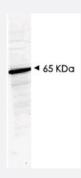


HDAC1 polyclonal antibody

Catalog # PAB10217 Size 100 ug

Applications



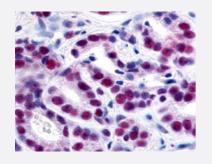
Western Blot (Cell lysate)

Western blot using HDAC1 polyclonal antibody (Cat # PAB10217) shows detection of a band at ~65 KDa corresponding to human HDAC1 present in a 293 whole cell lysate (arrowhead).

Approximately 35 ug of lysate wseparated on a 4-20% Tris-HEPES gel by SDS-PAGE and transferred onto nitrocellulose.

After blocking the membrane was probed with the primary antibody diluted to 1:1,350.

Reaction occurred 2 h at room temperature followed by washes and reaction with a 1 : 10,000 dilution of IRDyeas™800 conjugated Rb-a-Goat IgG [H&L] MXHu for 45 min at room temperature.

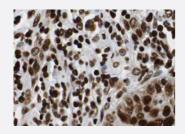


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemistry of HDAC1 polyclonal antibody (Cat # PAB10217) was used at a 1 : 500 dilution to detect HDAC1 by immunohistochemistry in human prostate cancer tissue.

Tissue was formalin-fixed and paraffin embedded.

Personal Communication, Alan Yen, Life Span Biosciences, Seattle, WA.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemistry of HDAC1 polyclonal antibody (Cat # PAB10217) shows strong nuclear staining of tumor cells in human lung tissue.

Tissue was formalin-fixed and paraffin embedded.

Brown color indicates presence of protein, blue color shows cell nuclei.

Personal Communication, Kenneth Wester, www.proteinatlas.org, Upsala, Sweden.



Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of HDAC1.
Immunogen	A synthetic peptide corresponding to amino acids 466-482 of human HDAC1.
Host	Rabbit
Reactivity	Bovine, Chicken, Chimpanzee, Human, Mouse, Rat
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:10000-1:50000)
	Western Blot (1:1000-1:5000)
	Immunohistochemistry (1:200-1:1000)
	The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C.
	Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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Enzyme-linked Immunoabsorbent Assay

Gene Info — HDAC1	
Entrez GenelD	<u>3065</u>
Protein Accession#	Q13547;NP_004955
Gene Name	HDAC1
Gene Alias	DKFZp686H12203, GON-10, HD1, RPD3, RPD3L1
Gene Description	histone deacetylase 1
Omim ID	601241
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histon e deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also in teracts with retinoblastoma tumor-suppressor protein and this complex is a key element in the con trol of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deac etylates p53 and modulates its effect on cell growth and apoptosis. [provided by RefSeq
Other Designations	OTTHUMP00000008745 reduced potassium dependency, yeast homolog-like 1

Publication Reference

• ICBP90, an E2F-1 target, recruits HDAC1 and binds to methyl-CpG through its SRA domain.

Unoki M, Nishidate T, Nakamura Y.

Oncogene 2004 Oct; 23(46):7601.

Application: WB, Human, HEK 293T cells

Product Information



 Site-specific acetylation of the fetal globin activator NF-E4 prevents its ubiquitination and regulates its interaction with the histone deacetylase, HDAC1.

Zhao Q, Cumming H, Cerruti L, Cunningham JM, Jane SM.

The Journal of Biological Chemistry 2004 Oct; 279(40):41477.

Application: WB, Human, K-562 cells

 Restoration of transforming growth factor-beta signaling through receptor RI induction by histone deacetylase activity inhibition in breast cancer cells.

Ammanamanchi S, Brattain MG.

The Journal of Biological Chemistry 2004 Jul; 279(31):32620.

Application: WB, Human, MCF-7, ZR75 cells

Pathway

- Cell cycle
- Chronic myeloid leukemia
- Notch signaling pathway
- Pathways in cancer

Disease

- Asthma
- Cognition Disorders
- Genetic Predisposition to Disease
- Huntington disease
- Mental Status Schedule
- Neoplasms
- Ovarian cancer
- Ovarian Neoplasms
- Tobacco Use Disorder