

ARG55802 anti-HDAC4 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HDAC4
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	ICC/IF, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HDAC4
Species	Human
Immunogen	Synthetic peptide of Human HDAC4 (NP_006028.2)
Conjugation	Un-conjugated
Alternate Names	HD4; BDMR; HDAC-A; HDACA; EC 3.5.1.98; HDAC-4; HA6116; Histone deacetylase 4; AHO3

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IP	1:50 - 1:200
	WB	1:500 - 1:2000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

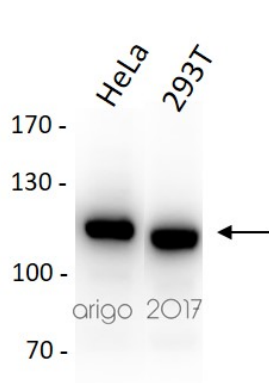
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 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

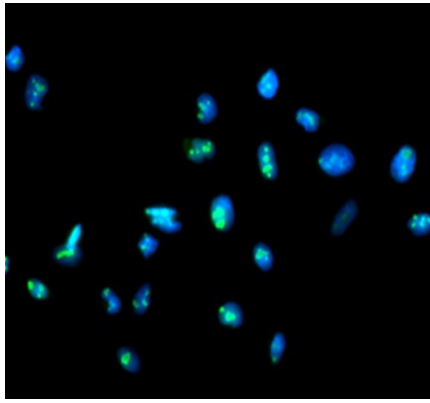
Database links	GeneID: 208727 Mouse GeneID: 9759 Human Swiss-port # P56524 Human Swiss-port # Q6NZM9 Mouse
Gene Symbol	HDAC4
Gene Full Name	histone deacetylase 4
Background	Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to class II of the histone deacetylase/acuc/apha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. This protein does not bind DNA directly, but through transcription factors MEF2C and MEF2D. It seems to interact in a multiprotein complex with RbAp48 and HDAC3. [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 via its interaction with the myocyte enhancer factors such as MEF2A, MEF2C and MEF2D. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer. [UniProt]
Calculated Mw	119 kDa
PTM	Phosphorylated by CaMK4 at Ser-246, Ser-467 and Ser-632. Phosphorylation at other residues by CaMK2D is required for the interaction with 14-3-3. Phosphorylation at Ser-350, within the PxLPxI/L motif, impairs the binding of ANKRA2 but generates a high-affinity docking site for 14-3-3. Sumoylation on Lys-559 is promoted by the E3 SUMO-protein ligase RANBP2, and prevented by phosphorylation by CaMK4.

Images



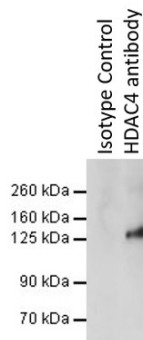
ARG55802 anti-HDAC4 antibody WB image

Western blot: 30 µg of HeLa and 293T cell lysates stained with ARG55802 anti-HDAC4 antibody at 1:500 dilution.



ARG55802 anti-HDAC4 antibody ICC/IF image

Immunofluorescence: A549 cells stained with ARG55802 anti-HDAC4 antibody. Blue: DAPI for nuclear staining.



ARG55802 anti-HDAC4 antibody IP image

Immunoprecipitation: 200 μ g extracts of HeLa cells immunoprecipitated and stained with ARG55802 anti-HDAC4 antibody at 1:1000 dilution.