

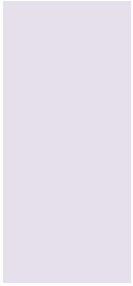
Histone	Peptide Length	Array Position	Kac Mark Combinations	Sequence
polyHis CTRL		A1	HHHHHHHH	
polyHis CTRL		A2	HHHHHHHH	
		A3	Blank	
H2A (Q6F113)	1-20	A4	CONTROL	S G R G K Q G G K A R A K A K S R S S R
		A5	pS1	pS G R G K Q G G K A R A K A K S R S S R
		A6	K5me	S G R G Kme Q G G K A R A K A K S R S S R
		A7	K5me2	S G R G Kme2 Q G G K A R A K A K S R S S R
		A8	K5me3	S G R G Kme3 Q G G K A R A K A K S R S S R
		A9	K5ac	S G R G Kac Q G G K A R A K A K S R S S R
		A10	K9me	S G R G K Q G G Kme A R A K A K S R S S R
		A11	K9me2	S G R G K Q G G Kme2 A R A K A K S R S S R
		A12	K9me3	S G R G K Q G G Kme3 A R A K A K S R S S R
		A13	K9ac	S G R G K Q G G Kac A R A K A K S R S S R
		A14	K13me	S G R G K Q G G K A R A Kme A K S R S S R
		A15	K13me2	S G R G K Q G G K A R A Kme2 A K S R S S R
		A16	K13me3	S G R G K Q G G K1 A R A Kme3 A K S R S S R
		A17	K13ac	S G R G K Q G G K A R A Kac A K S R S S R
		A18	pS1/K5me	pS G R G Kme Q G G K A R A K A K S R S S R
		A19	pS1/K5me2	pS G R G Kme2 Q G G K A R A K A K S R S S R
		A20	pS1/K5me3	pS G R G Kme3 Q G G K A R A K A K S R S S R
		A21	pS1/K5ac	pS G R G Kac Q G G K A R A K A K S R S S R
		A22	K5me/K9me	S G R G Kme Q G G Kme A R A K A K S R S S R
		A23	K5me/K9me2	S G R G Kme Q G G Kme2 A R A K A K S R S S R
		A24	K5me/K9me3	S G R G Kme Q G G Kme3 A R A K A K S R S S R
		A25	K5me/K9ac	S G R G Kme Q G G Kac A R A K A K S R S S R
		A26	K5me2/K9me	S G R G Kme2 Q G G Kme A R A K A K S R S S R
		A27	K5me2/K9me2	S G R G Kme2 Q G G Kme2 A R A K A K S R S S R
		A28	K5me2/K9me3	S G R G Kme2 Q G G Kme3 A R A K A K S R S S R
		A29	K5me2/K9ac	S G R G Kme2 Q G G Kac A R A K A K S R S S R
		A30	K5me3/K9me	S G R G Kme3 Q G G Kme A R A K A K S R S S R
		A31	K5me3/K9me2	S G R G Kme3 Q G G Kme2 A R A K A K S R S S R
		A32	K5me3/K9me3	S G R G Kme3 Q G G Kme3 A R A K A K S R S S R
		A33	K5me3/K9ac	S G R G Kme3 Q G G Kac A R A K A K S R S S R
		A34	K5ac/K9me	S G R G Kac Q G G Kme A R A K A K S R S S R
		A35	K5ac/K9me2	S G R G Kac Q G G Kme2 A R A K A K S R S S R
		A36	K5ac/K9me3	S G R G Kac Q G G Kme3 A R A K A K S R S S R
		A37	K5ac/K9ac	S G R G Kac Q G G Kac A R A K A K S R S S R
		B1	K9me/K13me	S G R G K Q G G Kme A R A Kme A K S R S S R
		B2	K9me/K13me2	S G R G K Q G G Kme A R A Kme2 A K S R S S R
		B3	K9me/K13me3	S G R G K Q G G Kme A R A Kme3 A K S R S S R
		B4	K9me/K13ac	S G R G K Q G G Kme A R A Kac A K S R S S R
		B5	K9me2/K13me	S G R G K Q G G Kme2 A R A Kme A K S R S S R
		B6	K9me2/K13me2	S G R G K Q G G Kme2 A R A Kme2 A K S R S S R
		B7	K9me2/K13me3	S G R G K Q G G Kme2 A R A Kme3 A K S R S S R
		B8	K9me2/K13ac	S G R G K Q G G Kme2 A R A Kac A K S R S S R
		B9	K9me3/K13me	S G R G K Q G G Kme3 A R A Kme A K S R S S R
		B10	K9me3/K13me2	S G R G K Q G G Kme3 A R A Kme2 A K S R S S R
		B11	K9me3/K13me3	S G R G K Q G G Kme3 A R A Kme3 A K S R S S R
		B12	K9me3/K13ac	S G R G K Q G G Kme3 A R A Kac A K S R S S R
		B13	K9ac/K13me	S G R G K Q G G Kac A R A Kme A K S R S S R
		B14	K9ac/K13me2	S G R G K Q G G Kac A R A Kme2 A K S R S S R
		B15	K9ac/K13me3	S G R G K Q G G Kac A R A Kme3 A K S R S S R
		B16	K9ac/K13ac	S G R G K Q G G Kac A R A Kac A K S R S S R
		B17	Blank	
	6-25	B18	CONTROL	Q G G K A R A K A K S R S S R A G L Q F
		B19	K13me	Q G G K A R A Kme A K S R S S R A G L Q F
		B20	K13me2	Q G G K A R A Kme2 A K S R S S R A G L Q F
		B21	K13me3	Q G G K A R A Kme3 A K S R S S R A G L Q F
		B22	K13ac	Q G G K A R A Kac A K S R S S R A G L Q F
		B23	K15me	Q G G K A R A K A Kme S R S S R A G L Q F
		B24	K15me2	Q G G K A R A K A Kme2 S R S S R A G L Q F
		B25	K15me3	Q G G K A R A K A Kme3 S R S S R A G L Q F
		B26	K15ac	Q G G K A R A K A Kac S R S S R A G L Q F
		B27	pS16	Q G G K A R A K A K pS R S S R A G L Q F
		B28	K13me/K15me	Q G G K A R A Kme A Kme S R S S R A G L Q F
		B29	K13me/K15me2	Q G G K A R A Kme A Kme2 S R S S R A G L Q F
		B30	K13me/K15me3	Q G G K A R A Kme A Kme3 S R S S R A G L Q F
		B31	K13me/K15ac	Q G G K A R A Kme A Kac S R S S R A G L Q F
		B32	K13me2/K15me	Q G G K A R A Kme2 A Kme S R S S R A G L Q F
		B33	K13me2/K15me2	Q G G K A R A Kme2 A Kme2 S R S S R A G L Q F
		B34	K13me2/K15me3	Q G G K A R A Kme2 A Kme3 S R S S R A G L Q F
		B35	K13me2/K15ac	Q G G K A R A Kme2 A Kac S R S S R A G L Q F
		B36	K13me3/K15me	Q G G K A R A Kme3 A Kme S R S S R A G L Q F
		B37	K13me3/K15me2	Q G G K A R A Kme3 A Kme2 S R S S R A G L Q F
		C1	K13me3/K15me3	Q G G K A R A Kme3 A Kme3 S R S S R A G L Q F
		C2	K13me3/K15ac	Q G G K A R A Kme3 A Kac S R S S R A G L Q F
		C3	K13ac/K15me	Q G G K A R A Kac A Kme S R S S R A G L Q F
		C4	K13ac/K15me2	Q G G K A R A Kac A Kme2 S R S S R A G L Q F
		C5	K13ac/K15me3	Q G G K A R A Kac A Kme3 S R S S R A G L Q F
		C6	K13ac/K15ac	Q G G K A R A Kac A Kac S R S S R A G L Q F
		C7	K13me/pS16	Q G G K A R A Kme A K pS R S S R A G L Q F
		C8	K13me2/pS16	Q G G K A R A Kme2 A K pS R S S R A G L Q F
		C9	K13me3/pS16	Q G G K A R A Kme3 A K pS R S S R A G L Q F
		C10	K13ac/pS16	Q G G K A R A Kac A K pS R S S R A G L Q F
		C11	K15me/pS16	Q G G K A R A K A Kme pS R S S R A G L Q F
		C12	K15me2/pS16	Q G G K A R A K A Kme2 pS R S S R A G L Q F
		C13	K15me3/pS16	Q G G K A R A K A Kme3 pS R S S R A G L Q F
		C14	K15ac/pS16	Q G G K A R A K A Kac pS R S S R A G L Q F
		C15	K13me/K15me/pS16	Q G G K A R A Kme A Kme pS R S S R A G L Q F
		C16	K13me/K15me2/pS16	Q G G K A R A Kme A Kme2 pS R S S R A G L Q F
		C17	K13me/K15me3/pS16	Q G G K A R A Kme A Kme3 pS R S S R A G L Q F
		C18	K13me/K15ac/pS16	Q G G K A R A Kme A Kac pS R S S R A G L Q F
		C19	K13me2/K15me/pS16	Q G G K A R A Kme2 A Kme pS R S S R A G L Q F
		C20	K13me2/K15me2/pS16	Q G G K A R A Kme2 A Kme2 pS R S S R A G L Q F
		C21	K13me2/K15me3/pS16	Q G G K A R A Kme2 A Kme3 pS R S S R A G L Q F
		C22	K13me2/K15ac/pS16	Q G G K A R A Kme2 A Kac pS R S S R A G L Q F
		C23	K13me3/K15me/pS16	Q G G K A R A Kme3 A Kme pS R S S R A G L Q F
		C24	K13me3/K15me2/pS16	Q G G K A R A Kme3 A Kme2 pS R S S R A G L Q F
		C25	K13me3/K15me3/pS16	Q G G K A R A Kme3 A Kme3 pS R S S R A G L Q F
		C26	K13me3/K15ac/pS16	Q G G K A R A Kme3 A Kac pS R S S R A G L Q F
		C27	K13ac/K15me/pS16	Q G G K A R A Kac A Kme pS R S S R A G L Q F

C28	K13ac/K15me2/pS16	Q	G	G	K	A	R	A	Kac	A	Kme2	pS	R	S	S	R	A	G	L	Q	F	
C29	K13ac/K15me3/pS16	Q	G	G	K	A	R	A	Kac	A	Kme3	pS	R	S	S	R	A	G	L	Q	F	
C30	K13ac/K15ac/pS16	Q	G	G	K	A	R	A	Kac	A	Kac	pS	R	S	S	R	A	G	L	Q	F	
C31	pS18	Q	G	G	K	A	R	A	K	A	K	S	R	pS	S	R	A	G	L	Q	F	
C32	K13me/pS18	Q	G	G	K	A	R	A	Kme	A	K	S	R	pS	S	R	A	G	L	Q	F	
C33	K13me2/pS18	Q	G	G	K	A	R	A	Kme2	A	K	S	R	pS	S	R	A	G	L	Q	F	
C34	K13me3/pS18	Q	G	G	K	A	R	A	Kme3	A	K	S	R	pS	S	R	A	G	L	Q	F	
C35	K13ac/pS18	Q	G	G	K	A	R	A	Kac	A	K	S	R	pS	S	R	A	G	L	Q	F	
C36	K15me/pS18	Q	G	G	K	A	R	A	K	A	Kme	S	R	pS	S	R	A	G	L	Q	F	
