

Table S5. The differential histone H2A PTMs sites list in MCF-7 cells under estradiol stimulation

Protein IDs	Protein name	Sequence	Sequence begin	Acetyl sites	Methyl sites	Dimethyl sites	Trimethyl sites	Phospho sites	Ratio (E2+\E2-)	RSD (%)
P0C0S8	H2A1	NDEELNKLLGKVTIAQGGVLPNIQA VLLPKKTESHHKAKGK	90	126	100	128			0.59	\
P04908	H2A1B	NDEELNKLLGRVTIAQGGVLPNIQA VLLPKKTESHHKAKGK	90	126	130	100			0.36	9.8
P04908	H2A1B	NDEELNKLLGRVTIAQGGVLPNIQA VLLPKKTESHHKAKGK	90			100			0.42	34.3
P04908	H2A1B	NDEELNKLLGRVTIAQGGVLPNIQA VLLPKKTESHHKAKGK	90	128	130	100			0.49	33.3
Q8IU6	H2A2B	NDEELNKLLGGVTIAQGGVLPNIQA VLLPKKTESHKPGKNK	90	128	130				0.27	7.0
Q16777	H2A2C	AKAKSR	13		18				1.65	3.9
Q16777	H2A2C	NDEELNKLLGKVTIAQGGVLPNIQA VLLPKKTESHKAKSK	90	119	120			128	2.31	\
Q7L7L0	H2A3	VTIAQGGVLPNIQAVLLPKKTESHH KAKGK	101	119	126				0.58	\
Q9BTM1	H2AJ	NDEELNKLLGKVTIAQGGVLPNIQA VLLPKKTESQKTKSK	90	125			120		0.52	\
Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	12					4.09	4.3
Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	5	12				4.14	1.1
Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	14					4.15	3.0

Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	5			4.18	7.8
Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	8			4.23	32.4
Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	8 12			4.25	4.4
Q71UI9	H2AV	AGGKAGKDSGKAKAKAVSR	2	5 8			4.39	3.6
Q71UI9	H2AV	GDEELDSLKATIAGGGVIPHIHKS LI GKKGQQKTA	93			102	0.27	\
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	5 8 12			1.75	2.6
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	8 12 14			1.76	\
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	5	12		1.79	39.2
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	12			2.12	3.2
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	5 12			2.32	24.9
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	5 8			2.34	17.9
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	5			2.37	30.5
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	8			2.42	31.8
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	8 12			2.50	20.8
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	8 12	5	16	4.94	4.4
P0C0S5	H2AZ	AGGKAGKDSGKAKTKAVSR	2	5		12	5.15	\
P0C0S5	H2AZ	GDEELDSLKATIAGGGVIPHIHKS LI GKKGQQKTV	93	116 121		102	0.27	\

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