

**ARG53994**  
anti-HDAC4 antibodyPackage: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody recognizes HDAC4
Tested Reactivity	Hu, Ms, Rat, Mk
Tested Application	IP, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Target Name	HDAC4
Species	Human
Immunogen	Purified recombinant human HDAC4 protein fragments expressed in E.coli
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
	IP	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	140 kDa	

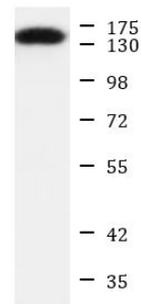
### Properties

Form	Liquid
Purification	Affinity purified
Buffer	0.1M Tris-Glycine (pH 7.4), 150 mM NaCl, 0.2% Sodium azide and 50% Glycerol
Preservative	0.2% 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

Gene Symbol	HDAC4
Gene Full Name	histone deacetylase 4
Background	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
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]
Research Area	Cell Biology and Cellular Response antibody; Developmental Biology antibody; Gene Regulation antibody; Signaling Transduction antibody
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.
Cellular Localization	Nucleus. Cytoplasm

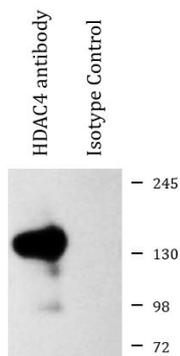
## Images



K562

ARG53994 anti-HDAC4 antibody WB image

Western blot: K562 cell lysate stained with ARG53994 anti-HDAC4 antibody at 1:1000 dilution.



ARG53994 anti-HDAC4 antibody IP image

Immunoprecipitation: HeLa cell lysates were immunoprecipitated and stained with ARG53994 anti-HDAC4 antibody.