C37	K15me2/pS18	Q	G	G	K	A	R	A	K	A	Kme2	S	R	pS	S	R	A	G	L	Q	F	
D1	K15me3/pS18	Q	G	G	K	A	R	A	K	A	Kme3	S	R	pS	S	R	A	G	L	Q	F	
D2	K15ac/pS18	Q	G	G	K	A	R	A	K	A	Kac	S	R	pS	S	R	A	G	L	Q	F	
D3	K13me/K15me/pS18	Q	G	G	K	A	R	A	Kme	A	Kme	S	R	pS	S	R	A	G	L	Q	F	
D4	K13me/K15me2/pS18	Q	G	G	K	A	R	A	Kme	A	Kme2	S	R	pS	S	R	A	G	L	Q	F	
D5	K13me/K15me3/pS18	Q	G	G	K	A	R	A	Kme	A	Kme3	S	R	pS	S	R	A	G	L	Q	F	
D6	K13me/K15ac/pS18	Q	G	G	K	A	R	A	Kme	A	Kac	S	R	pS	S	R	A	G	L	Q	F	
D7	K13me2/K15me/pS18	Q	G	G	K	A	R	A	Kme2	A	Kme	S	R	pS	S	R	A	G	L	Q	F	
D8	K13me2/K15me2/pS18	Q	G	G	K	A	R	A	Kme2	A	Kme2	S	R	pS	S	R	A	G	L	Q	F	
D9	K13me2/K15me3/pS18	Q	G	G	K	A	R	A	Kme2	A	Kme3	S	R	pS	S	R	A	G	L	Q	F	
D10	K13me2/K15ac/pS18	Q	G	G	K	A	R	A	Kme2	A	Kac	S	R	pS	S	R	A	G	L	Q	F	
D11	K13me3/K15me/pS18	Q	G	G	K	A	R	A	Kme3	A	Kme	S	R	pS	S	R	A	G	L	Q	F	
D12	K13me3/K15me2/pS18	Q	G	G	K	A	R	A	Kme3	A	Kme2	S	R	pS	S	R	A	G	L	Q	F	
D13	K13me3/K15me3/pS18	Q	G	G	K	A	R	A	Kme3	A	Kme3	S	R	pS	S	R	A	G	L	Q	F	
D14	K13me3/K15ac/pS18	Q	G	G	K	A	R	A	Kme3	A	Kac	S	R	pS	S	R	A	G	L	Q	F	
D15	K13ac/K15me/pS18	Q	G	G	K	A	R	A	Kac	A	Kme	S	R	pS	S	R	A	G	L	Q	F	
D16	K13ac/K15me2/pS18	Q	G	G	K	A	R	A	Kac	A	Kme2	S	R	pS	S	R	A	G	L	Q	F	
D17	K13ac/K15me3/pS18	Q	G	G	K	A	R	A	Kac	A	Kme3	S	R	pS	S	R	A	G	L	Q	F	
D18	K13ac/K15ac/pS18	Q	G	G	K	A	R	A	Kac	A	Kac	S	R	pS	S	R	A	G	L	Q	F	
D19	pS19	Q	G	G	K	A	R	A	K	A	K	S	R	S	pS	R	A	G	L	Q	F	
D20	K13me/K15me/pS19	Q	G	G	K	A	R	A	Kme	A	Kme	S	R	S	pS	R	A	G	L	Q	F	
D21	K13me/K15me2/pS19	Q	G	G	K	A	R	A	Kme	A	Kme2	S	R	S	pS	R	A	G	L	Q	F	
D22	K13me/K15me3/pS19	Q	G	G	K	A	R	A	Kme	A	Kme3	S	R	S	pS	R	A	G	L	Q	F	
D23	K13me/K15ac/pS19	Q	G	G	K	A	R	A	Kme	A	Kac	S	R	S	pS	R	A	G	L	Q	F	
D24	K13me2/K15me/pS19	Q	G	G	K	A	R	A	Kme2	A	Kme	S	R	S	pS	R	A	G	L	Q	F	
D25	K13me2/K15me2/pS19	Q	G	G	K	A	R	A	Kme2	A	Kme2	S	R	S	pS	R	A	G	L	Q	F	
D26	K13me2/K15me3/pS19	Q	G	G	K	A	R	A	Kme2	A	Kme3	S	R	S	pS	R	A	G	L	Q	F	
D27	K13me2/K15ac/pS19	Q	G	G	K	A	R	A	Kme2	A	Kac	S	R	S	pS	R	A	G	L	Q	F	
D28	K13me3/K15me/pS19	Q	G	G	K	A	R	A	Kme3	A	Kme	S	R	S	pS	R	A	G	L	Q	F	
D29	K13me3/K15me2/pS19	Q	G	G	K	A	R	A	Kme3	A	Kme2	S	R	S	pS	R	A	G	L	Q	F	
D30	K13me3/K15me3/pS19	Q	G	G	K	A	R	A	Kme3	A	Kme3	S	R	S	pS	R	A	G	L	Q	F	
D31	K13me3/K15ac/pS19	Q	G	G	K	A	R	A	Kme3	A	Kac	S	R	S	pS	R	A	G	L	Q	F	
D32	K13ac/K15me/pS19	Q	G	G	K	A	R	A	Kac	A	Kme	S	R	S	pS	R	A	G	L	Q	F	
D33	K13ac/K15me2/pS19	Q	G	G	K	A	R	A	Kac	A	Kme2	S	R	S	pS	R	A	G	L	Q	F	
D34	K13ac/K15me3/pS19	Q	G	G	K	A	R	A	Kac	A	Kme3	S	R	S	pS	R	A	G	L	Q	F	
D35	K13ac/K15ac/pS19	Q	G	G	K	A	R	A	Kac	A	Kac	S	R	S	pS	R	A	G	L	Q	F	
D36	Blank																					
D37	CONTROL	R	A	K	A	K	S	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E1	K15me	R	A	K	A	Kme	S	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E2	K15me2	R	A	K	A	Kme2	S	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E3	K15me3	R	A	K	A	Kme3	S	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E4	K15ac	R	A	K	A	Kac	S	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E5	pS16	R	A	K	A	K	pS	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E6	pS18	R	A	K	A	K	S	R	pS	S	R	A	G	L	Q	F	P	V	G	R	V	
E7	pS19	R	A	K	A	K	S	R	S	pS	S	R	A	G	L	Q	F	P	V	G	R	V
E8	K15me/pS16	R	A	K	A	Kme	pS	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E9	K15me2/pS16	R	A	K	A	Kme2	pS	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E10	K15me3/pS16	R	A	K	A	Kme3	pS	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E11	K15ac/pS16	R	A	K	A	Kac	pS	R	S	S	R	A	G	L	Q	F	P	V	G	R	V	
E12	K15me/pS18	R	A	K	A	Kme	S	R	pS	S	R	A	G	L	Q	F	P	V	G	R	V	
E13	K15me2/pS18	R	A	K	A	Kme2	S	R	pS	S	R	A	G	L	Q	F	P	V	G	R	V	
E14	K15me3/pS18	R	A	K	A	Kme3	S	R	pS	S	R	A	G	L	Q	F	P	V	G	R	V	
E15	K15ac/pS18	R	A	K	A	Kac	S	R	pS	S	R	A	G	L	Q	F	P	V	G	R	V	
E16	K15me/pS19	R	A	K	A	Kme	S	R	S	pS	R	A	G	L	Q	F	P	V	G	R	V	
E17	K15me2/pS19	R	A	K	A	Kme2	S	R	S	pS	R	A	G	L	Q	F	P	V	G	R	V	
E18	K15me3/pS19	R	A	K	A	Kme3	S	R	S	pS	R	A	G	L	Q	F	P	V	G	R	V	
E19	K15ac/pS19	R	A	K	A	Kac	S	R	S	pS	R	A	G	L	Q	F	P	V	G	R	V	
E20	Blank																					
E21	CONTROL	V	G	R	V	H	R	L	L	R	K	G	N	Y	A	E	R	V	G	A	G	
E22	K36me	V	G	R	V	H	R	L	L	R	Kme	G	N	Y	A	E	R	V	G	A	G	
E23	K36me2	V	G	R	V	H	R	L	L	R	Kme2	G	N	Y	A	E	R	V	G	A	G	
E24	K36me3	V	G	R	V	H	R	L	L	R	Kme3	G	N	Y	A	E	R	V	G	A	G	
E25	K36ac	V	G	R	V	H	R	L	L	R	Kac	G	N	Y	A	E	R	V	G	A	G	

11-30

27-46

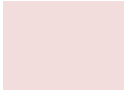
Histone	Peptide Length	Array Poition	Kac Mark Combinations	Sequence
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polyHis CTRL		A2	HHHHHHHH	
		A3	Blank	
H2A.X (P16104)	1-20	A4	CONTROL	S G R G K T G G K A R A K A K S R S S R
		A5	K5me	S G R G Kme T G G K A R A K A K S R S S R
		A6	K5me2	S G R G Kme2 T G G K A R A K A K S R S S R
		A7	K5me3	S G R G Kme3 T G G K A R A K A K S R S S R
		A8	K5ac	S G R G Kac T G G K A R A K A K S R S S R
		A9	pT6	S G R G K pT G G K A R A K A K S R S S R
		A10	K9me	S G R G K T G G Kme A R A K A K S R S S R
		A11	K9me2	S G R G K T G G Kme2 A R A K A K S R S S R
		A12	K9me3	S G R G K T G G Kme3 A R A K A K S R S S R
		A13	K9ac	S G R G K T G G Kac A R A K A K S R S S R
		A14	K5me/pT6	S G R G Kme pT G G K A R A K A K S R S S R
		A15	K5me2/pT6	S G R G Kme2 pT G G K A R A K A K S R S S R
		A16	K5me3/pT6	S G R G Kme3 pT G G K A R A K A K S R S S R
		A17	K5ac/pT6	S G R G Kac pT G G K A R A K A K S R S S R
		A18	pT6/K9me	S G R G K pT G G Kme A R A K A K S R S S R
		A19	pT6/K9me2	S G R G K pT G G Kme2 A R A K A K S R S S R
		A20	pT6/K9me3	S G R G K pT G G Kme3 A R A K A K S R S S R
		A21	pT6/K9ac	S G R G K pT G G Kac A R A K A K S R S S R
		A22	K5me/pT6/K9me	S G R G Kme pT G G Kme A R A K A K S R S S R
		A23	K5me/pT6/K9me2	S G R G Kme pT G G Kme2 A R A K A K S R S S R
		A24	K5me/pT6/K9me3	S G R G Kme pT G G Kme3 A R A K A K S R S S R
		A25	K5me/pT6/K9ac	S G R G Kme pT G G Kac A R A K A K S R S S R
		A26	K5me2/pT6/K9me	S G R G Kme2 pT G G Kme A R A K A K S R S S R
		A27	K5me2/pT6/K9me2	S G R G Kme2 pT G G Kme2 A R A K A K S R S S R
		A28	K5me2/pT6/K9me3	S G R G Kme2 pT G G Kme3 A R A K A K S R S S R
		A29	K5me2/pT6/K9ac	S G R G Kme2 pT G G Kac A R A K A K S R S S R
		A30	K5me3/pT6/K9me	S G R G Kme3 pT G G Kme A R A K A K S R S S R
		A31	K5me3/pT6/K9me2	S G R G Kme3 pT G G Kme2 A R A K A K S R S S R
		A32	K5me3/pT6/K9me3	S G R G Kme3 pT G G Kme3 A R A K A K S R S S R
		A33	K5me3/pT6/K9ac	S G R G Kme3 pT G G Kac A R A K A K S R S S R
		A34	K5ac/pT6/K9me	S G R G Kac pT G G Kme A R A K A K S R S S R
		A35	K5ac/pT6/K9me2	S G R G Kac pT G G Kme2 A R A K A K S R S S R
		A36	K5ac/pT6/K9me3	S G R G Kac pT G G Kme3 A R A K A K S R S S R
		A37	K5ac/pT6/K9ac	S G R G Kac pT G G Kac A R A K A K S R S S R
		B1	Blank	
		B2	CONTROL	T V G P K A P S G G K K A T Q A S Q E Y
		B3	K127me	T V G P Kme A P S G G K K A T Q A S Q E Y
		B4	K127me2	T V G P Kme2 A P S G G K K A T Q A S Q E Y
		B5	K127me3	T V G P Kme3 A P S G G K K A T Q A S Q E Y
		B6	K127ac	T V G P Kac A P S G G K K A T Q A S Q E Y
		B7	pS130	T V G P K A P pS G G K K A T Q A S Q E Y
