

**Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody**  
**Catalog # ABO13701****Specification****Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC, IP, FC
Primary Accession	<a href="#">Q9BY41</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 55869

**Other Names**

Histone deacetylase 8, HD8, 3.5.1.98, Protein deacetylase HDAC8, 3.5.1.-, Protein decrotonylase HDAC8, 3.5.1.-, HDAC8 {ECO:0000303|PubMed:10926844, ECO:0000312|HGNC:HGNC:13315}

**Calculated MW**

41758 MW KDa

**Application Details**

WB 1:5000-1:20000<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Subcellular Localization**

Nucleus. Cytoplasm. Excluded from the nucleoli. Found in the cytoplasm of cells showing smooth muscle differentiation.

**Tissue Specificity**

Weakly expressed in most tissues. Expressed at higher level in heart, brain, kidney and pancreas and also in liver, lung, placenta, prostate and kidney..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human HDAC8

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term**

**storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## **Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody - Protein Information**

**Name** HDAC8 {ECO:0000303|PubMed:10926844, ECO:0000312|HGNC:HGNC:13315}

### **Function**

Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed:<a href="http://www.uniprot.org/citations/10748112" target="\_blank">10748112</a>, PubMed:<a href="http://www.uniprot.org/citations/10922473" target="\_blank">10922473</a>, PubMed:<a href="http://www.uniprot.org/citations/10926844" target="\_blank">10926844</a>, PubMed:<a href="http://www.uniprot.org/citations/14701748" target="\_blank">14701748</a>, PubMed:<a href="http://www.uniprot.org/citations/28497810" target="\_blank">28497810</a>). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (PubMed:<a href="http://www.uniprot.org/citations/10748112" target="\_blank">10748112</a>, PubMed:<a href="http://www.uniprot.org/citations/10922473" target="\_blank">10922473</a>, PubMed:<a href="http://www.uniprot.org/citations/10926844" target="\_blank">10926844</a>, PubMed:<a href="http://www.uniprot.org/citations/14701748" target="\_blank">14701748</a>). Histone deacetylases act via the formation of large multiprotein complexes (PubMed:<a href="http://www.uniprot.org/citations/10748112" target="\_blank">10748112</a>, PubMed:<a href="http://www.uniprot.org/citations/10922473" target="\_blank">10922473</a>, PubMed:<a href="http://www.uniprot.org/citations/10926844" target="\_blank">10926844</a>, PubMed:<a href="http://www.uniprot.org/citations/14701748" target="\_blank">14701748</a>). Also involved in the deacetylation of cohesin complex protein SMC3 regulating release of cohesin complexes from chromatin (PubMed:<a href="http://www.uniprot.org/citations/22885700" target="\_blank">22885700</a>). May play a role in smooth muscle cell contractility (PubMed:<a href="http://www.uniprot.org/citations/15772115" target="\_blank">15772115</a>). In addition to protein deacetylase activity, also has protein-lysine deacylase activity: acts as a protein decrotonylase by mediating decrotonylation ((2E)-butenoyl) of histones (PubMed:<a href="http://www.uniprot.org/citations/28497810" target="\_blank">28497810</a>).

### **Cellular Location**

Nucleus. Chromosome Cytoplasm Note=Excluded from the nucleoli (PubMed:10748112). Found in the cytoplasm of cells showing smooth muscle differentiation (PubMed:15772115, PubMed:16538051).

### **Tissue Location**

Weakly expressed in most tissues. Expressed at higher level in heart, brain, kidney and pancreas and also in liver, lung, placenta, prostate and kidney.

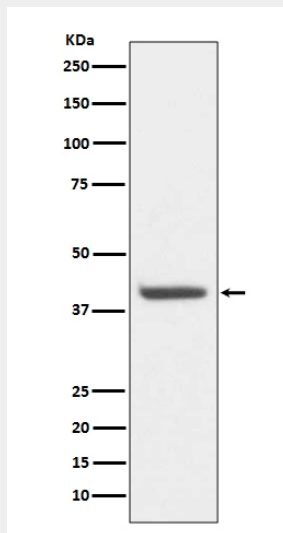
## **Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

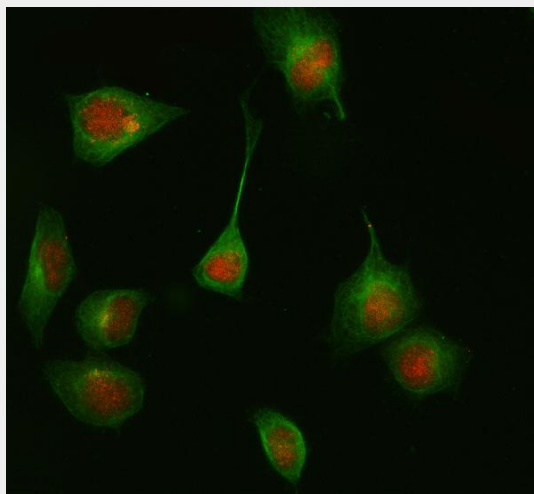
### Anti-HDAC8/Histone Deacetylase 8 Rabbit Monoclonal Antibody - Images



Western blot analysis of HDAC8 expression in HeLa cell lysate (M01843-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HDAC8 monoclonal antibody (Catalog # M01843-1) overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for HDAC8



IF analysis of HDAC8 using anti-HDAC8 antibody (M01843-1) and anti-Beta Tubulin antibody (M01857-3).

HDAC8 was detected in immunocytochemical section of HELA cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated at 1:50 with rabbit anti-HDAC8 Antibody (M01843-1) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. Cy3 Conjugated

Goat Anti-Rabbit IgG (BA1032) and DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.