

Immunotag™ HDAC5/9 (phospho Ser259/220) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0299
Product Description	Immunotag™ HDAC5/9 (phospho Ser259/220) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	HDAC5/9 (Ser259/220)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human HDAC5 around the phosphorylation site of Ser259. AA range:225-274
Specificity	Phospho-HDAC5/9 (S259/220) Polyclonal Antibody detects endogenous levels of HDAC5/9 protein only when phosphorylated at S259/220.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	HDAC5/HDAC9
Accession No.	Q9UQL6/Q9UKV0
Alternate Names	HDAC5; KIAA0600; Histone deacetylase 5; HD5; Antigen NY-CO-9; HDAC9; HDAC7; HDAC7B; HDRP; KIAA0744; MITR; Histone deacetylase 9; HD9; Histone deacetylase 7B; HD7; HD7b; Histone deacetylase-related protein; MEF2-interacting transcription rep

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Description	histone deacetylase 5(HDAC5) Homo sapiens 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],
Cell Pathway/ Category	Protein_Acetylation
Protein Expression	Brain,Colon carcinoma,Eye,Ovary,Testis,
Subcellular Localization	histone deacetylase complex,nucleus,nucleoplasm,cytoplasm,Golgi apparatus,protein complex,
Protein 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: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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.