

Figure 1

Tissue Samples or Cell Lines

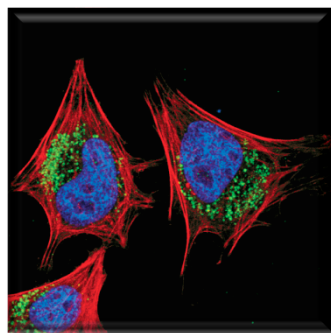


Image File: 3868_IF.psd

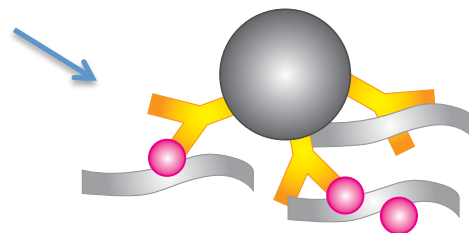


Image File: Generic_Motif.ai

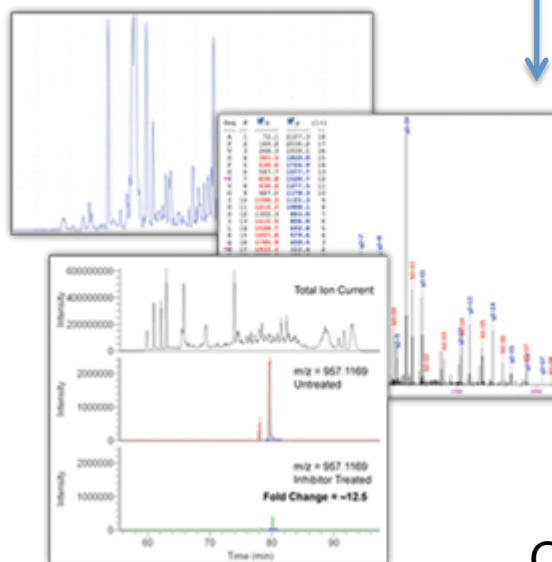


Image File: Results.psd

Identification

Quantification

Figure 1B

Ser/Thr Phosphorylation

Tyrosine Phosphorylation

Proteomic Analysis

Acetylation

Ubiquitination

Figure 2

PTMScan[®] Services:

 PhosphoScan[®]

 UbiScan[™]

 AcetylScan[™]

Image File: ServiceBands.ai

Background Image File: PTMS_OrangeBg.psd

Figure 3A

Human Kinome Coverage

Animate colored areas marked right with dash lines with below list.

Please Note: The shaded areas marked on the pathway with colored dash lines are only to show you what areas should be animated with which listed Motif. Please use the design method you feel best expresses what we are trying to get across to the viewer and **NOT THESE COLORED DASH LINES.**

Antibodies covering the Kinome

- CDK Subst. Motif
(R/K-X-S*/T*-P-X-R/K-X)
- MAPK Subst. Motif
(X-S*/T*-P-X-R/K-X)
- Akt Subst. Motif
(R/K-X-R/K-X-S*/T*-X)
- Akt Subst. Motif
(X-R/K-X-X-S*/T*-X)
- PKD Subst. Motif
(X-L-X-R/K-X-S*/T*-X)
- PKA Subst. Motif
(X-R/K-R/K-X-S*/T*-X)
- CK2 Subst. Motif
(X-T*-X-D/E-X-D/E-X)
- Ser/Thr-Phe Motif
(X-F/Y/W-S*/T*-F-X-Ser*/Thr*-Phe-X)
- P-Tyr-100
(X-Y*-X)

