Product Name: NY-CO-9 Rabbit Polyclonal Antibody
Catalog #: APRab15004

Summary

Production Name	NY-CO-9 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	HDAC5
Alternative Names	HDAC5; KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9
Gene ID	10014.0
SwissProt ID	Q9UQL6.The antiserum was produced against synthesized peptide derived from human HDAC5. AA range:1073-1122

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	121kD

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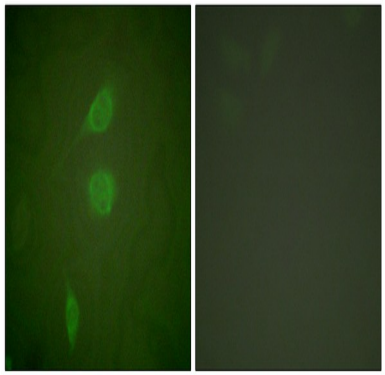
Background

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],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:Ubiquitinated. Polyubiquitination however does not lead to its degradation.,similarity:Belongs to the histone deacetylase family. Type 2 subfamily.,subcellular location: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 CaMK.,subunit:Interacts with AHRR (By similarity). Interacts with BCOR, HDAC7, HDAC9, CTBP1, MEF2C, NCOR2, NRIP1, PHB2 and a 14-3-3 chaperone protein. Interacts with KDM5B.,tissue specificity:Ubiquitous.,

Research Area

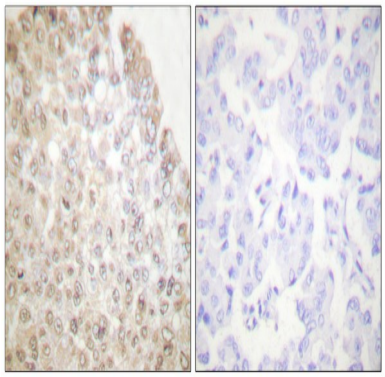
Protein_Acetylation

Image Data

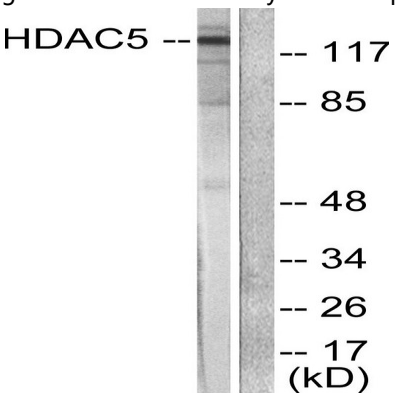


Immunofluorescence analysis of NIH/3T3 cells, using HDAC5 Antibody. The picture on the right is blocked with the

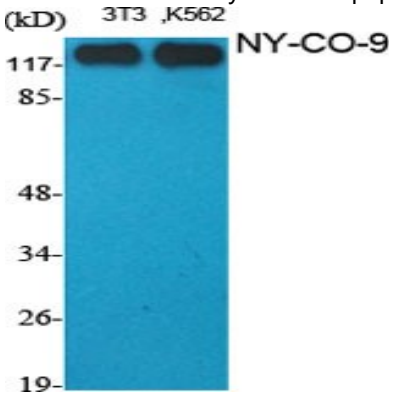
synthesized peptide.



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 HepG2 cells, treated with PMA 125ng/ml 30 ', using HDAC5 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using NY-CO-9 Polyclonal Antibody

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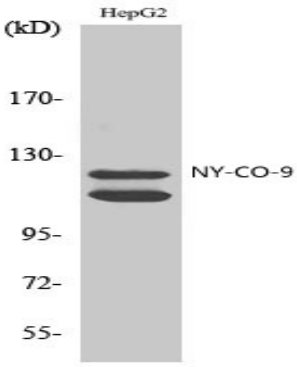
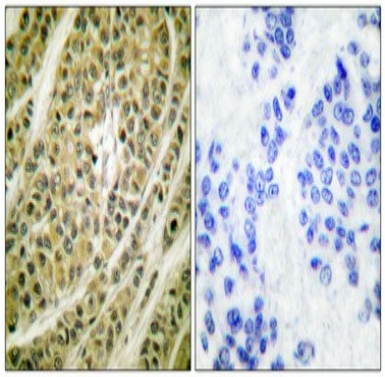


Western Blot analysis of HepG2 cells using NY-CO-9 Polyclonal Antibody



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. Negetive contrl （right） obtaned from antibody was pre-absorbed by immunogen peptide.

Note

For research use only.