



**Specificity data.** EpiGold™ Histone Peptide Array used to analyze histone modification specificity of Histone H3 K4me3 (Lys4 trimethyl) catalog number 13-0004. 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 (“Pep No.”) in the raw data list below. Raw data “Signal” is an average of the antibody signal intensities of all 24 instances of the corresponding peptide on the array (8 instances of three peptide spots in a row).

Pep No.	Signal	STDEV	Peptide Name
22	32534	7871	<b>H3K4me3</b> + K9ac + K14ac
25	30576	6059	<b>H3K4me3</b> + K9ac + K14ac + K18ac
23	28125	4888	<b>H3K4me3</b> + K9ac + K18ac
24	27737	6806	<b>H3K4me3</b> + K14ac + K18ac
174	27449	8098	H3R2me2s + <b>K4me3</b> + K9ac + K14ac + K18ac
55	25796	6478	H3Cit2 + <b>K4me3</b> + K9ac + K14ac + K18ac
19	25425	6320	<b>H3K4me3</b> + K9ac
39	22415	5533	<b>H3K4me3</b> + K9ac + S10p + K14ac + K18ac
40	22077	8494	H3R2me2a + <b>K4me3</b> + S10p
20	22024	4670	<b>H3K4me3</b> + K14ac
50	21040	4613	H3R2me2a + <b>K4me3</b> + K9ac + K14ac + K18ac
21	20975	5691	<b>H3K4me3</b> + K18ac
148	20940	4479	<b>H3K4me3</b> + K9ac + S10p
52	19945	5783	H3R2me1 + <b>K4me3</b> + K9ac + K14ac + K18ac
264	19915	4806	<b>H3K4me3</b> + K9me2
96	16062	6154	<b>H3K4me3</b> + R8me2a + K9me3
41	15830	2848	H3R2me2a + <b>K4me3</b> + K9ac + S10p + K14ac + K18ac
54	14550	4021	H3Cit2 + <b>K4me3</b>
38	14517	2260	<b>H3K4me3</b> + S10p
89	12583	2977	<b>H3K4me3</b> + R8me2s + K9me3
132	11188	3727	<b>H3K4me3</b> + K9me3

30	11052	2891	H3R2me2a + <b>K4me3</b>
33	10959	3013	H3K4me2 + K9ac + K14ac + K18ac
18	10184	3753	<b>H3K4me3</b>
44	9242	3146	H3K4me2 + K9ac + K18ac
157	8869	3147	H3R2me2s + <b>K4me3</b>
26	8216	2772	H3T3p + <b>K4me3</b> + K9ac + K14ac + K18ac
27	8008	2151	H3T3p + <b>K4me3</b>
51	7041	1861	H3R2me1 + <b>K4me3</b>
29	6942	2054	H3R2me2a + T3p + <b>K4me3</b>
259	6454	1540	H3K4me2 + K9me2
28	6307	1083	H3R2me2a + T3p + <b>K4me3</b> + K9ac + K14ac + K18ac
163	4854	1473	<b>H3K4me3</b> + T6p
302	4570	12105	H2AK5ac (data not valid, std deviation too high)
166	4478	1695	<b>H3K4me3</b> + T6p + K9ac + K14ac + K18ac
63	3942	1883	H3Cit2 + K4me2
60	3786	1946	H3R2me2a + K4me2
61	2775	1659	H3R2me2s + K4me2
43	2454	1005	H3K4ac + K9me3 + K14ac + K18ac
229	2299	1267	H3K4ac + K9me3
62	1800	1336	H3R2me1 + K4me2
167	1594	525	H3K4me2 + T6p + K9ac + K14ac + K18ac
221	1514	595	H3T6p + R8me2a + K9me3
220	1440	628	H3T6p + K9me3
32	1421	635	H3K4me2
164	992	364	H3K4me2 + T6p
45	903	493	H3K4me1 + K9ac + K18ac
260	779	200	H3K4me1 + K9me2
91	734	351	H3K18me3
183	681	301	H3R8me2s + K9me3
178	667	335	H3R8me1 + K9me3
381	637	1642	H4K5me1 + K8ac + K12ac + K16ac
35	591	410	H3K4me1 + K9ac + K14ac + K18ac
123	505	1327	H3K36ac (27-45)
179	399	947	H3R8me1 + K9me2
186	276	780	H3K4ac + K9me2 + K14ac + K18ac
180	264	240	H3R8me2a + K9me3
95	264	246	H3K18me3 + K36me3
68	252	325	H4K12ac
82	229	293	H4K20me3
371	202	233	H4K5me1
311	193	443	H2AX (132-142)
304	190	511	H2AR3me2a + K5ac
78	190	351	H4S1p + R3me1
77	171	280	H4S1p + R3me2s
42	168	171	H3K9me3
373	150	256	H4K12me1
75	143	220	H4R3me1
79	134	293	H4R3me2a + K5ac + K8ac + K12ac + K16ac + K20ac
34	124	103	H3K4me1
74	122	205	H4R3me2s
401	113	105	H2BK5me3
76	112	206	H4S1p + R3me2a
93	102	195	H3K36me3
255	83	73	H3K56me3 (52-61)
129	75	118	H3K9me2 + K27me2
124	69	112	H3 (27-45)
73	68	150	H4R3me2a
145	66	141	H3K9me3 + S10p
67	63	140	H4K8ac
69	63	90	H4K16ac