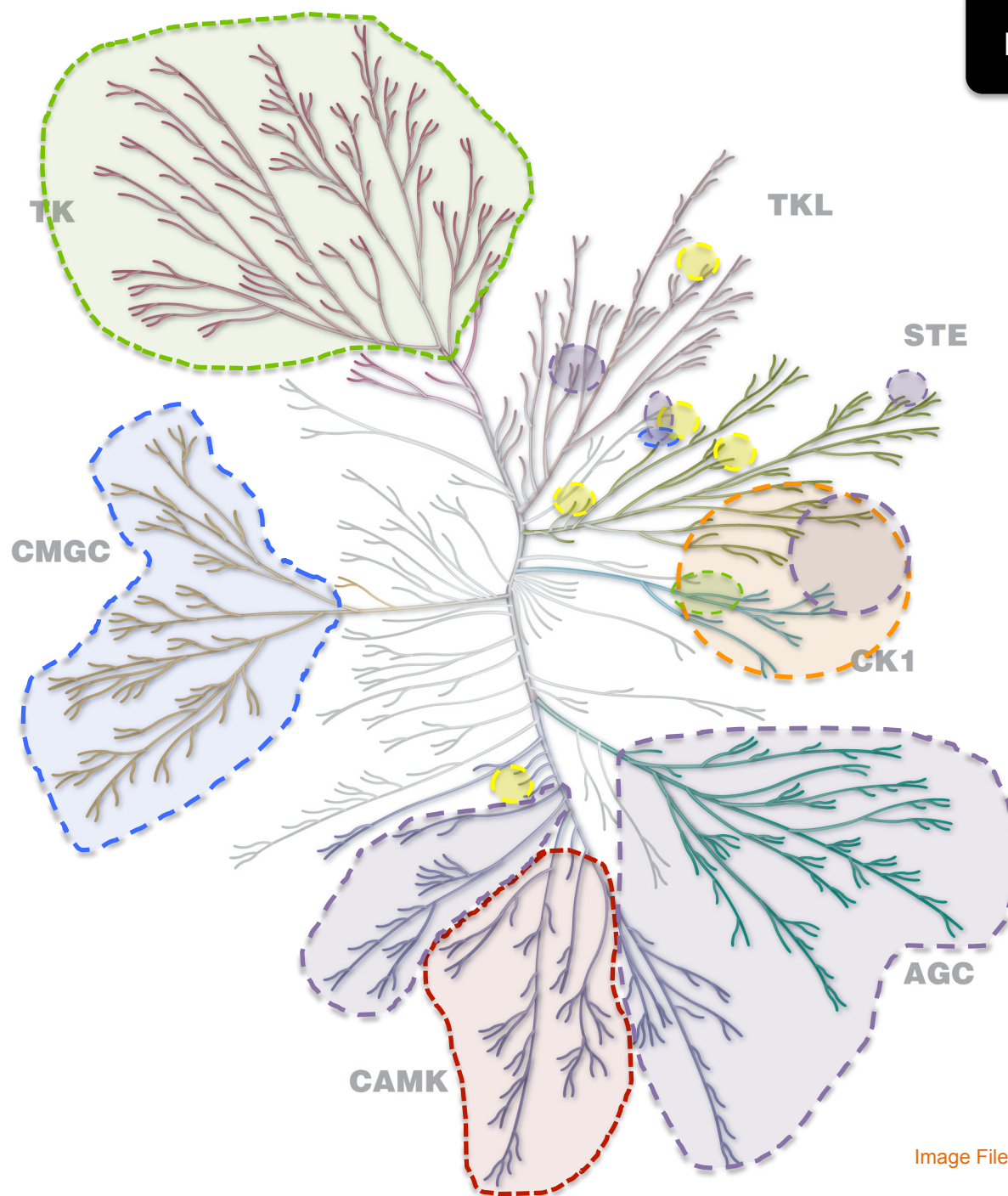
