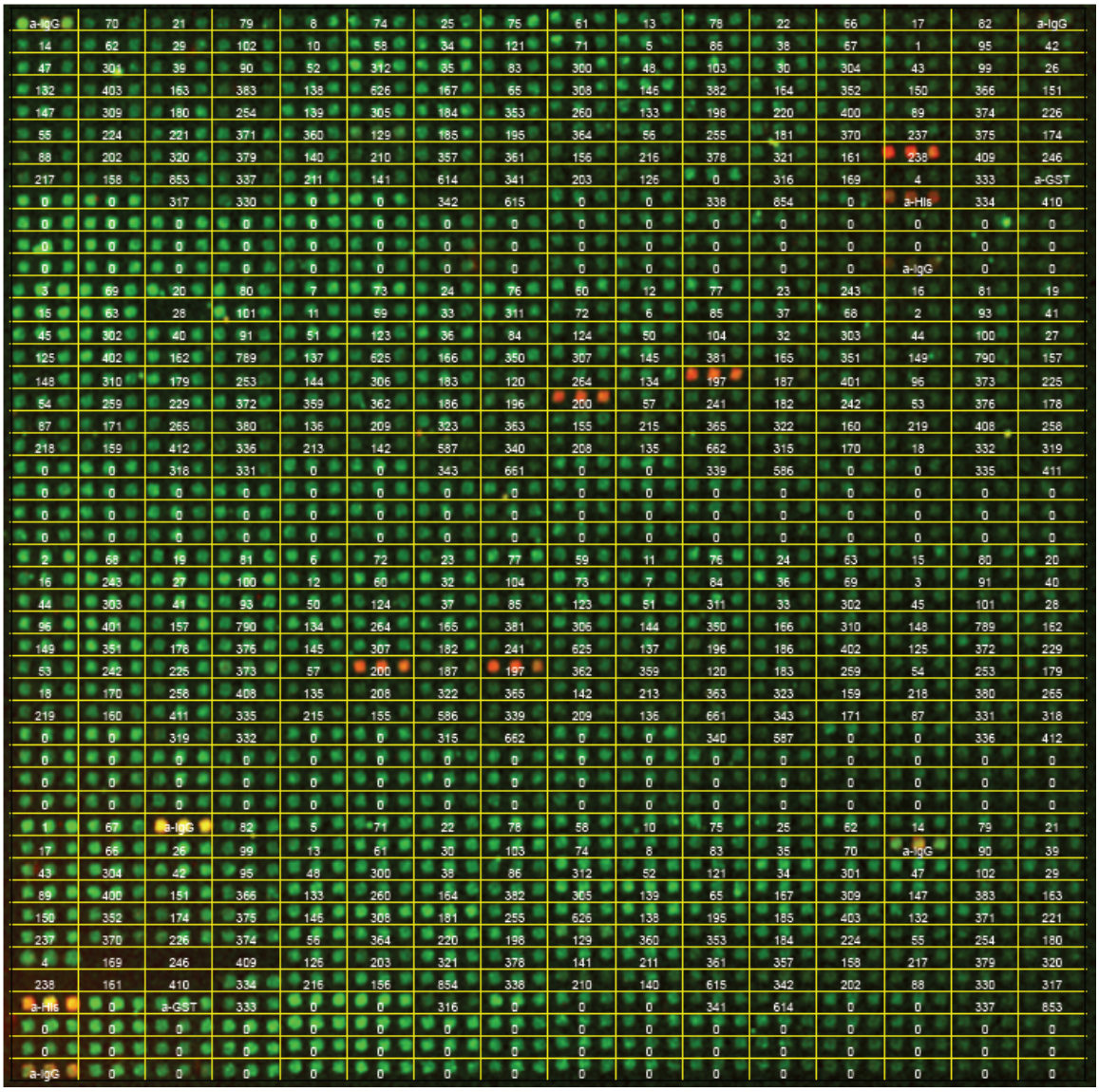
Analysis of anti-H3K27me1 on the *EpiTitan*^{TM} Histone Peptide Array



Data Specificity:

EpiTitanTM Histone Peptide Array was used to analyze binding specificity of the H3K27me1 antibody (catalog number A2361) at 1:5,000. Antibody signal appears in red, while the spotting tracer appears in green. The array image is overlayed with a frame containing numbers corresponding to the peptide number ("Peptide #") in the raw data list below. Raw data "Signal" is an average of the antibody signal intensities of all 6 instances of the corresponding peptide on the array (2 instances of three peptide spots in a row).

