

## Analysis of anti-H3K9Ac (Cat. No. 13-0020) on the *EpiTitan™ Histone Peptide Array*



### Data Specificity:

*EpiTitan™ Histone Peptide Array* was used to analyze binding specificity of Histone H3K9Ac Antibody (Catalog No. 13-0020) at 1:5,000. Antibody signal appears in red, while the spotting tracer appears in green. The array image is overlaid with a frame containing numbers corresponding to the peptide number (“Peptide #”) in the raw data list below. Raw data “Signal” shown in Table 1 is an average of the antibody signal intensities of all instances of the corresponding peptide on the array. Only peptides exhibiting signals that can be visualized on the array were listed in Table 1.

### Result:

Anti-H3K9ac (**E1512**) recognizes all the peptides containing H3K9ac on the array. It does not cross react with H3K27ac. Importantly, S10 phosphorylation only slightly diminishes its binding to the H3K9ac + S10p peptide. In summary, this is a very good H3K9ac antibody.

Peptide #	Signal	STDEV	Peptide Name
17	88568	5107	H3K4ac + K9ac + K14ac + K18ac
14	74773	834	H3K9ac + K14ac + K18ac
16	71097	9794	H3K4ac + K9ac + K18ac
6	69770	10863	H3K9ac + K14ac
8	68336	10073	H3K4ac + K9ac + K14ac
12	66309	4982	H3K9ac + K18ac
7	61564	1566	H3K4ac + K9ac
22	61115	375	H3K4me3 + K9ac + K14ac
23	59806	6237	H3K4me3 + K9ac + K18ac
19	54707	3056	H3K4me3 + K9ac
25	51874	53	H3K4me3 + K9ac + K14ac + K18ac
33	51138	6079	H3K4me2 + K9ac + K14ac + K18ac
44	50217	3229	H3K4me2 + K9ac + K18ac
3	49355	7154	H3K9ac
48	44412	2055	H3R2me2a + K4ac + K9ac + K14ac + K18ac
55	43080	102	H3Cit2 + K4me3 + K9ac + K14ac + K18ac
50	40471	2970	H3R2me2a + K4me3 + K9ac + K14ac + K18ac
52	38268	1268	H3R2me1 + K4me3 + K9ac + K14ac + K18ac
45	35583	8862	H3K4me1 + K9ac + K18ac
56	35515	1349	H3Cit2 + K4ac + K9ac + K14ac + K18ac
35	32930	157	H3K4me1 + K9ac + K14ac + K18ac
174	31542	3551	H3R2me2s + K4me3 + K9ac + K14ac + K18ac
26	28478	8039	H3T3p + K4me3 + K9ac + K14ac + K18ac
39	21350	330	H3K4me3 + K9ac + S10p + K14ac + K18ac
37	19784	134	H3K4ac + K9ac + S10p + K14ac + K18ac
144	18410	3065	H3K9ac + S10p
148	17850	2520	H3K4me3 + K9ac + S10p
167	13529	1906	H3K4me2 + T6p + K9ac + K14ac + K18ac
165	13453	725	H3T6p + K9ac + K14ac + K18ac
166	12123	2204	H3K4me3 + T6p + K9ac + K14ac + K18ac
41	9856	3723	H3R2me2a + K4me3 + K9ac + S10p + K14ac + K18ac