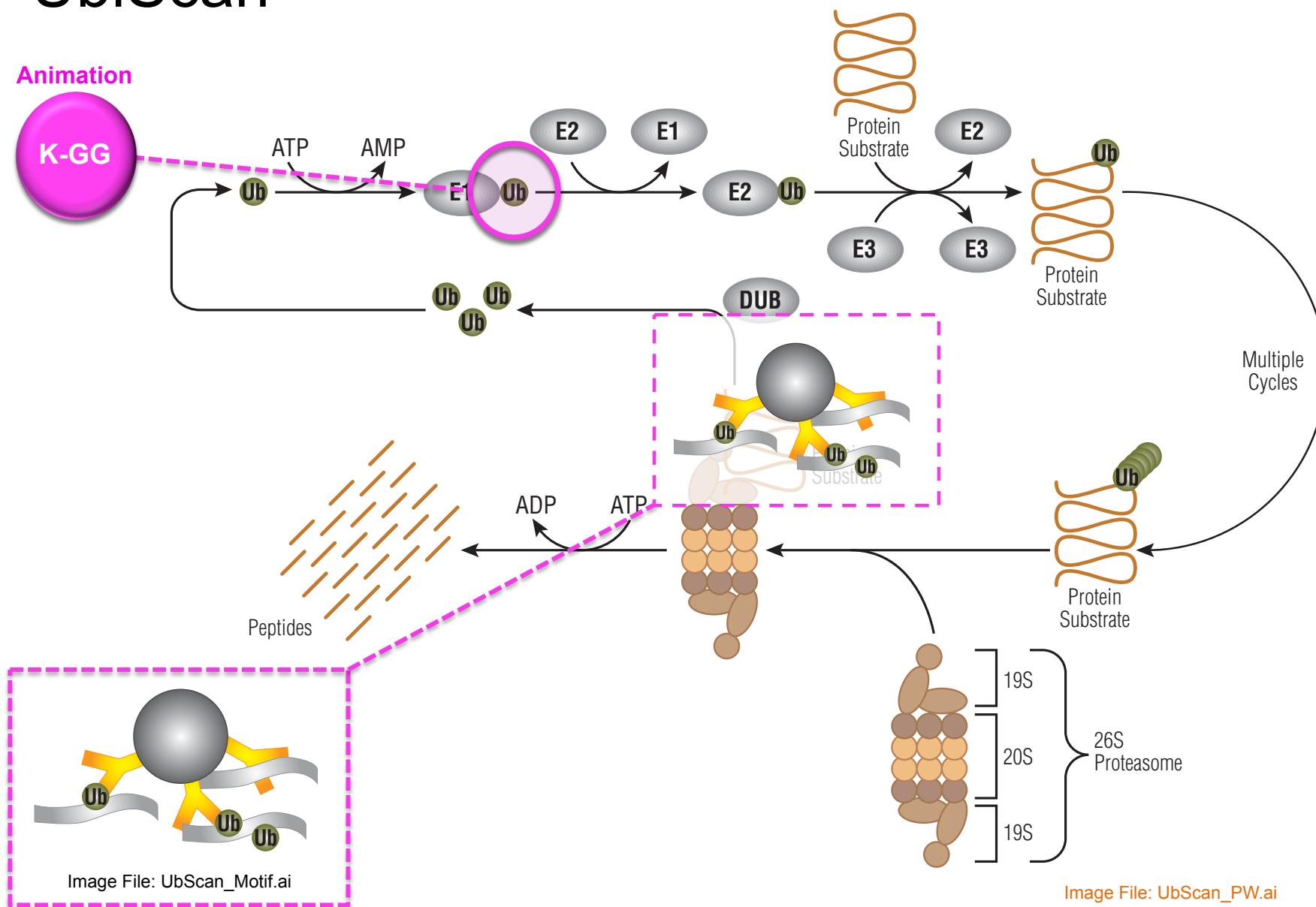


