

Product datasheet for TA347207

H2AW Rabbit Polyclonal Antibody

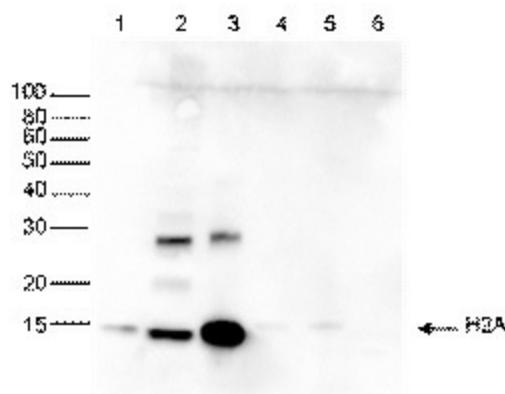
Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	ChIP (1-2 µg/ChIP); ELISA (1:100-1:1,000); Western blotting (1:2,000)
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-H2A pan antibody: histone H2A using 2 KLH-conjugated synthetic peptides containing a sequence from the central and the C-terminal part of the protein.
Concentration:	lot specific
Purification:	Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	histone cluster 3, H2a
Database Link:	NP_254280 Entrez Gene 92815 Human Q7L7L0
Background:	Histones are the main constituents of the protein part of chromosomes of eukaryotic cells. They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histones play a central role in the regulation of transcription, DNA repair, DNA replication and chromosomal stability. These different functions are established via a complex set of post-translational modifications which either directly or indirectly alter chromatin structure and DNA accessibility to facilitate transcriptional activation or repression or other nuclear processes.
Synonyms:	MGC3165

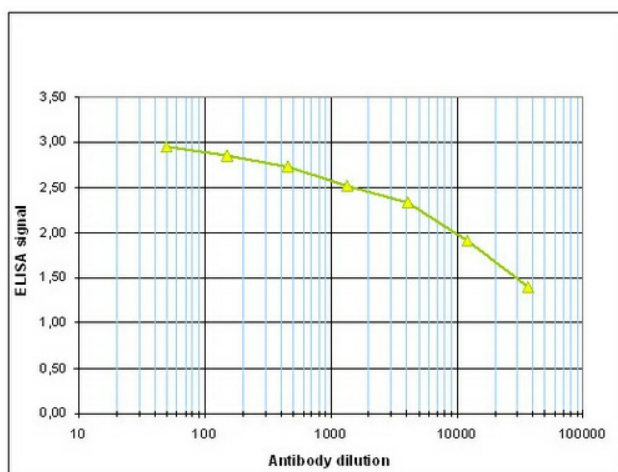

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Protein Pathways: Systemic lupus erythematosus

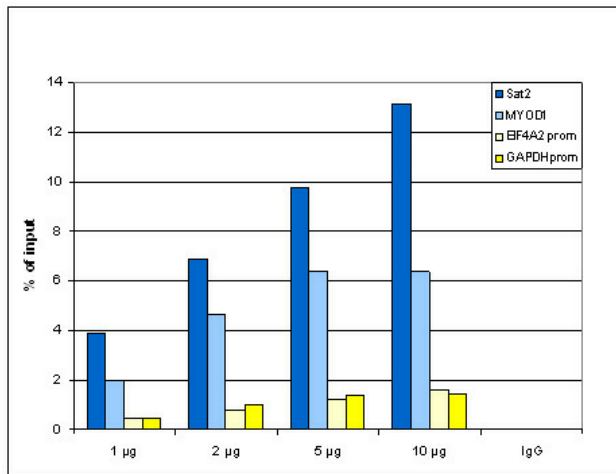
Product images:



WB was performed on whole cell (25 ug, lane 1) and histone extracts (15 ug, lane 2) from HeLa cells, and on 1 ug of recombinant histone H2A, H2B, H3 and H4 (lane 3, 4, 5 and 6, respectively) using the antibody against H2Apan. The antibody was diluted 1:2,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.



Determination of the titer To determine the titer of the antibody, an ELISA was performed using a serial dilution of the antibody against H2Apan in antigen coated wells. By plotting the absorbance against the antibody dilution (Figure 2), the titer of the antibody was estimated to be 1:32, 500.



ChIP assays using HeLa cells (sheared chromatin from 1 million cells). A titration of the antibody consisting of 1, 2, 5, and 10 µg per ChIP experiment was analysed. IgG (5 µg/IP) was used as negative control. qPCR primers were for the GAPDH and EIF4A2 promoters as negative controls and for the inactive MYOD1 gene and the Sat2 satellite repeats as positive controls. Image shows the recovery, expressed as a % of input (the relative amount of IP'd DNA compared to input DNA after qPCR).