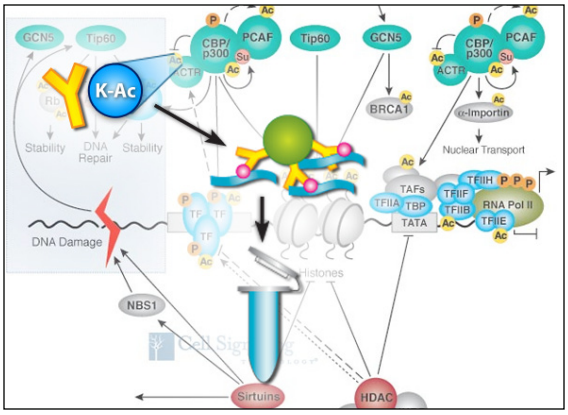
AcetylScan® (Acetylation Proteomics)

Step 1: AcetylScan® Analysis

1. Experimental objectives and design consultation with CST scientists.
2. Determine samples and experimental parameters for study.
3. Acetylated peptide immuno-affinity purification (IAP) with Ac-K antibody
4. Tandem mass spectrometry (LC-MS/MS) analysis of enriched acetylated peptides for qualitative sequence and site identification.
5. Quantitative analysis of acetylated peptide fold-change between study samples.



Step 2: AcetylScan® Report and Consultation

1. AcetylScan report with qualitative and quantitative results.
2. Report contains sequence assignments in table format and detailed explanation of table contents and guidelines for data review.
3. Detailed discussion and review of report with CST scientists.
4. AcetylScan timeline: approximately 5 weeks; preliminary results delivery in 2–3 weeks; timeline will vary with project size.

ACETYLSCAN® PRELIMINARY RESULTS

Table #1: *HCT 166 cell line; Trypsin Digest; Acetylated Lysine (CST# 11D9B8/16E10E7)*

Treatments: *untreated*

Legend: ** - acetylated lysine (K-epsilon-acetyl);* ***#*** *- oxidized methionine;* ***§*** *- published site; Bold Intensity Value - Manually validate*

Index	Index in Detail	Gene Name	PSP Name	Description	Accession	URL	kD	Site
1	***Adaptor/scaffold***							
2	16	WDR33	WDR33	WD repeat domain 33 isc	Q9C0J8	http://www.phosphosite.	146	§46
3	***Adhesion or extracellular matrix protein***							
4	25	ZYX	zyxin	zyxin	Q15942	http://www.phosphosite.	61	§24
5	***Apoptosis***							
6	26	CYCS	CYCS	cytochrome c	P99999	http://www.phosphosite.	12	§72
7	30	FAU	FAU	ubiquitin-like protein fubi	Q9P1M0	http://www.phosphosite.	14	§125
8	31	GPI	G6PI	glucose phosphate isome	P06744	http://www.phosphosite.	63	§141
9	32	LDHA	LDH-A	L-lactate dehydrogenase	P00338	http://www.phosphosite.	37	§4
10	***Cell cycle regulation***							
11	45	SMC3	bamacan	structural maintenance o	Q9UQE7	http://www.phosphosite.	142	§105
12	***Chaperone***							
13	59	HSPA1A	HSP70	heat shock 70kDa protein	P08107	http://www.phosphosite.	70	§246
14	62	HSPA8	HSC70	heat shock 70kDa protein	P11142	http://www.phosphosite.	71	§246
15	67	HSPD1	HSP60	chaperonin	P10809	http://www.phosphosite.	61	§156
16	74	HSPD1	HSP60	chaperonin	P10809	http://www.phosphosite.	61	§249
17	78	TRAP1	HSP75	TNF receptor-associated	Q12931	http://www.phosphosite.	80	§431
18	***Chromatin, DNA-binding, DNA repair or DNA replication protein***							
19	85	H2BFS; HIST1H2BC; HIS	H2BFS; H2B1C; H2B1D;		79; O60814; Q99880; Q9	http://www.phosphosite.	14; 14; 14; 14; 14;	0; §15, §16, §20; §15, §16
20	86	H2BFS; HIST1H2BC; HIS	H2BFS; H2B1C; H2B1K;		53; P62807; O60814; Q1	http://www.phosphosite.	14; 14; 14; 14	5, §15; §6, §16; 5, §15; §
21	87	H3F3B; HIST1H3A; HIST	H3 iso3; H3; H3 iso2	H3 histone, family 3B	P84243; P68431; Q71DI3	http://www.phosphosite.	15; 15; 15	§18, §23; §18, §23; §19,
22	89	HIST1H2BB; HIST1H2BN	H2B; H2B1N	histone cluster 1, H2bb	P33778; Q99877	http://www.phosphosite.	14; 14	§5, §12, §15; §6, §13, §
23	90	HIST1H2BD	H2B1D	histone cluster 1, H2bd	P58876	http://www.phosphosite.	14	§5, §12, §15
24	92	HIST1H2BH; HIST1H2BO	H2B1H; H2BFH; H2B2F	histone cluster 1, H2bh	93079; P23527; Q5QNW	http://www.phosphosite.	14; 14; 14	§11, §15; §6, §12, §16; §6,
25	93	HIST1H2BL	H2B1L	histone cluster 1, H2bl	Q99880	http://www.phosphosite.	14	§5, §15, §16

Cell Signaling TECHNOLOGY®

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