Figure 4

UbiScan™

Animation



AcetylScan™

Figure 5

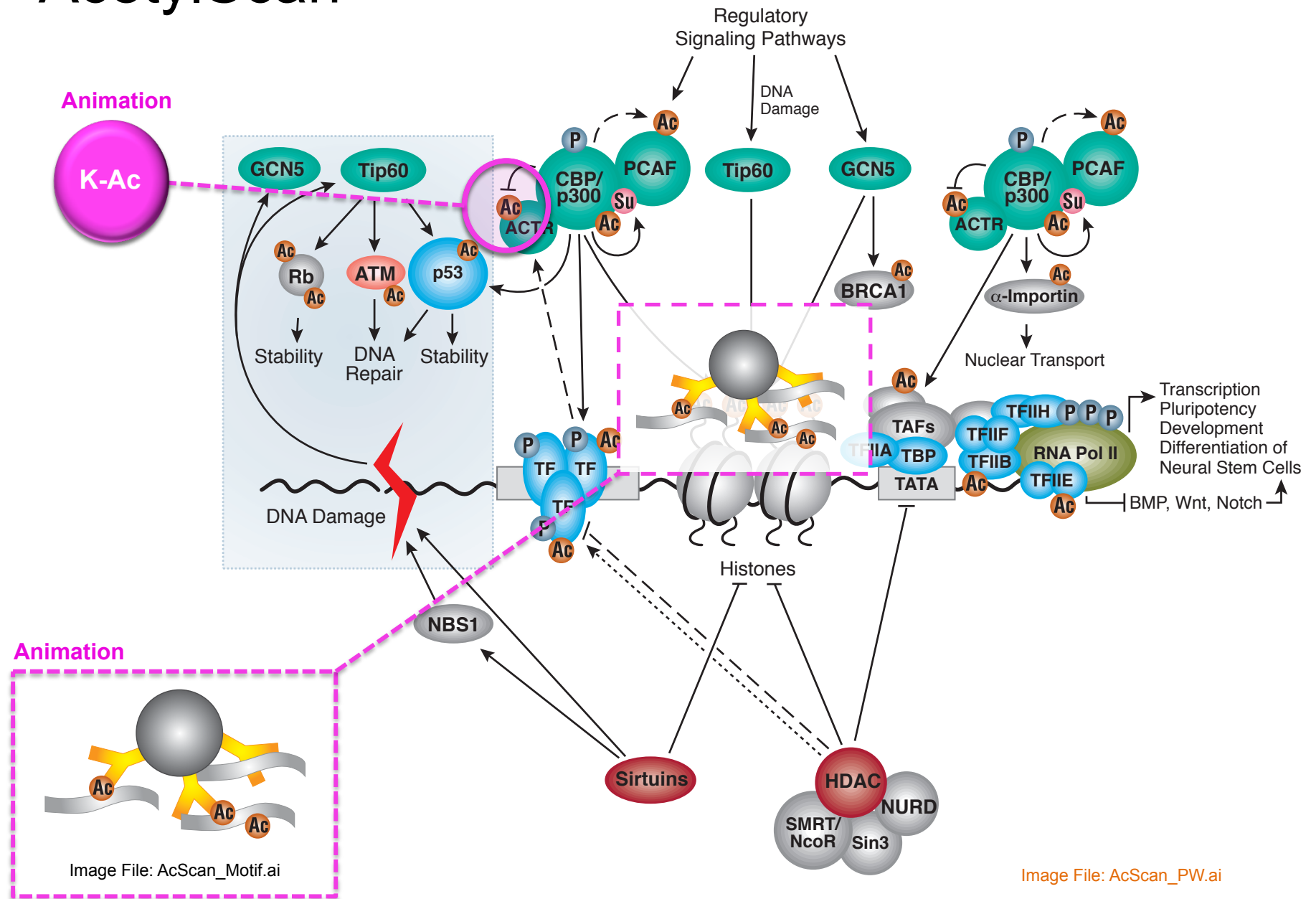


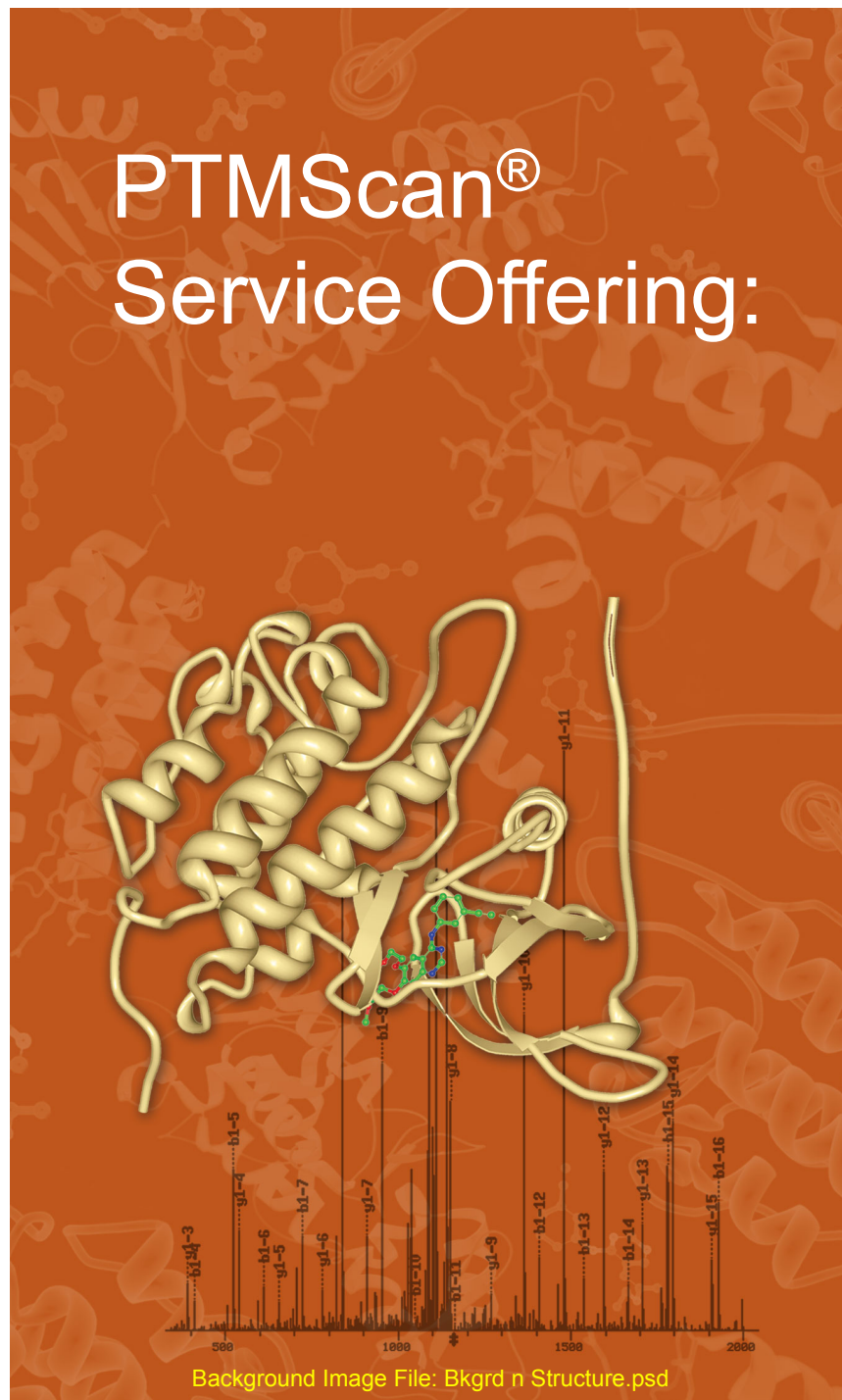
