



HDAC5 Polyclonal Antibody

Catalog No	BYab-01764
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	HDAC5
Protein Name	Histone deacetylase 5
Immunogen	The antiserum was produced against synthesized peptide derived from human HDAC5. AA range:464-513
Specificity	HDAC5 Polyclonal Antibody detects endogenous levels of HDAC5 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	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.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HDAC5; KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9
Observed Band	122kD
Cell Pathway	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.
Tissue Specificity	Ubiquitous.
Function	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

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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

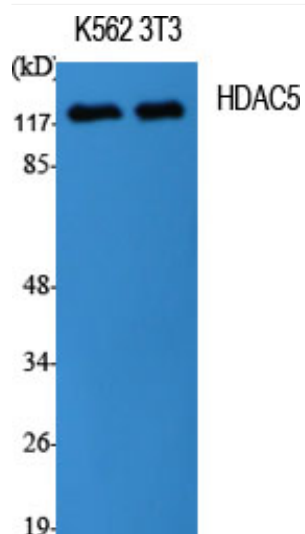
Avoid repeated freezing and thawing!

Usage suggestions

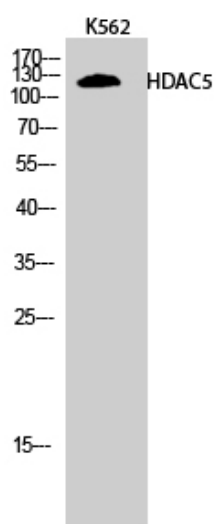
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



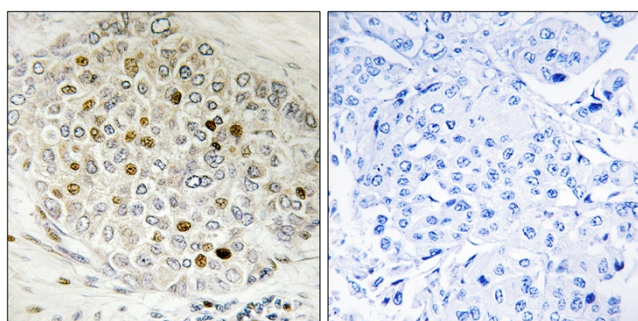
Products Images



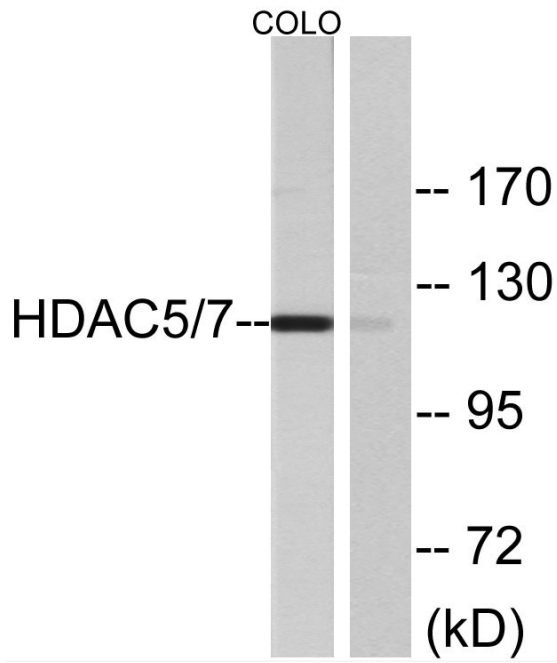
Western Blot analysis of various cells using HDAC5 Polyclonal Antibody



Western Blot analysis of K562 cells using HDAC5 Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using HDAC5 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from colo cells, using HDAC5 Antibody. The lane on the right is blocked with the synthesized peptide.