Result:
Anti-H3K27me1 recognizes all H3K27me1 peptides, and shows no cross-reactivity with any other peptides on the array.

Peptide #	Signal	STDEV	Peptide Name
197	40467	1483	K27me1
200	37998	6335	H3R26me2a + K27me1
129	9216	1465	H3K9me2 + K27me2
187	6315	768	H3K4ac + K9me1 + K14ac + K18ac
373	6268	4172	H4K12me1
196	5507	16	H3K27me2
134	4012	2099	H3K9me1
376	3072	2160	H4K5me1 + K8me1 + K12me1
343	2909	831	H4K12acK16acK20me3 (1-25)
381	2869	735	H4K5me1 + K8ac + K12ac + K16ac
215	2794	1184	H3K23me1 15-34
403	2721	87	H2BK5me1
375	2697	1195	H4K5me1 + K8ac + K12me1
342	2584	841	H4K20me3 (1-23)
195	2574	785	H3K27me3
139	2298	184	H3K18me1
374	2276	1040	H4K5ac + K8me1 + K12ac
334	2237	1620	H3K36me3 (21-44)
303	2235	540	H2AS1p + K5ac
217	2214	2137	H3K14-Nle (1-20)
66	2172	1818	H4K5ac
170	2059	1274	H3K18ac + K23ac + K27ac + S28p
383	2055	386	H4K5ac + K8ac + K12me1 + K16ac
209	1979	45	H3.3 15-34
67	1943	1129	H4K8ac
237	1931	1687	H3K9me2 (1-32)
242	1923	1490	H3K27ac + S28p
226	1912	1871	H3K27me2 + S28p
15	1903	1213	H3K4ac + K14ac + K18ac
44	1898	1688	H3K4me2 + K9ac + K18ac
382	1876	137	H4K5ac + K8me1 + K12ac + K16ac
198	1873	644	H3R26me2a + K27me3
352	1857	1036	H4K20ac
135	1850	686	K3K4me1 + K18ac
126	1845	814	H3.3K36me1
42	1843	249	H3K9me3

150	1832	1617	H3R17me2s
587	1814	560	H2A (10-25)
182	1790	227	H3R8me2a + K9me1
91	1772	993	H3K18me3
120	1753	464	H3K36me3 (27-45)
65	1727	171	H3K4N3
370	1710	1258	H4K12ac + KQ5,8,16,20
335	1701	886	H3K36ac (21-44)
330	1700	529	H3Cit8 (1-21)
336	1687	1255	H3K27acK36me1 (21-44)
306	1683	16	H2ACit3 + K5ac
43	1665	1208	H3K4ac + K9me3 + K14ac + K18ac
359	1649	345	H4K5ac + K8ac
301	1646	1164	H2AK5ac + K9ac + K13ac + K15ac
213	1644	289	H3 120-135
95	1635	1326	H3K18me3 + K36me3
68	1562	64	H4K12ac
149	1558	1449	H3R17me2a
790	1549	344	H3S31p + K36me3
253	1548	111	H3 (52-61)
140	1545	248	H3R8me1
55	1544	622	H3Cit2 + K4me3 + K9ac + K14ac + K18ac
88	1540	335	H4K12ac + K16ac
229	1538	826	H3K4ac + K9me3
362	1536	235	H4K8ac + K12ac
144	1530	287	H3K9ac + S10p
16	1529	1592	H3K4ac + K9ac + K18ac
56	1523	698	H3Cit2 + K4ac + K9ac + K14ac + K18ac
305	1521	308	H2AS1p + R3me2a + K5ac
380	1504	420	H4K5ac + K8ac + K16ac
372	1503	1	H4K8me1
366	1492	1112	H4K16ac + K20ac
221	1487	130	H3T6p + R8me2a + K9me3
225	1479	47	H3K27me3 + S28p
80	1478	228	H4R3me2s + K5ac + K8ac + K12ac + K16ac + K20ac
789	1474	1009	H3K36me3
185	1464	396	H3R8me2s + K9me1
371	1449	320	H4K5me1
338	1443	504	H3K27acK36me3 (21-44)
243	1432	785	H3S28p
30	1432	488	H3R2me2a + K4me3
136	1429	391	H3T11p
53	1428	969	H3Cit2