Figure 6

PTMScan[®] Service Offering:

KinomeView[™]

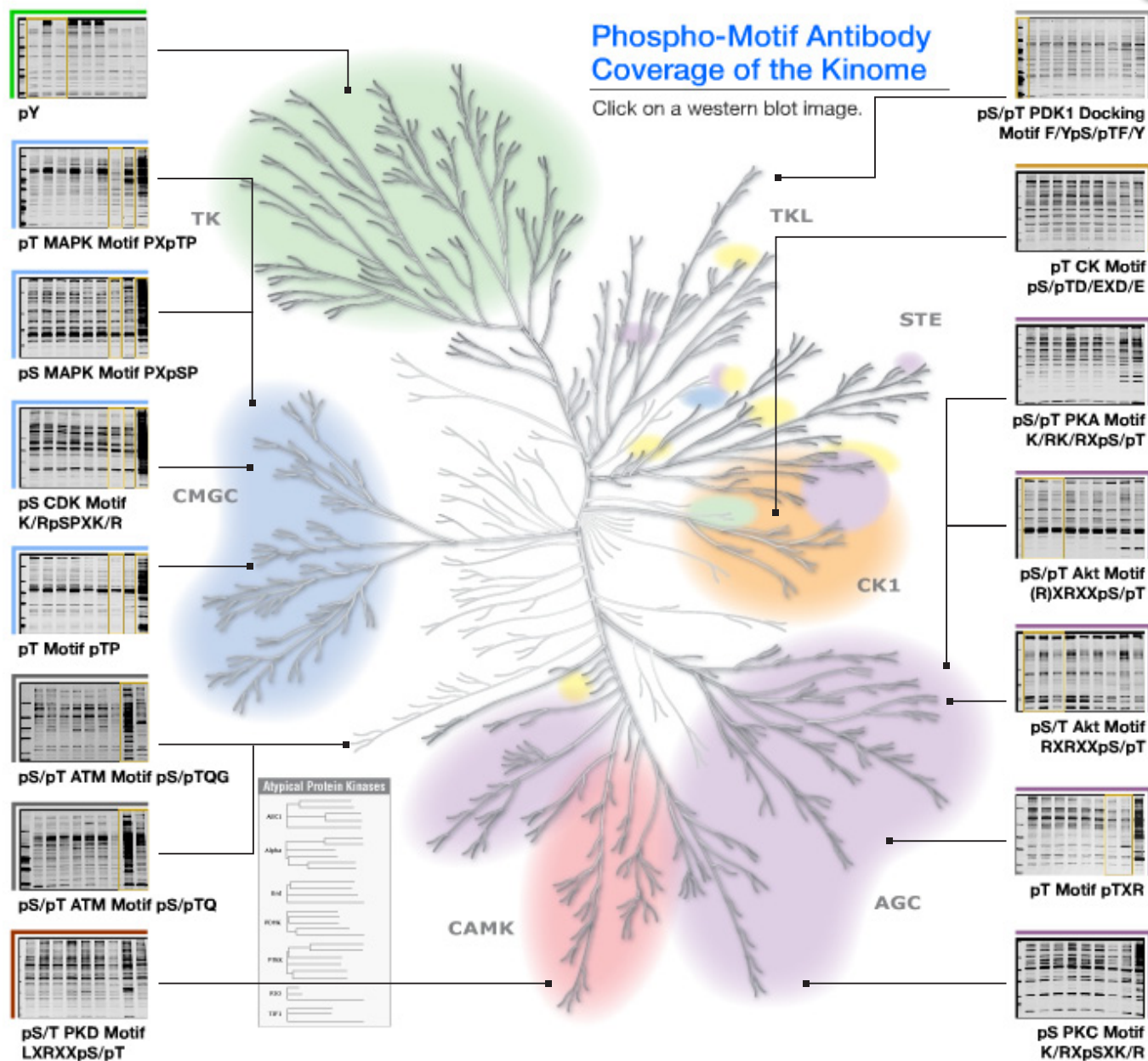
PhosphoScan[®]