		B8	K133me	T V G P K A P S G G Kme K A T Q A S Q E Y
		B9	K133me2	T V G P K A P S G G Kme2 K A T Q A S Q E Y
		B10	K133me3	T V G P K A P S G G Kme3 K A T Q A S Q E Y
		B11	K133ac	T V G P K A P S G G Kac K A T Q A S Q E Y
		B12	K134me	T V G P K A P S G G K Kme K A T Q A S Q E Y
		B13	K134me2	T V G P K A P S G G K Kme2 K A T Q A S Q E Y
		B14	K134me3	T V G P K A P S G G K Kme3 K A T Q A S Q E Y
		B15	K134ac	T V G P K A P S G G K Kac K A T Q A S Q E Y
		B16	pS136	T V G P K A P S G G K K A pT Q A S Q E Y
		B17	pS139	T V G P K A P S G G K K A pS Q E Y
	6-25	B18	K127me/pS130	T V G P Kme A P pS G G K K A T Q A S Q E Y
		B19	K127me2/pS130	T V G P Kme2 A P pS G G K K A T Q A S Q E Y
		B20	K127me3/pS130	T V G P Kme3 A P pS G G K K A T Q A S Q E Y
		B21	K127ac/pS130	T V G P Kac A P pS G G K K A T Q A S Q E Y
		B22	pS130/K133me	T V G P K A P pS G G Kme K A T Q A S Q E Y
		B23	pS130/K133me2	T V G P K A P pS G G Kme2 K A T Q A S Q E Y
		B24	pS130/K133me3	T V G P K A P pS G G Kme3 K A T Q A S Q E Y
		B25	pS130/K133ac	T V G P K A P pS G G Kac K A T Q A S Q E Y
		B26	pS130/K134me	T V G P K A P pS G G K Kme K A T Q A S Q E Y
		B27	pS130/K134me2	T V G P K A P pS G G K Kme2 K A T Q A S Q E Y
		B28	pS130/K134me3	T V G P K A P pS G G K Kme3 K A T Q A S Q E Y
		B29	pS130/K134ac	T V G P K A P pS G G K Kac K A T Q A S Q E Y
		B30	K133me/pT136	T V G P K A P S G G K Kme K A pT Q A S Q E Y
		B31	K133me2/pT136	T V G P K A P S G G K Kme2 K A pT Q A S Q E Y
		B32	K133me3/pT136	T V G P K A P S G G K Kme3 K A pT Q A S Q E Y
		B33	K133ac/pT136	T V G P K A P S G G Kac K A pT Q A S Q E Y
		B34	K134me/pT136	T V G P K A P S G G K Kme K A pT Q A S Q E Y
		B35	K134me2/pT136	T V G P K A P S G G K Kme2 K A pT Q A S Q E Y
		B36	K134me3/pT136	T V G P K A P S G G K Kme3 K A pT Q A S Q E Y
		B37	K134ac/pT136	T V G P K A P S G G K Kac K A pT Q A S Q E Y
		C1	K133me/pS139	T V G P K A P S G G Kme K A T Q A pS Q E Y
		C2	K133me2/pS139	T V G P K A P S G G Kme2 K A T Q A pS Q E Y
		C3	K133me3/pS139	T V G P K A P S G G Kme3 K A T Q A pS Q E Y
		C4	K133ac/pS139	T V G P K A P S G G Kac K A T Q A pS Q E Y
		C5	K134me/pS139	T V G P K A P S G G K Kme K A T Q A pS Q E Y
		C6	K134me2/pS139	T V G P K A P S G G K Kme2 K A T Q A pS Q E Y
		C7	K134me3/pS139	T V G P K A P S G G K Kme3 K A T Q A pS Q E Y
		C8	K134ac/pS139	T V G P K A P S G G Kac K A T Q A pS Q E Y
		C9	K127me/K133me	T V G P Kme A P S G G Kme K A T Q A S Q E Y
		C10	K127me/K133me2	T V G P Kme A P S G G Kme2 K A T Q A S Q E Y
		C11	K127me/K133me3	T V G P Kme A P S G G Kme3 K A T Q A S Q E Y
		C12	K127me/K133ac	T V G P Kme A P S G G Kac K A T Q A S Q E Y
		C13	K127me2/K133me	T V G P Kme2 A P S G G Kme K A T Q A S Q E Y
		C14	K127me2/K133me2	T V G P Kme2 A P S G G Kme2 K A T Q A S Q E Y
		C15	K127me2/K133me3	T V G P Kme2 A P S G G Kme3 K A T Q A S Q E Y
		C16	K127me2/K133ac	T V G P Kme2 A P S G G Kac K A T Q A S Q E Y
		C17	K127me3/K133me	T V G P Kme3 A P S G G Kme K A T Q A S Q E Y
		C18	K127me3/K133me2	T V G P Kme3 A P S G G Kme2 K A T Q A S Q E Y
		C19	K127me3/K133me3	T V G P Kme3 A P S G G Kme3 K A T Q A S Q E Y
		C20	K127me3/K133ac	T V G P Kme3 A P S G G Kac K A T Q A S Q E Y
		C21	K127ac/K133me	T V G P Kac A P S G G Kme K A T Q A S Q E Y
		C22	K127ac/K133me2	T V G P Kac A P S G G Kme2 K A T Q A S Q E Y
		C23	K127ac/K133me3	T V G P Kac A P S G G Kme3 K A T Q A S Q E Y
		C24	K127ac/K133ac	T V G P Kac A P S G G Kac K A T Q A S Q E Y
		C25	K127me/K134me	T V G P Kme A P S G G K Kme K A T Q A S Q E Y
		C26	K127me/K134me2	T V G P Kme A P S G G K Kme2 K A T Q A S Q E Y
		C27	K127me/K134me3	T V G P Kme A P S G G K Kme3 K A T Q A S Q E Y



C28	K127me/K134ac	T	V	G	P	Kme	A	P	S	G	G	K	Kac	A	T	Q	A	S	Q	E	Y
C29	K127me2/K134me	T	V	G	P	Kme2	A	P	S	G	G	K	Kme	A	T	Q	A	S	Q	E	Y
C30	K127me2/K134me2	T	V	G	P	Kme2	A	P	S	G	G	K	Kme2	A	T	Q	A	S	Q	E	Y
C31	K127me2/K134me3	T	V	G	P	Kme2	A	P	S	G	G	K	Kme3	A	T	Q	A	S	Q	E	Y
C32	K127me2/K134ac	T	V	G	P	Kme2	A	P	S	G	G	K	Kac	A	T	Q	A	S	Q	E	Y
C33	K127me3/K134me	T	V	G	P	Kme3	A	P	S	G	G	K	Kme	A	T	Q	A	S	Q	E	Y
C34	K127me3/K134me2	T	V	G	P	Kme3	A	P	S	G	G	K	Kme2	A	T	Q	A	S	Q	E	Y
C35	K127me3/K134me3	T	V	G	P	Kme3	A	P	S	G	G	K	Kme3	A	T	Q	A	S	Q	E	Y
C36	K127me3/K134ac	T	V	G	P	Kme3	A	P	S	G	G	K	Kac	A	T	Q	A	S	Q	E	Y
C37	K127ac/K134me	T	V	G	P	Kac	A	P	S	G	G	K	Kme	A	T	Q	A	S	Q	E	Y
D1	K127ac/K134me2	T	V	G	P	Kac	A	P	S	G	G	K	Kme2	A	T	Q	A	S	Q	E	Y
D2	K127ac/K134me3	T	V	G	P	Kac	A	P	S	G	G	K	Kme3	A	T	Q	A	S	Q	E	Y
D3	K127ac/K134ac	T	V	G	P	Kac	A	P	S	G	G	K	Kac	A	T	Q	A	S	Q	E	Y
D4	K127ac/K133ac/K134ac	T	V	G	P	Kac	A	P	S	G	G	Kac	Kac	A	T	Q	A	S	Q	E	Y
D5	K127ac/K133ac/K134ac/pS139	T	V	G	P	Kac	A	P	S	G	G	Kac	Kac	A	T	Q	A	pS	Q	E	Y

Histone	Peptide Length	Array Position	Kac Mark Combinations	Sequence
polyHis CTRL		A1	HHHHHHHH	
polyHis CTRL		A2	HHHHHHHH	
		A3	Blank	
H2A.Z (P0C0S5)	1-20	A4	CONTROL	A G G K A G K D S G K A K T K A V S R S
		A5	K4me	A G G Kme A G K D S G K A K T K A V S R S
		A6	K4me2	A G G Kme2 A G K D S G K A K T K A V S R S
		A7	K4me3	A G G Kme3 A G K D S G K A K T K A V S R S
		A8	K4ac	A G G Kac A G K D S G K A K T K A V S R S
		A9	K7me	A G G K A G Kme D S G K A K T K A V S R S
		A10	K7me2	A G G K A G Kme2 D S G K A K T K A V S R S
		A11	K7me3	A G G K A G Kme3 D S G K A K T K A V S R S
		A12	K7ac	A G G K A G Kac D S G K A K T K A V S R S
		A13	pS9	A G G K A G K D pS G K A K T K A V S R S
		A14	K11me	A G G K A G K D S G Kme A K T K A V S R S
		A15	K11me2	A G G K A G K D S G Kme2 A K T K A V S R S
		A16	K11me3	A G G K A G K D S G Kme3 A K T K A V S R S
		A17	K11ac	A G G K A G K D S G Kac A K T K A V S R S
		A18	K13me	A G G K A G K D S G K A Kme T K A V S R S
		A19	K13me2	A G G K A G K D S G K A Kme2 T K A V S R S
		A20	K13me3	A G G K A G K D S G K A Kme3 T K A V S R S
		A21	K13ac	A G G K A G K D S G K A Kac T K A V S R S
		A22	K4me/K7me	A G G Kme A G Kme D S G K A K T K A V S R S
		A23	K4me/K7me2	A G G Kme A G Kme2 D S G K A K T K A V S R S
		A24	K4me/K7me3	A G G Kme A G Kme3 D S G K A K T K A V S R S
		A25	K4me/K7ac	A G G Kme A G Kac D S G K A K T K A V S R S
		A26	K4me2/K7me	A G G Kme2 A G Kme D S G K A K T K A V S R S
		A27	K4me2/K7me2	A G G Kme2 A G Kme2 D S G K A K T K A V S R S
		A28	K4me2/K7me3	A G G Kme2 A G Kme3 D S G K A K T K A V S R S
		A29	K4me2/K7ac	A G G Kme2 A G Kac D S G K A K T K A V S R S
		A30	K4me3/K7me	A G G Kme3 A G Kme D S G K A K T K A V S R S
		A31	K4me3/K7me2	A G G Kme3 A G Kme2 D S G K A K T K A V S R S
		A32	K4me3/K7me3	A G G Kme3 A G Kme3 D S G K A K T K A V S R S
		A33	K4me3/K7ac	A G G Kme3 A G Kac D S G K A K T K A V S R S
		A34	K4ac/K7me	A G G Kac A G Kme D S G K A K T K A V S R S
		A35	K4ac/K7me2	A G G Kac A G Kme2 D S G K A K T K A V S R S
		A36	K4ac/K7me3	A G G Kac A G Kme3 D S G K A K T K A V S R S
		A37	K4ac/K7ac	A G G Kac A G Kac D S G K A K T K A V S R S
		B1	K4me/pS9	A G G Kme A G K D pS G K A K T K A V S R S
