ARG41801
anti-HDAC7 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HDAC7
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HDAC7
Species	Human
Immunogen	Synthetic peptide of Human HDAC7.
Conjugation	Un-conjugated
Alternate Names	HD7; Histone deacetylase 7A; EC 3.5.1.98; Histone deacetylase 7; HD7a; HD7A; HDAC7A

Application Instructions

Application table

Application	Dilution
FACS	1:100
WB	1:1000 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa
Observed Size	~ 120 kDa

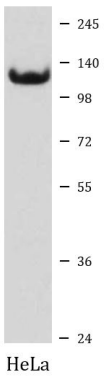
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. 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	HDAC7
Gene Full Name	histone deacetylase 7
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 mouse HDAC7 gene whose protein promotes repression mediated via the transcriptional corepressor SMRT. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [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. Histone deacetylases act via the formation of large multiprotein complexes. Involved in muscle maturation by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors (By similarity). May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene. Positively regulates the transcriptional repressor activity of FOXP3. [UniProt]
Calculated Mw	103 kDa
PTM	May be phosphorylated by CaMK1. Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import. Phosphorylation at Ser-155 by MARK2, MARK3 and PRKD1 promotes interaction with 14-3-3 proteins and export from the nucleus. Phosphorylation at Ser-155 is a prerequisite for phosphorylation at Ser-181. [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Note=In the nucleus, it associates with distinct subnuclear dot-like structures. Shuttles between the nucleus and the cytoplasm. Treatment with EDN1 results in shuttling from the nucleus to the perinuclear region. The export to cytoplasm depends on the interaction with the 14-3-3 protein YWHAE and is due to its phosphorylation. [UniProt]

Images



ARG41801 anti-HDAC7 antibody WB image

Western blot: HeLa cell lysate stained with ARG41801 anti-HDAC7 antibody.