Serine/Threonine
Phosphorylation Events



Please Note: Please use the same image file (Kinome.ai) and animation style you use on Figure 3A here for Figure 7B.

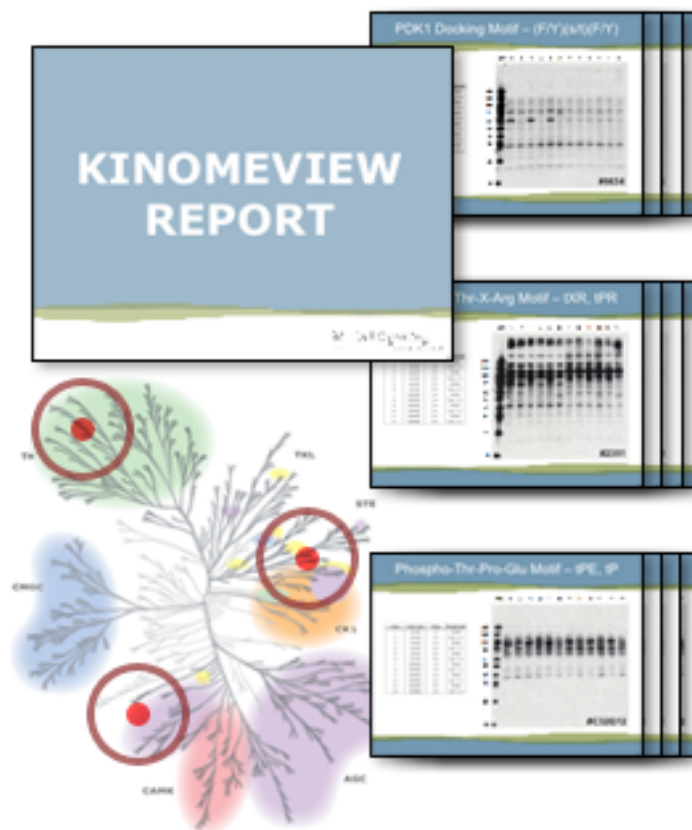
Figure 7B



Scientist from CST talking on
the phone and taking notes

Video imagery from LI-COR
machine and someone
working with it

Figure 10



Step 2: PhosphoScan®

Video image of mass spec
machine and someone
working with samples

Akt-RSK-S6 kinase signaling networks activated by oncogenic receptor tyrosine kinases.

[Moritz A](#), [Li Y](#), [Guo A](#), [Villén J](#), [Wang Y](#), [MacNeill J](#), [Kornhauser J](#), [Sprott K](#), [Zhou J](#), [Possemato A](#), [Ren JM](#), [Hornbeck P](#), [Cantley LC](#), [Gygi SP](#), [Rush J](#), [Comb MJ](#).
Cell Signaling Technology Inc., Danvers, MA 01923, USA.

Science Signaling. 2010 Aug 24;3(136):ra64.

Figure 14C
(fig 2A of the paper)

