

## Product datasheet

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# ARG59174 anti-HDAC9 antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes HDAC9

Tested Reactivity Hu

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name HDAC9

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 503-533 of Human HDAC9.

Conjugation Un-conjugated

Alternate Names HD7; MEF2-interacting transcription repressor MITR; Histone deacetylase-related protein; HDAC9B;

Histone deacetylase 9; HDAC7; HDRP; HDAC9FL; MITR; HDAC7B; HD9; HD7b; EC 3.5.1.98; HDAC;

Histone deacetylase 7B

#### **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:50 - 1:100
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS and 0.09% (W/V) Sodium azide.

Preservative 0.09% (W/V) Sodium azide.

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol HDAC9

Gene Full Name histone deacetylase 9

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 has sequence homology to members of the histone deacetylase family. This gene is orthologous to the Xenopus and mouse MITR genes. The MITR protein lacks the histone deacetylase catalytic domain. It represses MEF2 activity through recruitment of multicomponent corepressor complexes that include CtBP and HDACs. This encoded protein may play a role in hematopoiesis. Multiple alternatively spliced transcripts have been described for this gene but the full-length nature of some of them has not been determined. [provided by RefSeq, Jul 2008]

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. Represses

MEF2-dependent transcription.

Isoform 3 lacks active site residues and therefore is catalytically inactive. Represses MEF2-dependent transcription by recruiting HDAC1 and/or HDAC3. Seems to inhibit skeletal myogenesis and to be involved in heart development. Protects neurons from apoptosis, both by inhibiting JUN phosphorylation by MAPK10 and by repressing JUN transcription via HDAC1 recruitment to JUN

promoter. [UniProt]

Calculated Mw 111 kDa

PTM Phosphorylated on Ser-220 and Ser-450; which promotes 14-3-3-binding, impairs interaction with

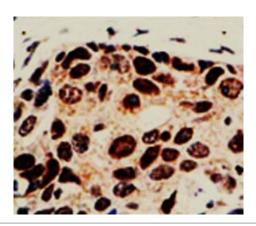
MEF2, and antagonizes antimyogenic activity. Phosphorylated on Ser-240; which impairs nuclear accumulation (By similarity). Isoform 7 is phosphorylated on Tyr-1010. Phosphorylated by the PKC

kinases PKN1 and PKN2, impairing nuclear import.

Sumoylated. [UniProt]

Cellular Localization Nucleus. [UniProt]

### **Images**



#### ARG59174 anti-HDAC9 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human breast carcinoma stained with ARG59174 anti-HDAC9 antibody.