305	56	159	H2AS1p + R3me2a + K5ac
375	56	60	H4K5me1 + K8ac + K12me1
70	52	77	H4K5ac + K12ac
310	50	141	H2AS1p + K5ac + K9ac + K13ac + K15ac (no N-ac)
400	49	139	H2B (1-24)
360	48	132	H4K5ac + K16ac
6	46	72	H3K9ac + K14ac
81	42	110	H4R3me1 + K5ac + K8ac + K12ac + K16ac + K20ac
625	42	75	H2A.X (1-17)
101	40	75	H3K79me3
403	40	80	H2BK5me1
71	38	87	H4K8ac + K16ac
104	38	89	H3 (74-84)
103	38	60	H3K79me1
366	36	102	H4K16ac + K20ac
17	35	92	H3K4ac + K9ac + K14ac + K18ac
121	34	62	H3K36me2 (27-45)
790	33	53	H3S31p + K36me3
308	32	71	H2AS1p + K5ac + K9ac + K13ac + K15ac
306	31	49	H2ACit3 + K5ac
351	30	79	H4 (1-23) (no N-ac)
198	29	48	H3R26me2a + K27me3
59	29	82	H4K5ac + K8ac + K12ac + K16ac
237	25	42	H3K9me2 (1-32)
185	25	70	H3R8me2s + K9me1
8	24	60	H3K4ac + K9ac + K14ac
626	24	54	H2A.X K5ac
1	24	53	H3 (1-20)
374	24	45	H4K5ac + K8me1 + K12ac
376	22	46	H4K5me1 + K8me1 + K12me1
242	22	43	H3K27ac + S28p
359	22	45	H4K5ac + K8ac
134	22	62	H3K9me1
243	22	59	H3S28p
253	21	60	H3 (52-61)
83	21	40	H4K20me2
58	21	47	H4 (1-23)
241	20	57	H3K27ac
162	20	31	H3T6p
372	19	39	H4K8me1
254	19	54	H3K56ac (52-61)
100	19	42	H3 (74-84) N-ac
181	19	46	H3R8me2a + K9me2
300	18	51	H2A (1-17)
85	18	27	H4K12ac + K16ac + K20me3
200	18	50	H3R26me2a + K27me1
TAGS	17	49	Flag, HA, His, Myc, V5
7	17	22	H3K4ac + K9ac
90	16	45	H3 (15-41)
383	15	44	H4K5ac + K8ac + K12me1 + K16ac
102	15	24	H3K79me2
196	15	42	H3K27me2
57	14	40	H3T3p
309	14	39	H2AK5ac + K9ac + K13ac + K15ac (no N-ac)
353	13	27	H4S1p + K5ac + K8ac + K12ac + K16ac
165	13	17	H3T6p + K9ac + K14ac + K18ac
66	13	35	H4K5ac
146	11	24	H3K9me2 + S10p
99	10	20	H4 (11-27)
12	10	25	H3K9ac + K18ac

80	9	18	H4R3me2s + K5ac + K8ac + K12ac + K16ac + K20ac
16	8	23	H3K4ac + K9ac + K18ac
2	8	22	H3K14ac
350	8	21	H4R3me2a + K5ac
84	7	20	H4K20me1
197	7	15	H3K27me1
195	7	16	H3K27me3
137	7	19	H3K18me3
120	7	12	H3K36me3 (27-45)
151	7	19	H3R17me1
303	6	18	H2AS1p + K5ac
15	6	17	H3K4ac + K14ac + K18ac
312	6	10	H2AX (S139p)
11	6	16	H3K14ac + K18ac
13	5	10	H3K4ac + K18ac
307	5	15	H2AS1p + Cit3 + K5ac
362	4	12	H4K8ac + K12ac
184	4	12	H3R8me2s + K9me2
10	4	7	H3K18ac
53	4	11	H3Cit2
149	4	8	H3R17me2a
133	3	8	H3K9me2
150	3	7	H3R17me2s
47	3	8	H3R2me2a
147	3	8	H3K9me1 + S10p
402	2	7	H2BK5me2
138	2	5	H3K18me2
125	1	3	H3T3p
225	1	2	H3K27me3 + S28p
789	0	1	H3K36me3
3	0	1	H3K9ac
4	0	0	H3K4ac
5	0	0	H3K4ac + K14ac
14	0	0	H3K9ac + K14ac + K18ac
36	0	0	H3S10p
37	0	0	H3K4ac + K9ac + S10p + K14ac + K18ac
48	0	0	H3R2me2a + K4ac + K9ac + K14ac + K18ac
56	0	0	H3Cit2 + K4ac + K9ac + K14ac + K18ac
72	0	0	H4K5ac + K8ac + K12ac
86	0	0	H4K12ac + K16ac + K20me2
139	0	0	H3K18me1
144	0	0	H3K9ac + S10p
182	0	0	H3R8me2a + K9me1
187	0	0	H3K4ac + K9me1 + K14ac + K18ac
224	0	0	H3R26me2a
226	0	0	H3S27me2 + S28p
301	0	0	H2AK5ac + K9ac + K13ac + K15ac
352	0	0	H4K20ac
364	0	0	H4K12ac + K16ac
370	0	0	H4K12ac + KQ5,8,16,20
382	0	0	H4K5ac + K8me1 + K12ac + K16ac