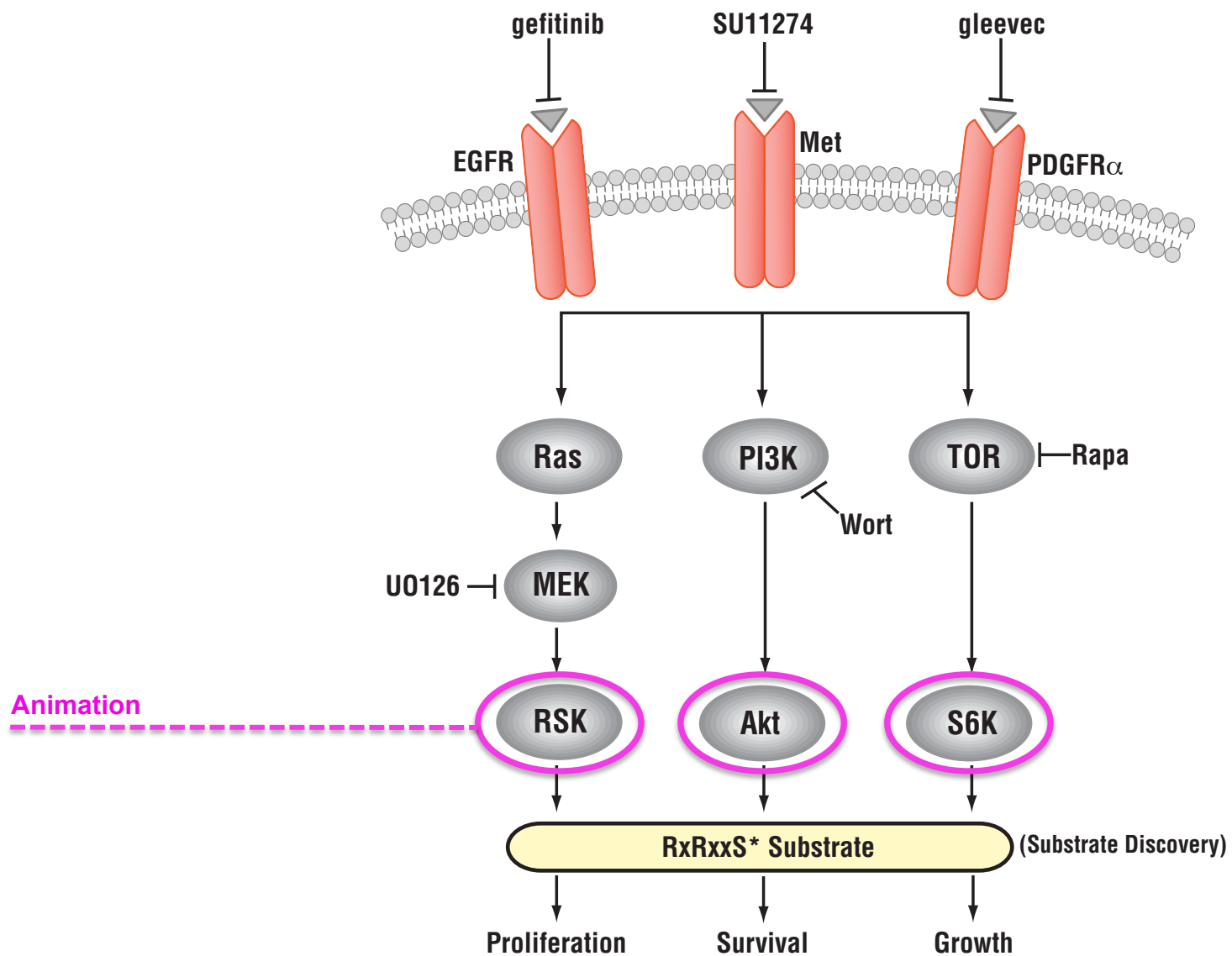


Figure 16

(fig 5 of the paper)

