

Rabbit anti-Human, Mouse HDAC5 Polyclonal Antibody | anti-HDAC5 antibody

HDAC5 Antibody

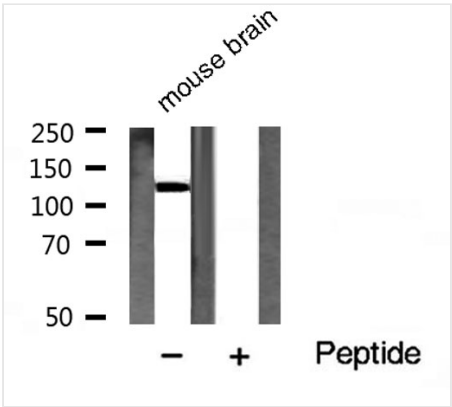
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31097	Rabbit	Human, Mouse	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

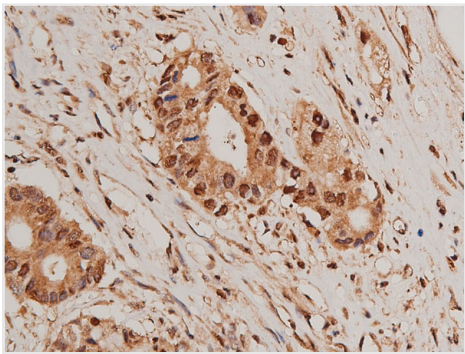
HDAC5; Polyclonal Antibody; HDAC5 Antibody; Antigen NY CO 9; Antigen NY-CO-9; HD5; HDAC 5; HDAC5_HUMAN; Histone deacetylase 5; NY CO 9; HD 7; HD 7B; HD 9; HD7; HD7B; HD9; HDAC 7; HDAC 7B; HDAC 9; HDAC 9B; HDAC 9FL; HDAC; HDAC7; HDAC7B; HDAC9; HDAC9_HUMAN; HDAC9B; HDAC9FL; HDRP; Histone deacetylase 4/5 related protein; Histone deacetylase 7; Histone deacetylase 7B; Histone deacetylase 9; Histone deacetylase 9A; Histone deacetylase related protein; Histone deacetylase-related protein; KIAA0744; MEF2 interacting transcription repressor MITR; MEF2 interacting transcription repressor protein; MEF2-interacting transcription repressor MITR; MITR; anti-HDAC5 antibody

PRODUCT SPECIFICATIONS

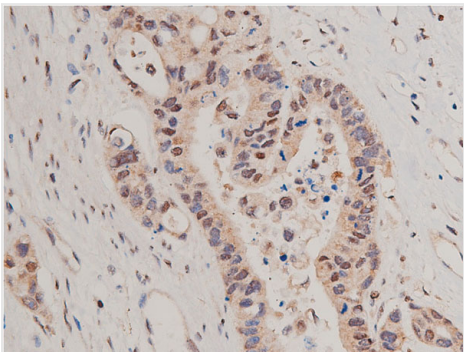
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	HDAC5 antibody detects endogenous levels of total HDAC5
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1123
Applicable Applications for anti-HDAC5 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200 IF/ICC: 1:100-1:500
Immunogen	A synthesized peptide derived from human HDAC5
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 CaMK.
Tissue Specificity	Ubiquitous.
Predicted Cross Reactivity	Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



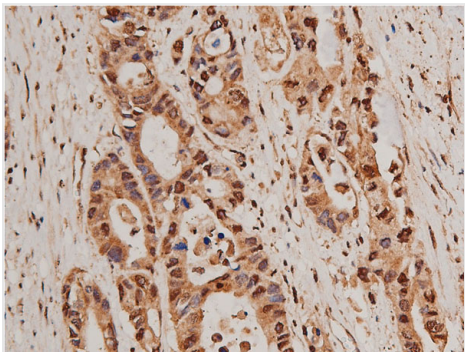
WB (Western Blot)
Western blot analysis of HDAC5 expression in mouse brain tissue lysates, The lane on the right is treated with the antigen-specific peptide.



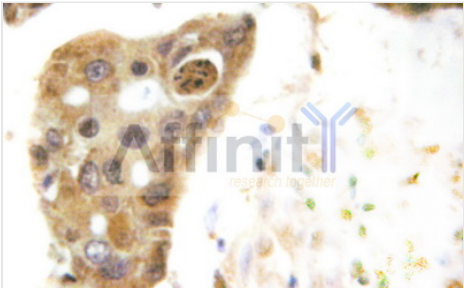
IHC (Immunohistochemistry)
AAA31097 at 1/50 staining human colon cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



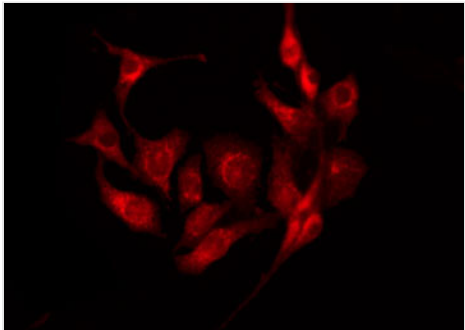
IHC (Immunohistochemistry)
AAA31097 at 1/200 staining human colon cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IHC (Immunohistochemistry)
AAA31097 at 1/50 staining human colon cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IHC (Immunohistochemistry)
AAA31097 at 1/100 staining human breast carcinoma tissues sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 ho



IF (Immunofluorescence)
AAA31097 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-HDAC5 antibody	Description: HDAC9 a transcriptional regulator of the histone deacetylase family, subfamily 2. Deacetylates lysine residues on the N-terminal part of the core histones H2A, H2B, H3 AND H4. 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. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer. Subunit Structure: Interacts with AHRR, BAHD1, BCOR, HDAC7, HDAC9, CTBP1, MEF2C, NCOR2, NRIP1, PHB2 and a 14-3-3 chaperone protein. Interacts with BCL6, DDIT3/CHOP, GRK5, KDM5B and MYOCD. Interacts with EP300 in the presence of TFAP2C. Interacts with ANKRA2. Interacts with CUL7 (as part of the 3M complex); negatively regulated by ANKRA2. Interacts with ZBTB7B; the interaction allows the recruitment of HDAC4 on CD8 loci for deacetylation and possible inhibition of CD8 genes expression (By similarity). Post-translational Modifications: Phosphorylated by AMPK, CaMK1, SIK1 and PRKD1 at Ser-259 and Ser-498. The phosphorylation is required for the export to the cytoplasm and inhibition. Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import. Phosphorylated by GRK5, leading to nuclear export of HDAC5 and allowing MEF2-mediated transcription (By similarity). Ubiquitinated. Polyubiquitination however does not lead to its degradation. Similarity: The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm. Belongs to the histone deacetylase family. HD type 2 subfamily.
---	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	62750349
NCBI GeneID	10014
NCBI Accession #	NP_001015053.1
NCBI GenBank Nucleotide #	NM_001015053.1
UniProt Accession #	Q9UQL6; O60340; O60528; Q96DY4; C9JFV9
Molecular Weight	Observed: 124 kDa Predicted: 122 kDa
NCBI Official Full Name	histone deacetylase 5 isoform 3
NCBI Official Synonym Full Names	histone deacetylase 5
NCBI Official Symbol	HDAC5
NCBI Official Synonym Symbols	HD5; NY-CO-9
NCBI Protein Information	histone deacetylase 5
UniProt Protein Name	Histone deacetylase 5
UniProt Gene Name	HDAC5
UniProt Synonym Gene Names	KIAA0600; HD5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.