10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HDAC5 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10450

Specification

HDAC5 Antibody - Product Information

Application	**WB, IHC, IP**
Primary Accession	Q9UQL6
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**121978**

HDAC5 Antibody - Additional Information

Gene ID 10014

Application & Usage

Western blotting (0.5-4 µg/ml), Immunoprecipitation (20 µg/ml), and Immunohistochemistry (20 µg/ml). However, the optimal conditions should be determined individually. The antibody detects ~124 kDa HDAC5 with human and mouse samples, and in a lesser extent with rat samples. It does not cross-react with other HDAC proteins including HDAC1, 2, 3, 4, 6, 7, 8, 9,10, and 11.

Other Names
HD5 , FLJ90614 , KIAA0600 , NY-CO-9

Target/Specificity
HDAC5

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.5 mg/ml) affinity purified rabbit anti-HDAC5 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
HDAC5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HDAC5 Antibody - Protein Information

Name HDAC5

Synonyms KIAA0600

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. Serves as a corepressor of RARA and causes its deacetylation (PubMed:28167758). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:28167758).

Cellular Location
Nucleus. Cytoplasm. Note=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 Location
Ubiquitous.

HDAC5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HDAC5 Antibody - Images

HDAC5 Antibody - Background

Human HDAC5 is composed of 1122 amino acid residues. The deacetylase domain of HDAC5 is located at the C-terminal half of the molecule. The N-terminal non-deacetylase domain does not

show any significant homology with any published sequence. Both domains are required for HDAC5-mediated repression of gene transcription. HDAC5 interacts with a growing number of transcriptional factors including MEF2A as well as other HDAC proteins. The interacting complexes bind to specific regions of chromatin and regulate gene transcription in these regions.