216	1419	455	H3K9-Nle (1-20)
219	1411	983	H3K23-Nle (15-31)
661	1408	1088	H3K4me3 (1-11)
260	1408	520	H3K4me1 + K9me2
160	1406	672	H3R17me2a + K18ac (1-25)
125	1405	295	H3T3p
364	1395	745	H4K12ac + K16ac
137	1392	396	H3K18me3
408	1379	409	H2BK12ac
141	1378	617	H3R8me2a
96	1365	752	H3K4me3 + R8me2a + K9me3
183	1354	196	H3R8me2s + K9me3
12	1352	950	H3K9ac + K18ac
51	1349	654	H3R2me1 + K4me3
180	1348	627	H3R8me2a + K9me3
132	1332	591	H3K4me3 + K9me3
36	1329	164	H3S10p
174	1328	1221	H3R2me2s + K4me3 + K9ac + K14ac + K18ac
142	1325	276	H3R8me2s
351	1322	860	H4 (1-23) (no N-ac)
40	1322	128	H3R2me2a + K4me3 + S10p
333	1321	948	H3K36me2 (21-44)
57	1320	383	H3T3p
401	1319	584	H2BK5me3
586	1317	369	yH2A (10-25)
353	1297	420	H4S1p + K5ac + K8ac + K12ac + K16ac
179	1293	73	H3R8me1 + K9me2
73	1292	160	H4R3me2a
18	1286	748	H3K4me3
350	1283	308	H4R3me2a + K5ac
162	1280	367	H3T6p
615	1278	424	cnp1 K2ac + K3ac + K18ac + K19ac (1-23)
41	1271	376	H3R2me2a + K4me3 + K9ac + S10p + K14ac + K18ac
151	1271	1133	H3R17me1
224	1263	229	H3R26me2a
379	1261	844	H4K5ac + K12ac + K16ac
360	1259	775	H4K5ac + K16ac
79	1248	462	H4R3me2a + K5ac + K8ac + K12ac + K16ac + K20ac
45	1244	876	H3K4me1 + K9ac + K18ac
157	1243	411	H3R2me2s + K4me3
210	1240	360	H3.3 30-49
164	1239	53	H3K4me2 + T6p

22	1238	378	H3K4me3 + K9ac + K14ac
133	1238	435	H3K9me2
310	1231	160	H2AS1p + K5ac + K9ac + K13ac + K15ac (no N-ac)
340	1231	283	H2B (108-125)
54	1224	579	H3Cit2 + K4me3
13	1223	209	H3K4ac + K18ac
308	1222	364	H2AS1p + K5ac + K9ac + K13ac + K15ac
26	1217	97	H3T3p + K4me3 + K9ac + K14ac + K18ac
341	1216	694	H4 (1-25)
184	1215	478	H3R8me2s + K9me2
311	1210	598	H2AX (132-142)
402	1210	447	H2BK5me2
158	1196	45	H3K18ac (1-25)
103	1188	152	H3K79me1
2	1182	1426	H3K14ac
47	1178	484	H3R2me2a
3	1177	1179	H3K9ac
78	1169	136	H4S1p + R3me1
854	1169	218	H3K23me2 (15-34)
165	1167	247	H3T6p + K9ac + K14ac + K18ac
259	1164	374	H3K4me2 + K9me2
6	1163	145	H3K9ac + K14ac
155	1155	1115	H3K14me2
625	1144	277	H2A.X (1-17)
89	1142	297	H3K4me3 + R8me2s + K9me3
23	1141	645	H3K4me3 + K9ac + K18ac
37	1137	497	H3K4ac + K9ac + S10p + K14ac + K18ac
147	1129	511	H3K9me1 + S10p
71	1128	550	H4K8ac + K16ac
5	1127	451	H3K4ac + K14ac
87	1116	683	H4K12ac + K16ac + K20me1
61	1112	852	H3R2me2s + K4me2
312	1104	315	H2AX (S139p)
156	1098	298	H3K14me3
365	1098	952	H4K12ac + K20ac
662	1095	863	H3K4me3 (1-7)
614	1090	224	cnp1 (1-23)
84	1088	222	H4K20me1
220	1087	1010	H3T6p + K9me3
99	1085	40	H4 (11-27)
339	1084	585	H2BK120ub1 (Leu-Arg-Gly-Gly) (108-125)
76	1077	149	H4S1p + R3me2a
70	1071	26	H4K5ac + K12ac

