DATASHEET

HDAC4 Rabbit Monoclonal Antibody(C1961)

CAT. NO. AMA01573

KEY FEATURES

Target	HDAC4	**Source / Host**	Rabbit
Reactivity	Human, Mouse, Rat	**Clonality**	Monoclonal
Applications	WB, IHC, IF/ICC, IP	**Conjugation**	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.	**Storage**	at-20°C

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. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer. Deacetylates HSPA1A and HSPA1B at 'Lys-77' leading to their preferential binding to co-chaperone STUB1 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:100
IF/ICC	1:100 - 1:300
IP	1:50 - 1:100

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to HDAC4
Specificity	Recognizes endogenous levels of HDAC4 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	Recombinant fusion protein of human HDAC4. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 119 kD; Observed: 140 kD
Form/Buffer	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Alternative Names	KIAA0288; Histone deacetylase 4; HD4
Gene Symbol	HDAC4
Entrez Gene	9759(Human); 208727(Mouse); 363287(Rat)
SwissProt	P56524(Human); Q6NZM9(Mouse); Q99P99(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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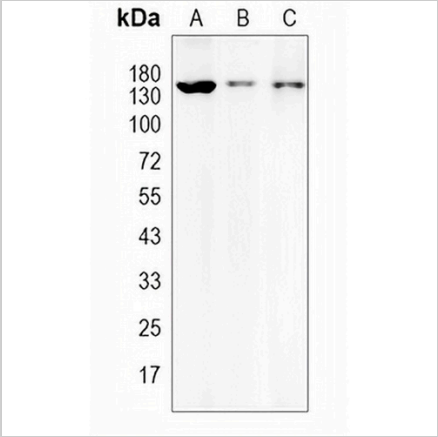
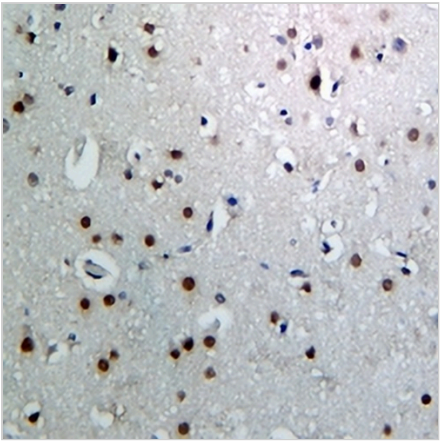
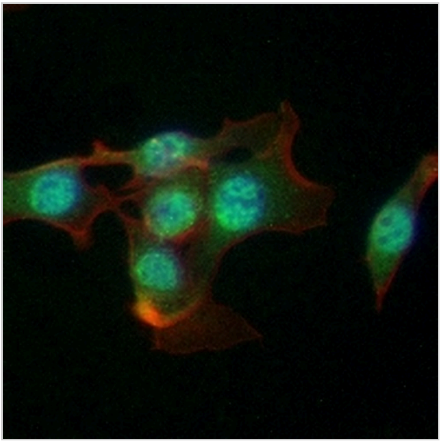
DATA



Western blot analysis of HDAC4 expression in Hela (A), NIH3T3 (B), rat brain (C) whole cell lysates. (Predicted band size: 119 kD; Observed band size: 140 kD)



Immunohistochemical analysis of HDAC4 staining in rat brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with TE buffer (pH 9.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of HDAC4 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.