		B2	K4me2/pS9	A G G Kme2 A G K D pS G K A K T K A V S R S
		B3	K4me3/pS9	A G G Kme3 A G K D pS G K A K T K A V S R S
		B4	K4ac/pS9	A G G Kac A G K D pS G K A K T K A V S R S
		B5	K7me/pS9	A G G K A G Kme D pS G K A K T K A V S R S
		B6	K7me2/pS9	A G G K A G Kme2 D pS G K A K T K A V S R S
		B7	K7me3/pS9	A G G K A G Kme3 D pS G K A K T K A V S R S
		B8	K7ac/pS9	A G G K A G Kac D pS G K A K T K A V S R S
		B9	pS9/K11me	A G G K A G K D pS G Kme A K T K A V S R S
		B10	pS9/K11me2	A G G K A G K D pS G Kme2 A K T K A V S R S
		B11	pS9/K11me3	A G G K A G K D pS G Kme3 A K T K A V S R S
		B12	pS9/K11ac	A G G K A G K D pS G Kac A K T K A V S R S
		B13	K7me/K11me	A G G K A G Kme D S G Kme A K T K A V S R S
		B14	K7me/K11me2	A G G K A G Kme D S G Kme2 A K T K A V S R S
		B15	K7me/K11me3	A G G K A G Kme D S G Kme3 A K T K A V S R S
		B16	K7me/K11ac	A G G K A G Kme D S G Kac A K T K A V S R S
		B17	K7me2/K11me	A G G K A G Kme2 D S G Kme A K T K A V S R S
		B18	K7me2/K11me2	A G G K A G Kme2 D S G Kme2 A K T K A V S R S
		B19	K7me2/K11me3	A G G K A G Kme2 D S G Kme3 A K T K A V S R S
		B20	K7me2/K11ac	A G G K A G Kme2 D S G Kac A K T K A V S R S
		B21	K7me3/K11me	A G G K A G Kme3 D S G Kme A K T K A V S R S
		B22	K7me3/K11me2	A G G K A G Kme3 D S G Kme2 A K T K A V S R S
		B23	K7me3/K11me3	A G G K A G Kme3 D S G Kme3 A K T K A V S R S
		B24	K7me3/K11ac	A G G K A G Kme3 D S G Kac A K T K A V S R S
		B25	K7ac/K11me	A G G K A G Kac D S G Kme A K T K A V S R S
		B26	K7ac/K11me2	A G G K A G Kac D S G Kme2 A K T K A V S R S
		B27	K7ac/K11me3	A G G K A G Kac D S G Kme3 A K T K A V S R S
		B28	K7ac/K11ac	A G G K A G Kac D S G Kac A K T K A V S R S
		B29	K7me/pS9/K11me	A G G K A G Kme D pS G Kme A K T K A V S R S
		B30	K7me/pS9/K11me2	A G G K A G Kme D pS G Kme2 A K T K A V S R S
		B31	K7me/pS9/K11me3	A G G K A G Kme D pS G Kme3 A K T K A V S R S
		B32	K7me/pS9/K11ac	A G G K A G Kme D pS G Kac A K T K A V S R S
		B33	K7me2/pS9/K11me	A G G K A G Kme2 D pS G Kme A K T K A V S R S
		B34	K7me2/pS9/K11me2	A G G K A G Kme2 D pS G Kme2 A K T K A V S R S
		B35	K7me2/pS9/K11me3	A G G K A G Kme2 D pS G Kme3 A K T K A V S R S
		B36	K7me2/pS9/K11ac	A G G K A G Kme2 D pS G Kac A K T K A V S R S
		B37	K7me3/pS9/K11me	A G G K A G Kme3 D pS G Kme A K T K A V S R S
		C1	K7me3/pS9/K11me2	A G G K A G Kme3 D pS G Kme2 A K T K A V S R S
		C2	K7me3/pS9/K11me3	A G G K A G Kme3 D pS G Kme3 A K T K A V S R S
		C3	K7me3/pS9/K11ac	A G G K A G Kme3 D pS G Kac A K T K A V S R S
		C4	K7ac/pS9/K11me	A G G K A G Kac D pS G Kme A K T K A V S R S
		C5	K7ac/pS9/K11me2	A G G K A G Kac D pS G Kme2 A K T K A V S R S
		C6	K7ac/pS9/K11me3	A G G K A G Kac D pS G Kme3 A K T K A V S R S
		C7	K7ac/pS9/K11ac	A G G K A G Kac D pS G Kac A K T K A V S R S
		C8	K11me/K13me	A G G K A G K D S G Kme A Kme T K A V S R S
		C9	K11me/K13me2	A G G K A G K D S G Kme A Kme2 T K A V S R S
		C10	K11me/K13me3	A G G K A G K D S G Kme A Kme3 T K A V S R S
		C11	K11me/K13ac	A G G K A G K D S G Kme A Kac T K A V S R S
		C12	K11me2/K13me	A G G K A G K D S G Kme2 A Kme T K A V S R S
		C13	K11me2/K13me2	A G G K A G K D S G Kme2 A Kme2 T K A V S R S
		C14	K11me2/K13me3	A G G K A G K D S G Kme2 A Kme3 T K A V S R S
		C15	K11me2/K13ac	A G G K A G K D S G Kme2 A Kac T K A V S R S
		C16	K11me3/K13me	A G G K A G K D S G Kme3 A Kme T K A V S R S
		C17	K11me3/K13me2	A G G K A G K D S G Kme3 A Kme2 T K A V S R S
		C18	K11me3/K13me3	A G G K A G K D S G Kme3 A Kme3 T K A V S R S
		C19	K11me3/K13ac	A G G K A G K D S G Kme3 A Kac T K A V S R S
		C20	K11ac/K13me	A G G K A G K D S G Kac A Kme T K A V S R S
		C21	K11ac/K13me2	A G G K A G K D S G Kac A Kme2 T K A V S R S
		C22	K11ac/K13me3	A G G K A G K D S G Kac A Kme3 T K A V S R S
		C23	K11ac/K13ac	A G G K A G K D S G Kac A Kac T K A V S R S
		C24	CONTROL	G K D S G K A K T K A V S R S Q R A G L
		C25	K11me	G K D S G Kme A K T K A V S R S Q R A G L
		C26	K11me2	G K D S G Kme2 A K T K A V S R S Q R A G L
		C27	K11me3	G K D S G Kme3 A K T K A V S R S Q R A G L
		C28	K11ac	G K D S G Kac A K T K A V S R S Q R A G L
		C29	K13me	G K D S G K A Kme T K A V S R S Q R A G L
		C30	K13me2	G K D S G K A Kme2 T K A V S R S Q R A G L
		C31	K13me3	G K D S G K A Kme3 T K A V S R S Q R A G L
		C32	K13ac	G K D S G K A Kac T K A V S R S Q R A G L

C33	K13ac	G	K	D	S	G	K	A	Kac	T	K	A	V	S	R	S	Q	R	A	G	L
C34	pT14	G	K	D	S	G	K	A	K	pT	K	A	V	S	R	S	Q	R	A	G	L
C35	K15me	G	K	D	S	G	K	A	K	T	Kme	A	V	S	R	S	Q	R	A	G	L
C36	K15me2	G	K	D	S	G	K	A	K	T	Kme2	A	V	S	R	S	Q	R	A	G	L
C37	K15me3	G	K	D	S	G	K	A	K	T	Kme3	A	V	S	R	S	Q	R	A	G	L
D1	K15ac	G	K	D	S	G	K	A	K	T	Kac	A	V	S	R	S	Q	R	A	G	L
D2	K11me/K13me	G	K	D	S	G	Kme	A	Kme	T	K	A	V	S	R	S	Q	R	A	G	L
D3	K11me/K13me2	G	K	D	S	G	Kme	A	Kme2	T	K	A	V	S	R	S	Q	R	A	G	L
D4	K11me/K13me3	G	K	D	S	G	Kme	A	Kme3	T	K	A	V	S	R	S	Q	R	A	G	L
D5	K11me/K13ac	G	K	D	S	G	Kme	A	Kac	T	K	A	V	S	R	S	Q	R	A	G	L
D6	K11me2/K13me	G	K	D	S	G	Kme2	A	Kme	T	K	A	V	S	R	S	Q	R	A	G	L
D7	K11me2/K13me2	G	K	D	S	G	Kme2	A	Kme2	T	K	A	V	S	R	S	Q	R	A	G	L
D8	K11me2/K13me3	G	K	D	S	G	Kme2	A	Kme3	T	K	A	V	S	R	S	Q	R	A	G	L
D9	K11me2/K13ac	G	K	D	S	G	Kme2	A	Kac	T	K	A	V	S	R	S	Q	R	A	G	L
D10	K11me3/K13me	G	K	D	S	G	Kme3	A	Kme	T	K	A	V	S	R	S	Q	R	A	G	L
D11	K11me3/K13me2	G	K	D	S	G	Kme3	A	Kme2	T	K	A	V	S	R	S	Q	R	A	G	L
D12	K11me3/K13me3	G	K	D	S	G	Kme3	A	Kme3	T	K	A	V	S	R	S	Q	R	A	G	L
D13	K11me3/K13ac	G	K	D	S	G	Kme3	A	Kac	T	K	A	V	S	R	S	Q	R	A	G	L
D14	K11ac/K13me	G	K	D	S	G	Kac	A	Kme	T	K	A	V	S	R	S	Q	R	A	G	L
D15	K11ac/K13me2	G	K	D	S	G	Kac	A	Kme2	T	K	A	V	S	R	S	Q	R	A	G	L
D16	K11ac/K13me3	G	K	D	S	G	Kac	A	Kme3	T	K	A	V	S	R	S	Q	R	A	G	L
D17	K11ac/K13ac	G	K	D	S	G	Kac	A	Kac	T	K	A	V	S	R	S	Q	R	A	G	L
D18	K11me/K15me	G	K	D	S	G	Kme	A	K	T	Kme	A	V	S	R	S	Q	R	A	G	L
D19	K11me/K15me2	G	K	D	S	G	Kme	A	K	T	Kme2	A	V	S	R	S	Q	R	A	G	L
D20	K11me/K15me3	G	K	D	S	G	Kme	A	K	T	Kme3	A	V	S	R	S	Q	R	A	G	L
D21	K11me/K15ac	G	K	D	S	G	Kme	A	K	T	Kac	A	V	S	R	S	Q	R	A	G	L
D22	K11me2/K15me	G	K	D	S	G	Kme2	A	K	T	Kme	A	V	S	R	S	Q	R	A	G	L
D23	K11me2/K15me2	G	K	D	S	G	Kme2	A	K	T	Kme2	A	V	S	R	S	Q	R	A	G	L
D24	K11me2/K15me3	G	K	D	S	G	Kme2	A	K	T	Kme3	A	V	S	R	S	Q	R	A	G	L
D25	K11me2/K15ac	G	K	D	S	G	Kme2	A	K	T	Kac	A	V	S	R	S	Q	R	A	G	L
D26	K11me3/K15me	G	K	D	S	G	Kme3	A	K	T	Kme	A	V	S	R	S	Q	R	A	G	L
D27	K11me3/K15me2	G	K	D	S	G	Kme3	A	K	T	Kme2	A	V	S	R	S	Q	R	A	G	L
D28	K11me3/K15me3	G	K	D	S	G	Kme3	A	K	T	Kme3	A	V	S	R	S	Q	R	A	G	L
D29	K11me3/K15ac	G	K	D	S	G	Kme3	A	K	T	Kac	A	V	S	R	S	Q	R	A	G	L
D30	K11ac/K15me	G	K	D	S	G	Kac	A	K	T	Kme	A	V	S	R	S	Q	R	A	G	L
D31	K11ac/K15me2	G	K	D	S	G	Kac	A	K	T	Kme2	A	V	S	R	S	Q	R	A	G	L
D32	K11ac/K15me3	G	K	D	S	G	Kac	A	K	T	Kme3	A	V	S	R	S	Q	R	A	G	L
D33	K11ac/K15ac	G	K	D	S	G	Kac	A	K	T	Kac	A	V	S	R	S	Q	R	A	G	L
D34	K11me/pT14	G	K	D	S	G	Kme	A	K	pT	K	A	V	S	R	S	Q	R	A	G	L
D35	K11me2/pT14	G	K	D	S	G	Kme2	A	K	pT	K	A	V	S	R	S	Q	R	A	G	L
D36	K11me3/pT14	G	K	D	S	G	Kme3	A	K	pT	K	A	V	S	R	S	Q	R	A	G	L
