

HDAC5/9 Polyclonal Antibody

Catalog No :	YT2117
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;ELISA
Target :	HDAC5/9
Fields :	>>Apelin signaling pathway;>>Neutrophil extracellular trap formation;>>Alcoholism;>>Viral carcinogenesis;>>MicroRNAs in cancer
Gene Name :	HDAC5/HDAC9
Protein Name :	Histone deacetylase 5/9
Human Gene Id :	10014/9734
Human Swiss Prot No :	Q9UQL6/Q9UKV0
Mouse Gene Id :	79221
Immunogen :	The antiserum was produced against synthesized peptide derived from human HDAC5. AA range:225-274
Specificity :	HDAC5/9 Polyclonal Antibody detects endogenous levels of HDAC5/9 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 121kD

Cell Pathway : Protein_Acetylation

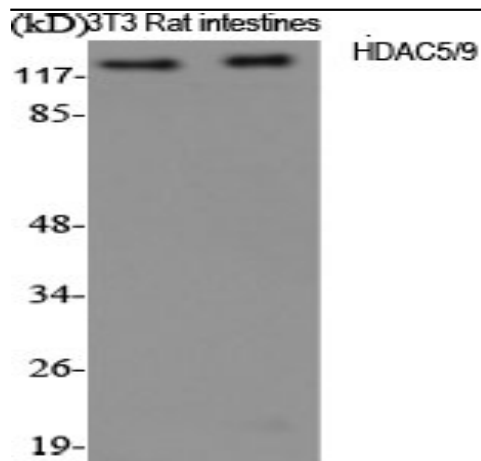
Background : Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to the class II histone deacetylase/acuc/apha 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],

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 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:

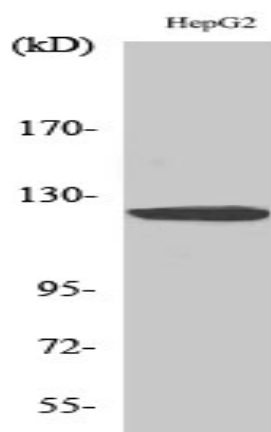
Subcellular Location : Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. In muscle cells, it shuttles into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-259 and Ser-498 by AMPK, CaMK1 and SIK1.

Expression : Ubiquitous.

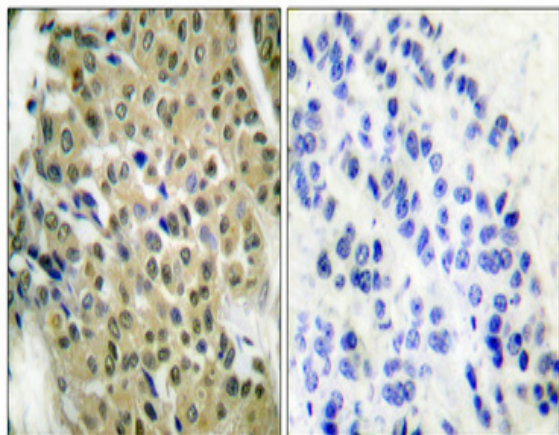
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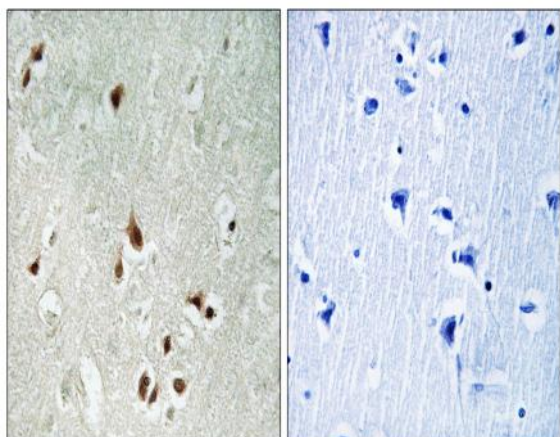
Western Blot analysis of various cells using HDAC5/9 Polyclonal Antibody diluted at 1:1000



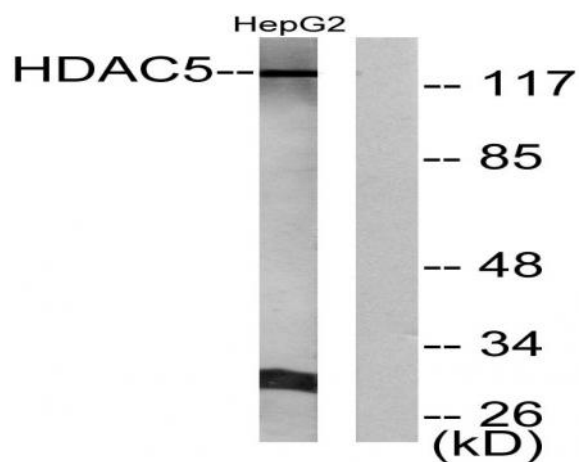
Western Blot analysis of HepG2 cells using HDAC5/9 Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



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



Western blot analysis of lysates from HepG2 cells, using HDAC5 Antibody. The lane on the right is blocked with the synthesized peptide.