



HDAC1 peptide (DAG-P0598)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Antigen Description | 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. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREST-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates 'Lys-310' in RELA and thereby inhibits the transcriptional activity of NF-kappa-B. |
| Specificity | Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain. |
| Conjugate | Unconjugated |
| Sequence Similarities | Belongs to the histone deacetylase family. HD type 1 subfamily. |
| Format | Liquid |
| Preservative | None |
| Storage | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request. |

GENE INFORMATION

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| Gene Name | hdac1 histone deacetylase 1 [Danio rerio (zebrafish)] |
| Official Symbol | HDAC1 |

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| Synonyms | HDAC1; histone deacetylase 1; hdac-1; chunp6919; zgc:65818; wu:fb19h11; wu:fi06f03; zgc:101582; mp:zf637-2-001987; histone deacetylase 2; col; colgate; |
| Entrez Gene ID | 192302 |
| mRNA Refseq | NM_173236.1 |
| Protein Refseq | NP_775343.1 |
| UniProt ID | Q8JIY7 |
| Chromosome Location | chromosome: 19 |
| Pathway | Androgen Receptor Signaling Pathway, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, conserved biosystem; Delta-Notch Signaling Pathway, organism-specific biosystem; EGFR1 Signaling Pathway, organism-specific biosystem; IL-6 Signaling Pathway, organism-specific biosystem; Notch Signaling Pathway, organism-specific biosystem; Notch signaling pathway, organism-specific biosystem; Notch signaling pathway, conserved biosystem |
| Function | NAD-dependent histone deacetylase activity (H3-K14 specific); NAD-dependent histone deacetylase activity (H3-K18 specific); NAD-dependent histone deacetylase activity (H3-K9 specific); NAD-dependent histone deacetylase activity (H4-K16 specific); histone |