D37	K11ac/pT14	G	K	D	S	G	Kac	A	K	pT	K	A	V	S	R	S	Q	R	A	G	L
E1	K13me/pT14	G	K	D	S	G	K	A	Kme	pT	K	A	V	S	R	S	Q	R	A	G	L
E2	K13me2/pT14	G	K	D	S	G	K	A	Kme2	pT	K	A	V	S	R	S	Q	R	A	G	L
E3	K13me3/pT14	G	K	D	S	G	K	A	Kme3	pT	K	A	V	S	R	S	Q	R	A	G	L
E4	K13ac/pT14	G	K	D	S	G	K	A	Kac	pT	K	A	V	S	R	S	Q	R	A	G	L
E5	pT14/K15me	G	K	D	S	G	K	A	K	pT	Kme	A	V	S	R	S	Q	R	A	G	L
E6	pT14/K15me2	G	K	D	S	G	K	A	K	pT	Kme2	A	V	S	R	S	Q	R	A	G	L
E7	pT14/K15me3	G	K	D	S	G	K	A	K	pT	Kme3	A	V	S	R	S	Q	R	A	G	L
E8	pT14/K15ac	G	K	D	S	G	K	A	K	pT	Kac	A	V	S	R	S	Q	R	A	G	L
E9	K11me/K13me/pT14	G	K	D	S	G	Kme	A	Kme	pT	K	A	V	S	R	S	Q	R	A	G	L
E10	K11me/K13me2/pT14	G	K	D	S	G	Kme	A	Kme2	pT	K	A	V	S	R	S	Q	R	A	G	L
E11	K11me/K13me3/pT14	G	K	D	S	G	Kme	A	Kme3	pT	K	A	V	S	R	S	Q	R	A	G	L
E12	K11me/K13ac/pT14	G	K	D	S	G	Kme	A	Kac	pT	K	A	V	S	R	S	Q	R	A	G	L
E13	K11me2/K13me/pT14	G	K	D	S	G	Kme2	A	Kme	pT	K	A	V	S	R	S	Q	R	A	G	L
E14	K11me2/K13me2/pT14	G	K	D	S	G	Kme2	A	Kme2	pT	K	A	V	S	R	S	Q	R	A	G	L
E15	K11me2/K13me3/pT14	G	K	D	S	G	Kme2	A	Kme3	pT	K	A	V	S	R	S	Q	R	A	G	L
E16	K11me2/K13ac/pT14	G	K	D	S	G	Kme2	A	Kac	pT	K	A	V	S	R	S	Q	R	A	G	L
E17	K11me3/K13me/pT14	G	K	D	S	G	Kme3	A	Kme	pT	K	A	V	S	R	S	Q	R	A	G	L
E18	K11me3/K13me2/pT14	G	K	D	S	G	Kme3	A	Kme2	pT	K	A	V	S	R	S	Q	R	A	G	L
E19	K11me3/K13me3/pT14	G	K	D	S	G	Kme3	A	Kme3	pT	K	A	V	S	R	S	Q	R	A	G	L
E20	K11me3/K13ac/pT14	G	K	D	S	G	Kme3	A	Kac	pT	K	A	V	S	R	S	Q	R	A	G	L
E21	K11ac/K13me/pT14	G	K	D	S	G	Kac	A	Kme	pT	K	A	V	S	R	S	Q	R	A	G	L
E22	K11ac/K13me2/pT14	G	K	D	S	G	Kac	A	Kme2	pT	K	A	V	S	R	S	Q	R	A	G	L
E23	K11ac/K13me3/pT14	G	K	D	S	G	Kac	A	Kme3	pT	K	A	V	S	R	S	Q	R	A	G	L
E24	K11ac/K13ac/pT14	G	K	D	S	G	Kac	A	Kac	pT	K	A	V	S	R	S	Q	R	A	G	L
E25	K11me/pT14/K15me	G	K	D	S	G	Kme	A	K	pT	Kme	A	V	S	R	S	Q	R	A	G	L
E26	K11me/pT14/K15me2	G	K	D	S	G	Kme	A	K	pT	Kme2	A	V	S	R	S	Q	R	A	G	L
E27	K11me/pT14/K15me3	G	K	D	S	G	Kme	A	K	pT	Kme3	A	V	S	R	S	Q	R	A	G	L
E28	K11me/pT14/K15ac	G	K	D	S	G	Kme	A	K	pT	Kac	A	V	S	R	S	Q	R	A	G	L
E29	K11me2/pT14/K15me	G	K	D	S	G	Kme2	A	K	pT	Kme	A	V	S	R	S	Q	R	A	G	L
E30	K11me2/pT14/K15me2	G	K	D	S	G	Kme2	A	K	pT	Kme2	A	V	S	R	S	Q	R	A	G	L
E31	K11me2/pT14/K15me3	G	K	D	S	G	Kme2	A	K	pT	Kme3	A	V	S	R	S	Q	R	A	G	L
E32	K11me2/pT14/K15ac	G	K	D	S	G	Kme2	A	K	pT	Kac	A	V	S	R	S	Q	R	A	G	L
E33	K11me3/pT14/K15me	G	K	D	S	G	Kme3	A	K	pT	Kme	A	V	S	R	S	Q	R	A	G	L
E34	K11me3/pT14/K15me2	G	K	D	S	G	Kme3	A	K	pT	Kme2	A	V	S	R	S	Q	R	A	G	L
E35	K11me3/pT14/K15me3	G	K	D	S	G	Kme3	A	K	pT	Kme3	A	V	S	R	S	Q	R	A	G	L
E36	K11me3/pT14/K15ac	G	K	D	S	G	Kme3	A	K	pT	Kac	A	V	S	R	S	Q	R	A	G	L
E37	K11ac/pT14/K15me	G	K	D	S	G	Kac	A	K	pT	Kme	A	V	S	R	S	Q	R	A	G	L
F1	K11ac/pT14/K15me2	G	K	D	S	G	Kac	A	K	pT	Kme2	A	V	S	R	S	Q	R	A	G	L
F2	K11ac/pT14/K15me3	G	K	D	S	G	Kac	A	K	pT	Kme3	A	V	S	R	S	Q	R	A	G	L
F3	K11ac/pT14/K15ac	G	K	D	S	G	Kac	A	K	pT	Kac	A	V	S	R	S	Q	R	A	G	L
F4	K11ac/K13ac/K15ac	G	K	D	S	G	Kac	A	Kac	T	Kac	A	V	S	R	S	Q	R	A	G	L
F5	CONTROL	K	A	K	T	K	A	V	S	R	S	Q	R	A	G	L	Q	F	P	V	G
F7	K15me	K	A	K	T	Kme	A	V	S	R	S	Q	R	A	G	L	Q	F	P	V	G
F8	K15me2	K	A	K	T	Kme2	A	V	S	R	S	Q	R	A	G	L	Q	F	P	V	G
F9	K15me3	K	A	K	T	Kme3	A	V	S	R	S	Q	R	A	G	L	Q	F	P	V	G
F10	K15ac	K	A	K	T	Kac	A	V	S	R	S	Q	R	A	G	L	Q	F	P	V	G
F11	pS18	K	A	K	T	K	A	V	pS	R	S	Q	R	A	G	L	Q	F	P	V	G
F12	pS20	K	A	K	T	K	A	V	S	R	pS	Q	R	A	G	L	Q	F	P	V	G
F13	K15me/pS18	K	A	K	T	Kme	A	V	pS	R	S	Q	R	A	G	L	Q	F	P	V	G
F14	K15me2/pS18	K	A	K	T	Kme2	A	V	pS	R	S	Q	R	A	G	L	Q	F	P	V	G
F15	K15me3/pS18	K	A	K	T	Kme3	A	V	pS	R	S	Q	R	A	G	L	Q	F	P	V	G
F16	K15ac/pS18	K	A	K	T	Kac	A	V	pS	R	S	Q	R	A	G	L	Q	F	P	V	G
F17	K15me/pS20	K	A	K	T	Kme	A	V	S	R	pS	Q	R	A	G	L	Q	F	P	V	G
F18	K15me2/pS20	K	A	K	T	Kme															



F31	pS38	Q	F	P	V	G	R	I	H	R	H	L	K	pS	R	T	T	S	H	G	R
F32	K37me/pS38	Q	F	P	V	G	R	I	H	R	H	L	Kme	pS	R	T	T	S	H	G	R
F33	K37me2/pS38	Q	F	P	V	G	R	I	H	R	H	L	Kme2	pS	R	T	T	S	H	G	R
F34	K37me3/pS38	Q	F	P	V	G	R	I	H	R	H	L	Kme3	pS	R	T	T	S	H	G	R
F35	K37ac/pS38	Q	F	P	V	G	R	I	H	R	H	L	Kac	pS	R	T	T	S	H	G	R

Histone	Peptide Length	Array Position	Kac Mark Combinations	Sequence	
polyHis CTRL		A1	HHHHHHHH		
polyHis CTRL		A2	HHHHHHHH		
		A3	Blank		
H2B (Q6F13)	1-20	A4	CONTROL	P E P A K S A P A P K K G S K K A V T K	
		A5	K5me	P E P A Kme S A P A P K K G S K K A V T K	
		A6	K5me2	P E P A Kme2 S A P A P K K G S K K A V T K	
		A7	K5me3	P E P A Kme3 S A P A P K K G S K K A V T K	
		A8	K5ac	P E P A Kac S A P A P K K G S K K A V T K	
		A9	pS6	P E P A K pS S A P A P K K G S K K A V T K	
		A10	K11me	P E P A K S A P A P Kme K G S K K A V T K	
		A11	K11me2	P E P A K S A P A P Kme2 K G S K K A V T K	
		A12	K11me3	P E P A K S A P A P Kme3 K G S K K A V T K	
		A13	K11ac	P E P A K S A P A P Kac K G S K K A V T K	
		A14	K12me	P E P A K S A P A P K Kme G S K K A V T K	
		A15	K12me2	P E P A K S A P A P K Kme2 G S K K A V T K	
		A16	K12me3	P E P A K S A P A P K Kme3 G S K K A V T K	
		A17	K12ac	P E P A K S A P A P K Kac G S K K A V T K	
		A18	pS14	P E P A K S A P A P K K G pS K K A V T K	
		A19	K5me/pS6	P E P A Kme pS S A P A P K K G S K K A V T K	
		A20	K5me2/pS6	P E P A Kme2 pS S A P A P K K G S K K A V T K	
		A21	K5me3/pS6	P E P A Kme3 pS S A P A P K K G S K K A V T K	
		A22	K5ac/pS6	P E P A Kac pS S A P A P K K G S K K A V T K	
		A23	K5me/K11me	P E P A Kme S A P A P Kme K G S K K A V T K	
		A24	K5me/K11me2	P E P A Kme S A P A P Kme2 K G S K K A V T K	
		A25	K5me/K11me3	P E P A Kme S A P A P Kme3 K G S K K A V T K	
		A26	K5me/K11ac	P E P A Kme S A P A P Kac K G S K K A V T K	
		A27	K5me2/K11me	P E P A Kme2 S A P A P Kme K G S K K A V T K	
		A28	K5me2/K11me2	P E P A Kme2 S A P A P Kme2 K G S K K A V T K	
		A29	K5me2/K11me3	P E P A Kme2 S A P A P Kme3 K G S K K A V T K	
		A30	K5me2/K11ac	P E P A Kme2 S A P A P Kac K G S K K A V T K	
		A31	K5me3/K11me	P E P A Kme3 S A P A P Kme K G S K K A V T K	
		A32	K5me3/K11me2	P E P A Kme3 S A P A P Kme2 K G S K K A V T K	
		A33	K5me3/K11me3	P E P A Kme3 S A P A P Kme3 K G S K K A V T K	
		A34	K5me3/K11ac	P E P A Kme3 S A P A P Kac K G S K K A V T K	
		A35	K5ac/K11me	P E P A Kac S A P A P Kme K G S K K A V T K	
		A36	K5ac/K11me2	P E P A Kac S A P A P Kme2 K G S K K A V T K	
		A37	K5ac/K11me3	P E P A Kac S A P A P Kme3 K G S K K A V T K	
		B1	K5ac/K11ac	P E P A Kac S A P A P Kac K G S K K A V T K	
		B2	K5me/pS6/K11me	P E P A Kme pS S A P A P Kme K G S K K A V T K	
		B3	K5me/pS6/K11me2	P E P A Kme pS S A P A P Kme2 K G S K K A V T K	
		B4	K5me/pS6/K11me3	P E P A Kme pS S A P A P Kme3 K G S K K A V T K	
		B5	K5me/pS6/K11ac	P E P A Kme pS S A P A P Kac K G S K K A V T K	
		B6	K5me2/pS6/K11me	P E P A Kme2 pS S A P A P Kme K G S K K A V T K	
		B7	K5me2/pS6/K11me2	P E P A Kme2 pS S A P A P Kme2 K G S K K A V T K	
		B8	K5me2/pS6/K11me3	P E P A Kme2 pS S A P A P Kme3 K G S K K A V T K	
		B9	K5me2/pS6/K11ac	P E P A Kme2 pS S A P A P Kac K G S K K A V T K	
B10	K5me3/pS6/K11me	P E P A Kme3 pS S A P A P Kme K G S K K A V T K			
B11	K5me3/pS6/K11me2	P E P A Kme3 pS S A P A P Kme2 K G S K K A V T K			
