT0135	2563.7	10	W	
138	STK26 (MST4)	Carna (07-119)	AQT0135	2563.7	10	M	

#	Recombinant Enzyme, HGNC (Common) Name	Enzyme Source (Cat. #)	Best Sensor	Sensor M <sub>r</sub> (Da)	Working [Sensor], μM	Strength of Assay	Alternative Sensors or Comments
139	TBK1	Carna (05-115)	AQT0215	1474.4	10	VS	
140	TNIK	SignalChem (T27-11G)	AQT0181	1446.7	10	VS	AQT0135

### [List of Assays for Protein Phosphatases: 6 assays with 3 Tyr & 3 Ser/Thr Phosphatases](#)

If you don't see your target of interest, please inquire at [Info@assayquant.com](mailto:Info@assayquant.com)

Summary of PhosphoSens® Target Assay Strength based on Reaction Rates				
Categories	Very Strong (VS)	Strong (S)	Medium (M) <sup>1</sup>	Weak (W) <sup>1</sup>
Initial Rate (RFU/pmole/min)	>1000	500-999	200-499	<200
# of Assays by Category	5	1	0	0
% of Assays by Category	83%	17%	0%	0%
% Assays Very Strong or Strong	100%		<sup>1</sup> Improvements in progress	

We offer **1) Assay Kits**, including all required reagents besides kinase, allowing 96 reactions (using 50 μL in a half-area 96-well plate, 10 μM final substrate) or 240 reactions (using 20 μL in a low-volume 384-well plate, 10 μM final substrate); **2) Bulk Sensor**, with pricing starting at 1 mg net and steep discounts with increasing scale; **3) Custom Assay Development Services** are performed under a Master Service Agreement, with 3 Milestones for a recombinant assay and 4-5 Milestones (1-2 additional beyond a recombinant assay) for a crude cell or tissue lysate assay; and **4) Custom Testing Services** including kinase profiling and IC<sub>50</sub>, K<sub>i</sub>, kinact/K<sub>i</sub>, Residence Time or Mechanism of Action (MOA) determinations.

#	Recombinant Enzyme, HGNC (Common) Name	Enzyme Source (Cat. #)	Best Sensor	Sensor M <sub>r</sub> (Da)	Working [Sensor], μM	Strength of Assay	Alternative Sensors or Comments
<b>Tyrosine Phosphatases</b>							
1	PTB1B	BPS (30009)	AQT0266	2151.8	10	VS	
2	SHP-1 (PTP1C)	R&D Systems (1878-SH)	AQT0266	2151.8	10	VS	
3	SHP-2 (PTP1D)	BPS (79018)	AQT0266	2151.8	10	VS	
<b>Serine/Threonine Phosphatases</b>							
4	PP2A	BPS (30056)	AQT0267	1219.3	10	S	
5	PP2C <sub>α</sub>	SignalChem (P02-20BG)	AQT0267	1219.3	10	VS	
6	PP2C <sub>γ</sub>	SignalChem (P07-20G)	AQT0267	1219.3	10	VS	

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