

ARG51816 anti-HDAC4 / HDAC5 / HDAC9 phospho (Ser246 / 259 / 220) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HDAC4 / HDAC5 / HDAC9 phospho (Ser246 / 259 / 220)
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HDAC4 / HDAC5 / HDAC9
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 246/259/220 (T-A-S(p)-EP) derived from Human HDAC4/HDAC5/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	1:500 - 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	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
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.

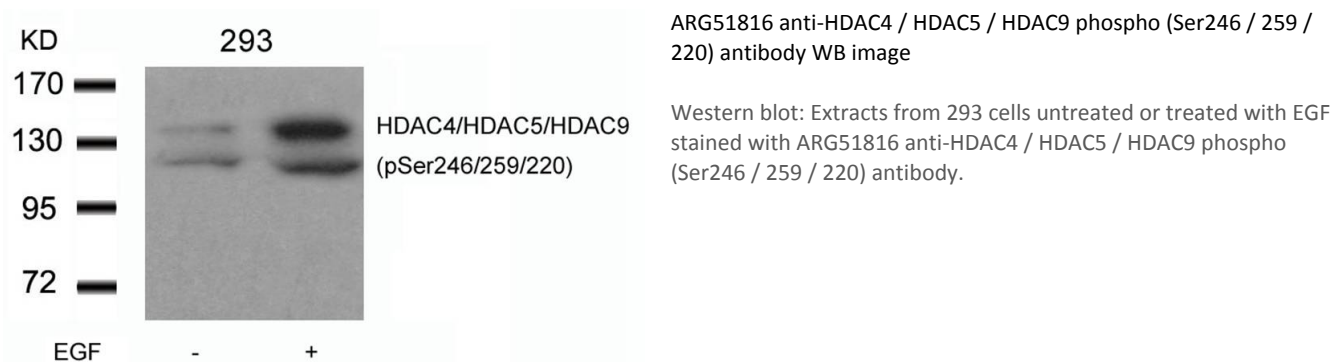
Note

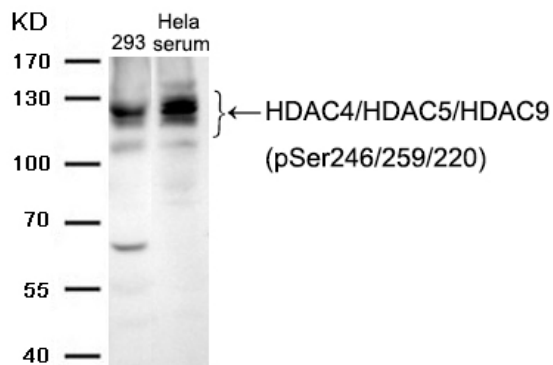
For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 9734 Human Swiss-port # Q9UKV0 Human
Gene Symbol	HDAC9
Gene Full Name	histone deacetylase 9
Background	Histone Deacetylases (HDACs) are a group of enzymes closely related to sirtuins. They catalyze the removal of acetyl groups from lysine residues in histones and non-histone proteins, resulting in transcriptional repression. In general, they do not act autonomously but as components of large multiprotein complexes, such as pRb-E2F and mSin3A, that mediate important transcription regulatory pathways. There are three classes of HDACs; classes 1, 2 and 4, which are closely related Zn ²⁺ -dependent enzymes. HDACs are ubiquitously expressed and they can exist in the nucleus or cytosol. Their subcellular localization is effected by protein-protein interactions (for example HDAC-14.3.3 complexes are retained in the cytosol) and by the class to which they belong (class 1 HDACs are predominantly nuclear whilst class 2 HDACs shuttle between the nucleus and cytosol). HDACs have a role in cell growth arrest, differentiation and death and this has led to substantial interest in HDAC inhibitors as possible antineoplastic agents.
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]
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody
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.

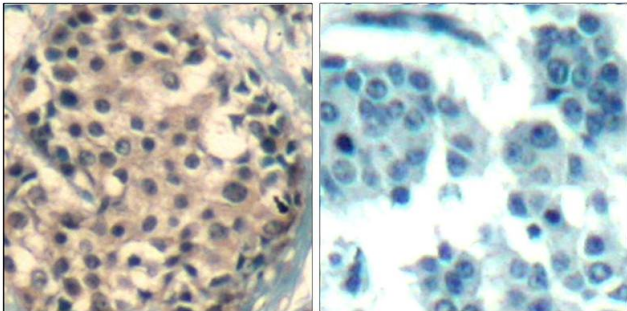
Images





ARG51816 anti-HDAC4 / HDAC5 / HDAC9 phospho (Ser246 / 259 / 220) antibody WB image

Western blot: Extracts from 293 cells and HeLa cells treated with serum stained with ARG51816 anti-HDAC4 / HDAC5 / HDAC9 phospho (Ser246 / 259 / 220) antibody.



ARG51816 anti-HDAC4 / HDAC5 / HDAC9 phospho (Ser246 / 259 / 220) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51816 anti-HDAC4 / HDAC5 / HDAC9 phospho (Ser246 / 259 / 220) antibody (left) or the same antibody preincubated with blocking peptide (right).