Deconstructing Signaling Pathways

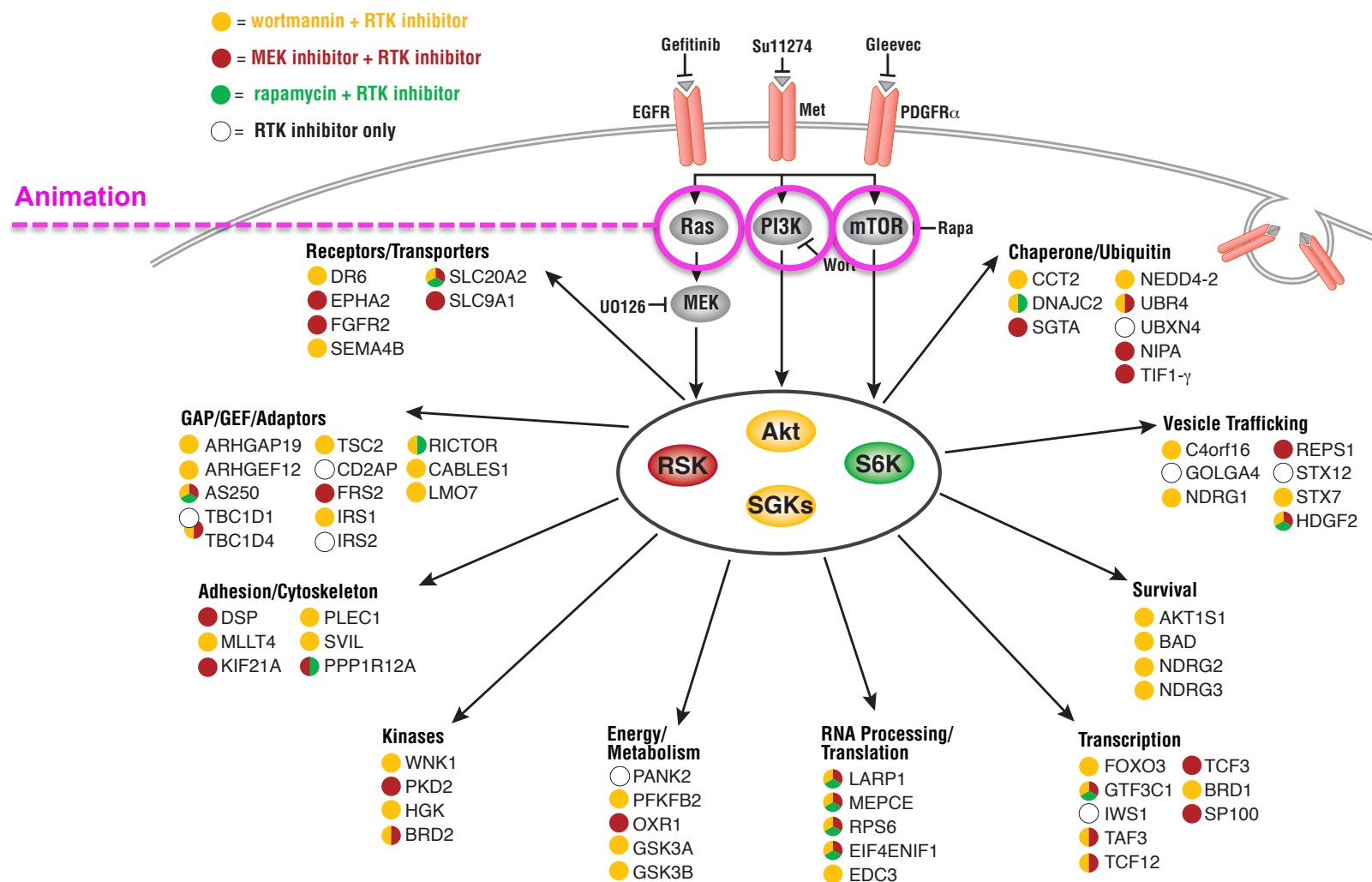


Image File: Deconstructing_PW.ai

Figure 17

Using Excel table (Akt9614-1.xls) from this study

TABLE: AKT SUBSTRATE MOTIF PHOSPHOSCAN® FINAL RESULTS, SILAC
Antibody: Phospho-Akt Substrate (RXRXXS/T) (11087E) Rabbit mAb #9614
Study Design: Human squamous cell carcinoma (H1703) cell line; Trypsin Digest
Treatments: Untreated (Heavy), Wortmannin (Light)
Legend: * - phosphorylation; # - oxidized methionine; § - published site

Index	Fold Change (Wortmannin/Untreated)	Protein Name	Description	Phosphorylation Site	Peptide
1		Adaptor/scaffold			
2	1.8	Akt1	Akt1 nuclear protein isoform 1	\$210	TVRLPS*GGGAASPTG
3	1.8	Akt1	Akt1 nuclear protein isoform 1	\$212	TVRLPSGS*GAASPTG
4	-0.2	Akt1	Akt1 nuclear protein isoform 1	\$5780	S*MSFSQERFPGSTH
5	-0.3	Akt1	Akt1 nuclear protein isoform 1	\$5782	HRSGS*FSQERFPGSTH
6	-0.8	Akt1	A kinase (PRAX) anchor protein 12 isoform	\$627	KVRKPS*ESQEDSLD
7	-0.8	Akt1	A kinase (PRAX) anchor protein 12 isoform	\$629	KVRKPS*ESQEDSLD
8	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
9	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
10	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
11	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
12	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
13	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
14	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
15	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
16	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
17	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
18	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
19	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
20	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
21	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
22	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
23	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
24	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
25	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
26	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
27	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
28	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
29	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
30	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
31	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
32	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
33	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
34	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
35	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
36	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
37	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
38	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
39	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
40	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
41	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
42	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
43	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
44	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
45	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
46	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
47	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
48	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
49	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR
50	1.8	PRX	Receptor growth factor receptor substrate	\$63	TSKST*GLPR

Figure 18

