



# HDAC5 (phospho Ser498) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01246
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	HDAC5
<b>Protein Name</b>	Histone deacetylase 5
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human HDAC5 around the phosphorylation site of Ser498. AA range:464-513
<b>Specificity</b>	Phospho-HDAC5 (S498) Polyclonal Antibody detects endogenous levels of HDAC5 protein only when phosphorylated at S498.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	HDAC5; KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9
<b>Observed Band</b>	122kD
<b>Cell Pathway</b>	Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. In muscle cells, it shuttles into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-259 and Ser-498 by AMPK, CaMK1 and SIK1.
<b>Tissue Specificity</b>	Ubiquitous.
<b>Function</b>	catalytic activity:Hydrolysis of an N(6)-acetyl-lysine residue of a histone to yield a deacetylated histone.,domain:The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.,function:Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Involved in muscle maturation by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors.,PTM:Phosphorylated by CaMK at Ser-259 and Ser-498. The



phosphorylation is required for the export to the cytoplasm.,PTM:

**Background**

Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to the class II histone deacetylase/acuc/apha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. It coimmunoprecipitates only with HDAC3 family member and might form multicomplex proteins. It also interacts with myocyte enhancer factor-2 (MEF2) proteins, resulting in repression of MEF2-dependent genes. This gene is thought to be associated with colon cancer. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

**matters needing attention**

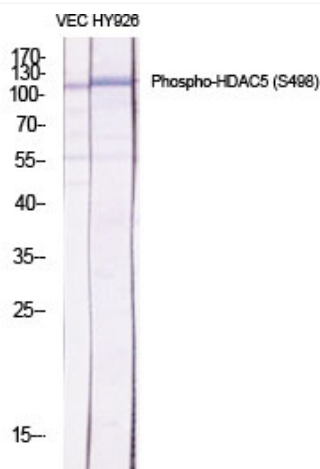
Avoid repeated freezing and thawing!

**Usage suggestions**

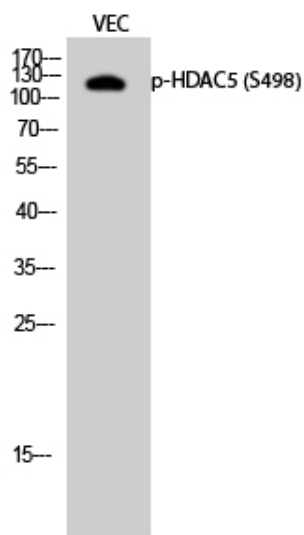
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



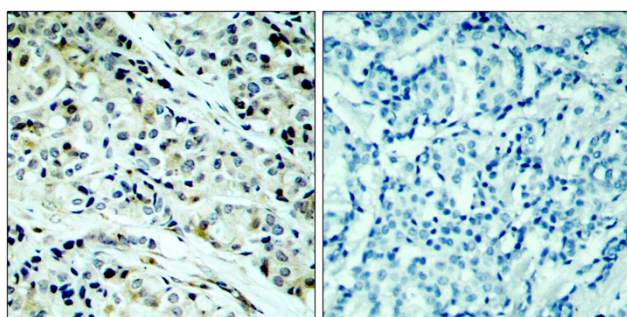
## Products Images



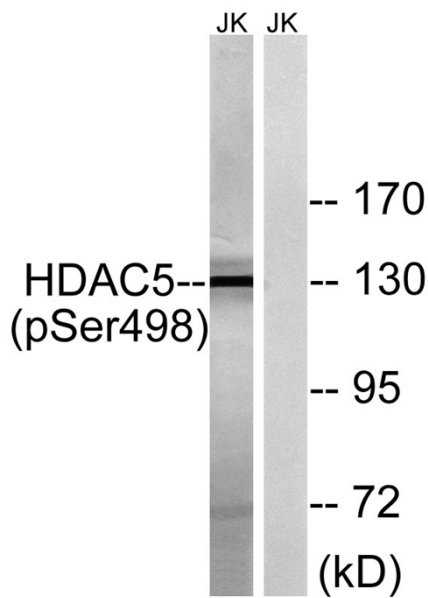
Western Blot analysis of various cells using Phospho-HDAC5 (S498) Polyclonal Antibody diluted at 1:500



Western Blot analysis of VEC cells using Phospho-HDAC5 (S498) Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using HDAC5 (Phospho-Ser498) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells, using HDAC5 (Phospho-Ser498) Antibody. The lane on the right is blocked with the phospho peptide.