B12	K5me3/pS6/K11me3	P E P A Kme3 pS S A P A P Kme3 K G S K K A V T K			
B13	K5me3/pS6/K11ac	P E P A Kme3 pS S A P A P Kac K G S K K A V T K			
B14	K5ac/pS6/K11me	P E P A Kac pS S A P A P Kme K G S K K A V T K			
B15	K5ac/pS6/K11me2	P E P A Kac pS S A P A P Kme2 K G S K K A V T K			
B16	K5ac/pS6/K11me3	P E P A Kac pS S A P A P Kme3 K G S K K A V T K			
B17	K5ac/pS6/K11ac	P E P A Kac pS S A P A P Kac K G S K K A V T K			
6-25	1-20	B18	K11me/K12me	P E P A K S A P A P Kme Kme G S K K A V T K	
		B19	K11me/K12me2	P E P A K S A P A P Kme Kme2 G S K K A V T K	
		B20	K11me/K12me3	P E P A K S A P A P Kme Kme3 G S K K A V T K	
		B21	K11me/K12ac	P E P A K S A P A P Kme Kac G S K K A V T K	
		B22	K11me2/K12me	P E P A K S A P A P Kme2 Kme G S K K A V T K	
		B23	K11me2/K12me2	P E P A K S A P A P Kme2 Kme2 G S K K A V T K	
		B24	K11me2/K12me3	P E P A K S A P A P Kme2 Kme3 G S K K A V T K	
		B25	K11me2/K12ac	P E P A K S A P A P Kme2 Kac G S K K A V T K	
		B26	K11me3/K12me	P E P A K S A P A P Kme3 Kme G S K K A V T K	
		B27	K11me3/K12me2	P E P A K S A P A P Kme3 Kme2 G S K K A V T K	
		B28	K11me3/K12me3	P E P A K S A P A P Kme3 Kme3 G S K K A V T K	
		B29	K11me3/K12ac	P E P A K S A P A P Kme3 Kac G S K K A V T K	
		B30	K11ac/K12me	P E P A K S A P A P Kac Kme G S K K A V T K	
		B31	K11ac/K12me2	P E P A K S A P A P Kac Kme2 G S K K A V T K	
		B32	K11ac/K12me3	P E P A K S A P A P Kac Kme3 G S K K A V T K	
		B33	K11ac/K12ac	P E P A K S A P A P Kac Kac G S K K A V T K	
		B34	K11me/K12me/pS14	P E P A K S A P A P Kme Kme G pS K K A V T K	
		B35	K11me/K12me2/pS14	P E P A K S A P A P Kme Kme2 G pS K K A V T K	
		B36	K11me/K12me3/pS14	P E P A K S A P A P Kme Kme3 G pS K K A V T K	
		B37	K11me/K12ac/pS14	P E P A K S A P A P Kme Kac G pS K K A V T K	
		C1	K11me2/K12me/pS14	P E P A K S A P A P Kme2 Kme G pS K K A V T K	
		C2	K11me2/K12me2/pS14	P E P A K S A P A P Kme2 Kme2 G pS K K A V T K	
		C3	K11me2/K12me3/pS14	P E P A K S A P A P Kme2 Kme3 G pS K K A V T K	
		C4	K11me2/K12ac/pS14	P E P A K S A P A P Kme2 Kac G pS K K A V T K	
		C5	K11me3/K12me/pS14	P E P A K S A P A P Kme3 Kme G pS K K A V T K	
		C6	K11me3/K12me2/pS14	P E P A K S A P A P Kme3 Kme2 G pS K K A V T K	
		C7	K11me3/K12me3/pS14	P E P A K S A P A P Kme3 Kme3 G pS K K A V T K	
		C8	K11me3/K12ac/pS14	P E P A K S A P A P Kme3 Kac G pS K K A V T K	
		C9	K11ac/K12me/pS14	P E P A K S A P A P Kac Kme G pS K K A V T K	
		C10	K11ac/K12me2/pS14	P E P A K S A P A P Kac Kme2 G pS K K A V T K	
		C11	K11ac/K12me3/pS14	P E P A K S A P A P Kac Kme3 G pS K K A V T K	
		C12	K11ac/K12ac/pS14	P E P A K S A P A P Kac Kac G pS K K A V T K	
		C13	blank		
		C14	CONTROL		S A P A P K K G S K K A V T K A Q K K D
		C15	K11me		S A P A P Kme K G S K K A V T K A Q K K D
		C16	K11me2		S A P A P Kme2 K G S K K A V T K A Q K K D
		C17	K11me3		S A P A P Kme3 K G S K K A V T K A Q K K D
C18	K11ac		S A P A P Kac K G S K K A V T K A Q K K D		
C19	K12me		S A P A P K Kme G S K K A V T K A Q K K D		
C20	K12me2		S A P A P K Kme2 G S K K A V T K A Q K K D		
C21	K12me3		S A P A P K Kme3 G S K K A V T K A Q K K D		
C22	K12ac		S A P A P K Kac G S K K A V T K A Q K K D		
C23	pS14		S A P A P K K G pS K K A V T K A Q K K D		
C24	K15me		S A P A P K K G S Kme K A V T K A Q K K D		
C25	K15me2		S A P A P K K G S Kme2 K A V T K A Q K K D		
C26	K15me3		S A P A P K K G S Kme3 K A V T K A Q K K D		
C27	K15ac		S A P A P K K G S Kac K A V T K A Q K K D		
C28	K16me		S A P A P K K G S K Kme A V T K A Q K K D		
C29	K16me2		S A P A P K K G S K Kme2 A V T K A Q K K D		
C30	K16me3		S A P A P K K G S K Kme3 A V T K A Q K K D		
C31	K16ac		S A P A P K K G S K Kac A V T K A Q K K D		
C32	pT19		S A P A P K K G S K K A V pT K A Q K K D		
C33	K11me/K12me		S A P A P Kme Kme G S K K A V T K A Q K K D		
C34	K11me/K12me2		S A P A P Kme Kme2 G S K K A V T K A Q K K D		
C35	K11me/K12me3		S A P A P Kme Kme3 G S K K A V T K A Q K K D		
C36	K11me/K12ac		S A P A P Kme Kac G S K K A V T K A Q K K D		
C37	K11me2/K12me		S A P A P Kme2 Kme G S K K A V T K A Q K K D		
D1	K11me2/K12me2		S A P A P Kme2 Kme2 G S K K A V T K A Q K K D		

M14	CONTROL	G	K	K	R	K	R	S	R	K	E	S	Y	S	V	Y	V	Y	K	V	L
M16	pS32	G	K	K	R	K	R	pS	R	K	E	S	Y	S	V	Y	V	Y	K	V	L
M17	K34me	G	K	K	R	K	R	S	R	Kme	E	S	Y	S	V	Y	V	Y	K	V	L
M18	K34me2	G	K	K	R	K	R	S	R	Kme2	E	S	Y	S	V	Y	V	Y	K	V	L
M19	K34me3	G	K	K	R	K	R	S	R	Kme3	E	S	Y	S	V	Y	V	Y	K	V	L
M20	K34ac	G	K	K	R	K	R	S	R	Kac	E	S	Y	S	V	Y	V	Y	K	V	L
M21	pS36	G	K	K	R	K	R	S	R	K	E	pS	Y	S	V	Y	V	Y	K	V	L
M22	pS38	G	K	K	R	K	R	S	R	K	E	S	Y	pS	V	Y	V	Y	K	V	L
M23	pS32/K34me	G	K	K	R	K	R	pS	R	Kme	E	S	Y	S	V	Y	V	Y	K	V	L
M24	pS32/K34me2	G	K	K	R	K	R	pS	R	Kme2	E	S	Y	S	V	Y	V	Y	K	V	L
M25	pS32/K34me3	G	K	K	R	K	R	pS	R	Kme3	E	S	Y	S	V	Y	V	Y	K	V	L
M26	pS32/K34ac	G	K	K	R	K	R	pS	R	Kac	E	S	Y	S	V	Y	V	Y	K	V	L
M27	K34me/pS36	G	K	K	R	K	R	S	R	Kme	E	pS	Y	S	V	Y	V	Y	K	V	L
M28	K34me2/pS36	G	K	K	R	K	R	S	R	Kme2	E	pS	Y	S	V	Y	V	Y	K	V	L
M29	K34me3/pS36	G	K	K	R	K	R	S	R	Kme3	E	pS	Y	S	V	Y	V	Y	K	V	L
M30	K34ac/pS36	G	K	K	R	K	R	S	R	Kac	E	pS	Y	S	V	Y	V	Y	K	V	L
M31	K34me/pS38	G	K	K	R	K	R	S	R	Kme	E	S	Y	pS	V	Y	V	Y	K	V	L
M32	K34me2/pS38	G	K	K	R	K	R	S	R	Kme2	E	S	Y	pS	V	Y	V	Y	K	V	L
M33	K34me3/pS38	G	K	K	R	K	R	S	R	Kme3	E	S	Y	pS	V	Y	V	Y	K	V	L
M34	K34ac/pS38	G	K	K	R	K	R	S	R	Kac	E	S	Y	pS	V	Y	V	Y	K	V	L

Histone	Peptide Length	Array Poition	Kac Mark Combinations	Sequence		
polyHis CTRL		A1	HHHHHHHHHH			
polyHis CTRL		A2	HHHHHHHHHH			
		A3	(blank)			
H3.1 (P68431)	1-20	A4	CONTROL	A R T K Q T A R K S T G G K A P R K Q L		
		A5	K4me	A R T Kme Q T A R K S T G G K A P R K Q L		
		A6	K4me2	A R T Kme2 Q T A R K S T G G K A P R K Q L		
		A7	K4me3	A R T Kme3 Q T A R K S T G G K A P R K Q L		
		A8	K4ac	A R T Kac Q T A R K S T G G K A P R K Q L		
		A9	pT3	A R pT K Q T A R K S T G G K A P R K Q L		
		A10	pT3/K4ac	A R pT Kme Q T A R K S T G G K A P R K Q L		
		A11	pT3/K4me	A R pT Kme2 Q T A R K S T G G K A P R K Q L		
		A12	pT3/K4me2	A R pT Kme3 Q T A R K S T G G K A P R K Q L		
		A13	pT3/K4me3	A R pT Kac Q T A R K S T G G K A P R K Q L		
		A14	pT6	A R T K Q pT A R K S T G G K A P R K Q L		
		A15	K4me/pT6	A R T Kme Q pT A R K S T G G K A P R K Q L		
		A16	K4me2/pT6	A R T Kme2 Q pT A R K S T G G K A P R K Q L		
		A17	K4me3/pT6	A R T Kme3 Q pT A R K S T G G K A P R K Q L		
		A18	K4ac/pT6	A R T Kac Q pT A R K S T G G K A P R K Q L		
		B1	K9me	A R T K Q T A R Kme S T G G K A P R K Q L		
		B2	K9me2	A R T K Q T A R Kme2 S T G G K A P R K Q L		
		B3	K9me3	A R T K Q T A R Kme3 S T G G K A P R K Q L		
		B4	K9ac	A R T K Q T A R Kac S T G G K A P R K Q L		
		B5	pT6/K9me	A R T K Q pT A R Kme S T G G K A P R K Q L		
		B6	pT6/K9me2	A R T K Q pT A R Kme2 S T G G K A P R K Q L		
		B7	pT6/K9me3	A R T K Q pT A R Kme3 S T G G K A P R K Q L		
		B8	pT6/K9ac	A R T K Q pT A R Kac S T G G K A P R K Q L		
		B9	pS10	A R T K Q T A R K pS T G G K A P R K Q L		
		B10	K9me/pS10	A R T K Q T A R Kme pS T G G K A P R K Q L		