74	1058	149	H4R3me2s
357	1057	669	H4S1p (1-23)
52	1056	292	H3R2me1 + K4me3 + K9ac + K14ac + K18ac
24	1051	13	H3K4me3 + K14ac + K18ac
1	1045	417	H3 (1-20)
166	1042	22	H3K4me3 + T6p + K9ac + K14ac + K18ac
146	1037	414	H3K9me2 + S10p
32	1037	254	H3K4me2
361	1035	63	H4K5ac + K20ac
300	1016	200	H2A (1-17)
378	1012	114	H4K8ac + K12ac + K16ac
331	1001	552	H3 (21-44)
75	999	162	H4R3me1
48	997	215	H3R2me2a + K4ac + K9ac + K14ac + K18ac
138	994	209	H3K18me2
337	983	21	H3K27acK36me2 (21-44)
63	979	446	H3Cit2 + K4me2
145	975	479	H3K9me3 + S10p
178	974	214	H3R8me1 + K9me3
82	972	447	H4K20me3
241	971	771	H3K27ac
38	970	353	H3K4me3 + S10p
211	967	226	H3.3 75-94
33	962	464	H3K4me2 + K9ac + K14ac + K18ac
85	957	716	H4K12ac + K16ac + K20me3
104	955	767	H3 (74-84)
203	949	855	H3 30-49
77	942	644	H4S1p + R3me2s
25	934	113	H3K4me3 + K9ac + K14ac + K18ac
10	934	417	H3K18ac
258	931	85	H3K9me2 (1-15)
20	922	5	H3K4me3 + K14ac
202	920	70	H3 15-34
218	913	14	H3K18-Nle (11-26)
304	911	384	H2AR3me2a + K5ac
186	908	238	H3K4ac + K9me2 + K14ac + K18ac
265	902	126	H3K4A + K9me2 (1-15)
100	893	418	H3 (74-84) N-ac
322	891	496	H2A.Z K4ac + K8ac + K12ac (1-19)
853	890	384	H3K23me3 (15-34)
83	883	113	H4K20me2
363	874	783	H4K8ac + K20ac
400	863	221	H2B (1-24)

29	863	805	H3R2me2a + T3p + K4me3
208	860	599	H3 105-124
93	858	379	H3K36me3
72	851	627	H4K5ac + K8ac + K12ac
62	841	16	H3R2me1 + K4me2
320	836	487	H2A.Z (1-19)
626	835	681	H2A.X K5ac
123	831	38	H3K36ac (27-45)
309	829	1075	H2AK5ac + K9ac + K13ac + K15ac (no N-ac)
255	827	58	H3K56me3 (52-61)
412	823	423	H2BK12ac + K15ac + K16ac + K20ac
86	822	167	H4K12ac + K16ac + K20me2
121	819	97	H3K36me2 (27-45)
17	813	354	H3K4ac + K9ac + K14ac + K18ac
254	807	15	H3K56ac (52-61)
90	803	62	H3 (15-41)
323	799	89	H2A.Z K4ac + K8ac + K12ac (1-19) N-ac
124	761	106	H3 (27-45)
102	744	327	H3K79me2
60	742	154	H3R2me2a + K4me2
7	727	378	H3K4ac + K9ac
11	726	272	H3K14ac + K18ac
58	710	155	H4 (1-23)
167	707	220	H3K4me2 + T6p + K9ac + K14ac + K18ac
307	704	110	H2AS1p + Cit3 + K5ac
35	695	684	H3K4me1 + K9ac + K14ac + K18ac
411	687	326	H2BK20ac
19	686	217	H3K4me3 + K9ac
302	674	280	H2AK5ac
8	672	22	H3K4ac + K9ac + K14ac
81	656	52	H4R3me1 + K5ac + K8ac + K12ac + K16ac + K20ac
69	653	138	H4K16ac
14	634	469	H3K9ac + K14ac + K18ac
163	631	250	H3K4me3 + T6p
264	609	583	H3K4me3 + K9me2
59	604	313	H4K5ac + K8ac + K12ac + K16ac
27	600	134	H3T3p + K4me3
159	597	836	H3R17me2a (1-25)
50	585	605	H3R2me2a + K4me3 + K9ac + K14ac + K18ac
34	567	72	H3K4me1
21	564	614	H3K4me3 + K18ac
101	458	135	H3K79me3
39	430	12	H3K4me3 + K9ac + S10p + K14ac + K18ac

171	370	459	H3K23ac