

Product datasheet for **TA326790**

HDAC1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, IP, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50 - 1:200;IP 1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	N term -peptide of human HDAC1
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	histone deacetylase 1
Database Link:	NP_004955 Entrez Gene 297893 Rat Entrez Gene 433759 Mouse Entrez Gene 3065 Human Q13547



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Background:

Acetylation of the histone tail causes chromatin to adopt an "open" conformation, allowing increased accessibility of transcription factors to DNA. The identification of histone acetyltransferases (HATs) and their large multiprotein complexes has yielded important insights into how these enzymes regulate transcription. HAT complexes interact with sequence-specific activator proteins to target specific genes. In addition to histones, HATs can acetylate nonhistone proteins, suggesting multiple roles for these enzymes. In contrast, histone deacetylation promotes a "closed" chromatin conformation and typically leads to repression of gene activity. Mammalian histone deacetylases can be divided into three classes on the basis of their similarity to various yeast deacetylases. Class I proteins (HDACs 1, 2, 3, and 8) are related to the yeast Rpd3-like proteins, those in class II (HDACs 4, 5, 6, 7, 9, and 10) are related to yeast Hda1-like proteins, and class III proteins are related to the yeast protein Sir2. Inhibitors of HDAC activity are now being explored as potential therapeutic cancer agents.

Synonyms:

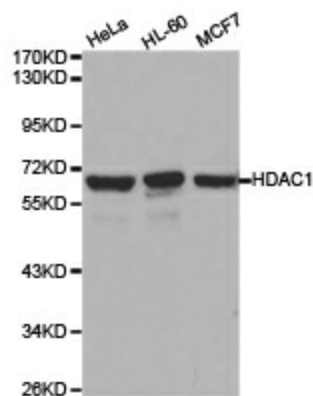
GON-10; HD1; RPD3; RPD3L1

Protein Families:

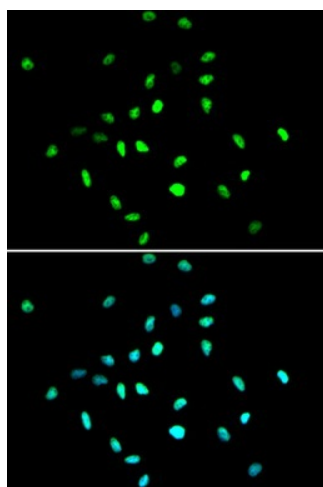
Adult stem cells, Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - DSL/Notch pathway, Transcription Factors

Protein Pathways:

Cell cycle, Chronic myeloid leukemia, Huntington's disease, Notch signaling pathway, Pathways in cancer

Product images:

Western blot analysis of extracts of various cell lines, using HDAC1 antibody.



Immunofluorescence analysis of A549 cell using HDAC1 antibody. Blue: DAPI for nuclear staining.