		B11	K9me2/pS10	A R T K Q T A R Kme2 pS T G G K A P R K Q L		
		B12	K9me3/pS10	A R T K Q T A R Kme3 pS T G G K A P R K Q L		
		B13	K9ac/pS10	A R T K Q T A R Kac pS T G G K A P R K Q L		
		B14	pT11	A R T K Q T A R K S pT G G K A P R K Q L		
		B15	K9me/pT11	A R T K Q T A R Kme S pT G G K A P R K Q L		
		B16	K9me2/pT11	A R T K Q T A R Kme2 S pT G G K A P R K Q L		
		B17	K9me3/pT11	A R T K Q T A R Kme3 S pT G G K A P R K Q L		
		B18	K9ac/pT11	A R T K Q T A R Kac S pT G G K A P R K Q L		
		C1	K14me	A R T K Q T A R K S T G G Kme A P R K Q L		
		C2	K14me2	A R T K Q T A R K S T G G Kme2 A P R K Q L		
		C3	K14me3	A R T K Q T A R K S T G G Kme3 A P R K Q L		
		C4	K14ac	A R T K Q T A R K S T G G Kac A P R K Q L		
		C5	K9me/K14ac	A R T K Q T A R Kme Kac S T G G Kac A P R K Q L		
		C6	K9me2/K14ac	A R T K Q T A R Kme2 Kac S T G G Kac A P R K Q L		
		C7	K9me3/K14ac	A R T K Q T A R Kme3 Kac S T G G Kac A P R K Q L		
		C8	K9ac/K14ac	A R T K Q T A R Kac Kac S T G G Kac A P R K Q L		
		C9	pS10/K14ac	A R T K Q T A R K pS T G G Kac A P R K Q L		
		C10	pT11/K14ac	A R T K Q T A R K S pT G G Kac A P R K Q L		
		C11	K9ac/pS10/K14ac	A R T K Q T A R Kac pS T G G Kac A P R K Q L		
		C12	K9ac/pT11/K14ac	A R T K Q T A R Kac S pT G G Kac A P R K Q L		
		H3.1 (P68431)	6-25	C13	CONTROL	T A R K S T G G K A P R K Q L A T K A A
				C14	K14me	T A R K S T G G Kme A P R K Q L A T K A A
				C15	K14me2	T A R K S T G G Kme2 A P R K Q L A T K A A
C16	K14me3			T A R K S T G G Kme3 A P R K Q L A T K A A		
C17	K14ac			T A R K S T G G Kac A P R K Q L A T K A A		
C18	K9me/K14ac			T A R Kme S T G G Kac A P R K Q L A T K A A		
D1	K9me2/K14ac			T A R Kme2 S T G G Kac A P R K Q L A T K A A		
D2	K9me3/K14ac			T A R Kme3 S T G G Kac A P R K Q L A T K A A		
D3	K9ac/K14ac			T A R Kac S T G G Kac A P R K Q L A T K A A		
D4	pS10/K14ac			T A R K pS T G G K A P R K Q L A T K A A		
D5	pT11/K14ac			T A R K S pT G G K A P R K Q L A T K A A		
D6	K9ac/pS10/K14ac			T A R Kac pS T G G Kac A P R K Q L A T K A A		
D7	K9ac/pT11/K14ac			T A R Kac S pT G G Kac A P R K Q L A T K A A		
D8	K18me			T A R K S T G G K A P R Kme Q L A T K A A		
D9	K18me2			T A R K S T G G K A P R Kme2 Q L A T K A A		
D10	K18me3			T A R K S T G G K A P R Kme3 Q L A T K A A		
D11	K18ac			T A R K S T G G K A P R Kac Q L A T K A A		
D12	K14ac/K18me			T A R K S T G G Kac A P R Kme Q L A T K A A		
D13	K14ac/K18me2			T A R K S T G G Kac A P R Kme2 Q L A T K A A		
D14	K14ac/K18me3			T A R K S T G G Kac A P R Kme3 Q L A T K A A		
D15	K14ac/K18ac			T A R K S T G G Kac A P R Kac Q L A T K A A		
D16	pS10/K14ac/K18me			T A R K pS T G G Kac A P R Kme Q L A T K A A		
D17	pS10/K14ac/K18me2			T A R K pS T G G Kac A P R Kme2 Q L A T K A A		
D18	pS10/K14ac/K18me3	T A R K pS T G G Kac A P R Kme3 Q L A T K A A				
E1	pS10/K14ac/K18ac	T A R K pS T G G Kac A P R Kac Q L A T K A A				
E2	pT11/K14ac/K18me	T A R K S pT G G Kac A P R Kme Q L A T K A A				
E3	pT11/K14ac/K18me2	T A R K S pT G G Kac A P R Kme2 Q L A T K A A				
E4	pT11/K14ac/K18me3	T A R K S pT G G Kac A P R Kme3 Q L A T K A A				
E5	pT11/K14ac/K18ac	T A R K S pT G G Kac A P R Kac Q L A T K A A				
H3.1 (P68431)	11-30	E6	CONTROL	T G G K A P R K Q L A T K A A R K S A P		
		E7	K18me	T G G K A P R Kme Q L A T K A A R K S A P		
		E8	K18me2	T G G K A P R Kme2 Q L A T K A A R K S A P		
		E9	K18me3	T G G K A P R Kme3 Q L A T K A A R K S A P		
		E10	K18ac	T G G K A P R Kac Q L A T K A A R K S A P		
		E11	K14ac/K18me	T G G Kac A P R Kme Q L A T K A A R K S A P		
		E12	K14ac/K18me2	T G G Kac A P R Kme2 Q L A T K A A R K S A P		
		E13	K14ac/K18me3	T G G Kac A P R Kme3 Q L A T K A A R K S A P		
		E14	K14ac/K18ac	T G G Kac A P R Kac Q L A T K A A R K S A P		
		E15	pT22	T G G K A P R K Q L A T K A A R K S A P		
		E16	pT22/K18me	T G G K A P R Kme Q L A T K A A R K S A P		
		E17	pT22/K18me2	T G G K A P R Kme2 Q L A T K A A R K S A P		
		E18	pT22/K18me3	T G G K A P R Kme3 Q L A T K A A R K S A P		
		F1	pT22/K18ac	T G G K A P R Kac Q L A T K A A R K S A P		
		F2	K23me	T G G K A P R K Q L A T Kme A A R K S A P		
		F3	K23me2	T G G K A P R K Q L A T Kme2 A A R K S A P		
		F4	K23me3	T G G K A P R K Q L A T Kme3 A A R K S A P		
		F5	K23ac	T G G K A P R K Q L A T Kac A A R K S A P		
F6	pT22/K23me	T G G K A P R K Q L A T Kme pT A A R K S A P				

Histone	Peptide Length	Array Poition	Kac Mark Combinations	Sequence
polyHis CTRL		A1	HHHHHHHH	
polyHis CTRL		A2	HHHHHHHH	
		A3	Blank	
H4 (P62805)	1-20	A4	CONTROL	S G R G K G G K G L G K G G A K R H R K
		A5	pS1	pS G R G K G G K G L G K G G A K R H R K
		A6	K5me	S G R G X1 G G K G L G K G G A K R H R K
		A7	K5me2	S G R G X2 G G K G L G K G G A K R H R K
		A8	K5me3	S G R G X3 G G K G L G K G G A K R H R K
		A9	K5ac	S G R G X4 G G K G L G K G G A K R H R K
		A10	K8me	S G R G K G G X1 G L G K G G A K R H R K
		A11	K8me2	S G R G K G G X2 G L G K G G A K R H R K
		A12	K8me3	S G R G K G G X3 G L G K G G A K R H R K
		A13	K8ac	S G R G K G G X4 G L G K G G A K R H R K
		A14	K12me	S G R G K G G K G L G X1 G G A K R H R K
		A15	K12me2	S G R G K G G K G L G X2 G G A K R H R K
		A16	K12me3	S G R G K G G K G L G X3 G G A K R H R K
		A17	K12ac	S G R G K G G K G L G X4 G G A K R H R K
		A18	pS1/K5me	pS G R G X1 G G K G L G K G G A K R H R K
		A19	pS1/K5me2	pS G R G X2 G G K G L G K G G A K R H R K
		A20	pS1/K5me3	pS G R G X3 G G K G L G K G G A K R H R K
		A21	pS1/K5ac	pS G R G X4 G G K G L G K G G A K R H R K
		A22	pS1/K8me	pS G R G K G G X1 G L G K G G A K R H R K
		A23	pS1/K8me2	pS G R G K G G X2 G L G K G G A K R H R K
		A24	pS1/K8me3	pS G R G K G G X3 G L G K G G A K R H R K
		A25	pS1/K8ac	pS G R G K G G X4 G L G K G G A K R H R K
		A26	K5me/K8me	S G R G X1 G G X1 G L G K G G A K R H R K
		A27	K5me/K8me2	S G R G X1 G G X2 G L G K G G A K R H R K
		A28	K5me/K8me3	S G R G X1 G G X3 G L G K G G A K R H R K
		A29	K5me/K8ac	S G R G X1 G G X4 G L G K G G A K R H R K
		A30	K5me2/K8me	S G R G X2 G G X1 G L G K G G A K R H R K
		A31	K5me2/K8me2	S G R G X2 G G X2 G L G K G G A K R H R K
		A32	K5me2/K8me3	S G R G X2 G G X3 G L G K G G A K R H R K
		A33	K5me2/K8ac	S G R G X2 G G X4 G L G K G G A K R H R K
		A34	K5me3/K8me	S G R G X3 G G X1 G L G K G G A K R H R K
		A35	K5me3/K8me2	S G R G X3 G G X2 G L G K G G A K R H R K
		A36	K5me3/K8me3	S G R G X3 G G X3 G L G K G G A K R H R K
		A37	K5me3/K8ac	S G R G X3 G G X4 G L G K G G A K R H R K
		B1	K5ac/K8me	S G R G X4 G G X1 G L G K G G A K R H R K
		B2	K5ac/K8me2	S G R G X4 G G X2 G L G K G G A K R H R K
		B3	K5ac/K8me3	S G R G X4 G G X3 G L G K G G A K R H R K
		B4	K5ac/K8ac	S G R G X4 G G X4 G L G K G G A K R H R K
		B5	K8me/K12me	S G R G K G G X1 G L G X1 G G A K R H R K
		B6	K8me/K12me2	S G R G K G G X1 G L G X2 G G A K R H R K
		B7	K8me/K12me3	S G R G K G G X1 G L G X3 G G A K R H R K
		B8	K8me/K12ac	S G R G K G G X1 G L G X4 G G A K R H R K
		B9	K8me2/K12me	S G R G K G G X2 G L G X1 G G A K R H R K
		B10	K8me2/K12me2	S G R G K G G X2 G L G X2 G G A K R H R K
		B11	K8me2/K12me3	S G R G K G G X2 G L G X3 G G A K R H R K
		B12	K8me2/K12ac	S G R G K G G X2 G L G X4 G G A K R H R K
		B13	K8me3/K12me	S G R G K G G X3 G L G X1 G G A K R H R K
		B14	K8me3/K12me2	S G R G K G G X3 G L G X2 G G A K R H R K
		B15	K8me3/K12me3	S G R G K G G X3 G L G X3 G G A K R H R K
		B16	K8me3/K12ac	S G R G K G G X3 G L G X4 G G A K R H R K
		B17	K8ac/K12me	S G R G K G G X4 G L G X1 G G A K R H R K
		B18	K8ac/K12me2	S G R G K G G X4 G L G X2 G G A K R H R K
		B19	K8ac/K12me3	S G R G K G G X4 G L G X3 G G A K R H R K
		B20	K8ac/K12ac	S G R G K G G X4 G L G X4 G G A K R H R K
		B21	pS1/K5me/K8me	pS G R G X1 G G X1 G L G K G G A K R H R K
		B22	pS1/K5me/K8me2	pS G R G X1 G G X2 G L G K G G A K R H R K
		B23	pS1/K5me/K8me3	pS G R G X1 G G X3 G L G K G G A K R H R K
		B24	pS1/K5me/K8ac	pS G R G X1 G G X4 G L G K G G A K R H R K
		B25	pS1/K5me2/K8me	pS G R G X2 G G X1 G L G K G G A K R H R K
		B26	pS1/K5me2/K8me2	pS G R G X2 G G X2 G L G K G G A K R H R K
		B27	pS1/K5me2/K8me3	pS G R G X2 G G X3 G L G K G G A K R H R K
		B28	pS1/K5me2/K8ac	pS G R G X2 G G X4 G L G K G G A K R H R K
		B29	pS1/K5me3/K8me	pS G R G X3 G G X1 G L G K G G A K R H R K
		B30	pS1/K5me3/K8me2	pS G R G X3 G G X2 G L G K G G A K R H R K
		B31	pS1/K5me3/K8me3	pS G R G X3 G G X3 G L G K G G A K R H R K
		B32	pS1/K5me3/K8ac	pS G R G X3 G G X4 G L G K G G A K R H R K
		B33	pS1/K5ac/K8me	pS G R G X4 G G X1 G L G K G G A K R H R K
		B34	pS1/K5ac/K8me2	pS G R G X4 G G X2 G L G K G G A K R H R K
		B35	pS1/K5ac/K8me3	pS G R G X4 G G X3 G L G K G G A K R H R K
		B36	pS1/K5ac/K8ac	pS G R G X4 G G X4 G L G K G G A K R H R K
		B37	K5ac/K8ac/K12ac	S G R G X4 G G X4 G L G X4 G G A K R H R K
		C1	CONTROL	G G K G L G K G G A K R H R K V L R D N
		C2	K12me	G G K G L G X1 G G A K R H R K V L R D N
		C3	K12me2	G G K G L G X2 G G A K R H R K V L R D N
		C4	K12me3	G G K G L G X3 G G A K R H R K V L R D N
		C5	K12ac	G G K G L G X4 G G A K R H R K V L R D N
		C6	K16me	G G K G L G K G G A X1 R H R K V L R D N
		C7	K16me2	G G K G L G K G G A X2 R H R K V L R D N
		C8	K16me3	G G K G L G K G G A X3 R H R K V L R D N
		C9	K16ac	G G K G L G K G G A X4 R H R K V L R D N
		C10	K20me	G G K G L G K G G A K R H R X1 V L R D N
		C11	K20me2	G G K G L G K G G A K R H R X2 V L R D N
		C12	K20me3	G G K G L G K G G A K R H R X3 V L R D N
		C13	K20ac	G G K G L G K G G A K R H R X4 V L R D N
		C14	K12me/K16me	G G K G L G X1 G G A X1 R H R K V L R D N
		C15	K12me/K16me2	G G K G L G X1 G G A X2 R H R K V L R D N
		C16	K12me/K16me3	G G K G L G X1 G G A X3 R H R K V L R D N
		C17	K12me/K16ac	G G K G L G X1 G G A X4 R H R K V L R D N
		C18	K12me2/K16me	G G K G L G X2 G G A X1 R H R K V L R D N
		C19	K12me2/K16me2	G G K G L G X2 G G A X2 R H R K V L R D N
		C20	K12me2/K16me3	G G K G L G X2 G G A X3 R H R K V L R D N
		C21	K12me2/K16ac	G G K G L G X2 G G A X4 R H R K V L R D N
		C22	K12me3/K16me	G G K G L G X3 G G A X1 R H R K V L R D N
		C23	K12me3/K16me2	G G K G L G X3 G G A X2 R H R K V L R D N
		C24	K12me3/K16me3	G G K G L G X3 G G A X3 R H R K V L R D N

C26	K12me3/K16ac	G G K G L G X3 G G A X4 R H R K V L R D N
C27	K12ac/K16me	G G K G L G X4 G G A X1 R H R K V L R D N
C28	K12ac/K16me2	G G K G L G X4 G G A X2 R H R K V L R D N
C29	K12ac/K16me3	G G K G L G X4 G G A X3 R H R K V L R D N
C30	K12ac/K16ac	G G K G L G X4 G G A X4 R H R K V L R D N
C31	K16me/K20me	G G K G L G K G G A X1 R H R X1 V L R D N
C32	K16me/K20me2	G G K G L G K G G A X1 R H R X2 V L R D N
C33	K16me/K20me3	G G K G L G K G G A X1 R H R X3 V L R D N
C34	K16me/K20ac	G G K G L G K G G A X1 R H R X4 V L R D N
C35	K16me2/K20me	G G K G L G K G G A X2 R H R X1 V L R D N
C36	K16me2/K20me2	G G K G L G K G G A X2 R H R X2 V L R D N
C37	K16me2/K20me3	G G K G L G K G G A X2 R H R X3 V L R D N
D1	K16me2/K20ac	G G K G L G K G G A X2 R H R X4 V L R D N
D2	K16me3/K20me	G G K G L G K G G A X3 R H R X1 V L R D N
D3	K16me3/K20me2	G G K G L G K G G A X3 R H R X2 V L R D N
D4	K16me3/K20me3	G G K G L G K G G A X3 R H R X3 V L R D N
D5	K16me3/K20ac	G G K G L G K G G A X3 R H R X4 V L R D N
D6	K16ac/K20me	G G K G L G K G G A X4 R H R X1 V L R D N
D7	K16ac/K20me2	G G K G L G K G G A X4 R H R X2 V L R D N
D8	K16ac/K20me3	G G K G L G K G G A X4 R H R X3 V L R D N
D9	K16ac/K20ac	G G K G L G K G G A X4 R H R X4 V L R D N
D10	K12ac/K16ac/K20ac	G G K G L G X4 G G A X4 R H R X4 V L R D N
D11		
D12	CONTROL	G K G G A K R H R K V L R D N I Q G I T
D13	K16me	G K G G A X1 R H R K V L R D N I Q G I T
D14	K16me2	G K G G A X2 R H R K V L R D N I Q G I T
D15	K16me3	G K G G A X3 R H R K V L R D N I Q G I T
D16	K16ac	G K G G A X4 R H R K V L R D N I Q G I T
D17	K20me	G K G G A K R H R X1 V L R D N I Q G I T
D18	K20me2	G K G G A K R H R X2 V L R D N I Q G I T
D19	K20me3	G K G G A K R H R X3 V L R D N I Q G I T
D20	K20ac	G K G G A K R H R X4 V L R D N I Q G I T
D21	K16me/K20me	G K G G A X1 R H R X1 V L R D N I Q G I T
D22	K16me/K20me2	G K G G A X1 R H R X2 V L R D N I Q G I T
D23	K16me/K20me3	G K G G A X1 R H R X3 V L R D N I Q G I T
D24	K16me/K20ac	G K G G A X1 R H R X4 V L R D N I Q G I T
D25	K16me2/K20me	G K G G A X2 R H R X1 V L R D N I Q G I T
D26	K16me2/K20me2	G K G G A X2 R H R X2 V L R D N I Q G I T
D27	K16me2/K20me3	G K G G A X2 R H R X3 V L R D N I Q G I T
D28	K16me2/K20ac	G K G G A X2 R H R X4 V L R D N I Q G I T
D29	K16me3/K20me	G K G G A X3 R H R X1 V L R D N I Q G I T
D30	K16me3/K20me2	G K G G A X3 R H R X2 V L R D N I Q G I T
D31	K16me3/K20me3	G K G G A X3 R H R X3 V L R D N I Q G I T
D32	K16me3/K20ac	G K G G A X3 R H R X4 V L R D N I Q G I T
D33	K16ac/K20me	G K G G A X4 R H R X1 V L R D N I Q G I T
D34	K16ac/K20me2	G K G G A X4 R H R X2 V L R D N I Q G I T
D35	K16ac/K20me3	G K G G A X4 R H R X3 V L R D N I Q G I T
D36	K16ac/K20ac	G K G G A X4 R H R X4 V L R D N I Q G I T
D37		
E1	CONTROL	K R H R K V L R D N I Q G I T K P A O R
E2	K20me	K R H R X1 V L R D N I Q G I T K P A O R
E3	K20me2	K R H R X2 V L R D N I Q G I T K P A O R
E4	K20me3	K R H R X3 V L R D N I Q G I T K P A O R
E5	K20ac	K R H R X4 V L R D N I Q G I T K P A O R
E6		
E7	CONTROL	V L R D N I Q G I T K P A O R E L A R R
E8	pT30	V L R D N I Q G I T pT K P A O R E L A R R
E9	K31me	V L R D N I Q G I T X1 P A O R E L A R R
E10	K31me2	V L R D N I Q G I T X2 P A O R E L A R R
E11	K31me3	V L R D N I Q G I T X3 P A O R E L A R R
E12	K31ac	V L R D N I Q G I T X4 P A O R E L A R R
E13	pT30/K31me	V L R D N I Q G I T pT X1 P A O R E L A R R
E14	pT30/K31me2	V L R D N I Q G I T pT X2 P A O R E L A R R
E15	pT30/K31me3	V L R D N I Q G I T pT X3 P A O R E L A R R
E16	pT30/K31ac	V L R D N I Q G I T pT X4 P A O R E L A R R

