

HDAC1 recombinant protein

Recombinant HDAC1 protein

CATALOG #
AAA59725

HOST
Baculovirus

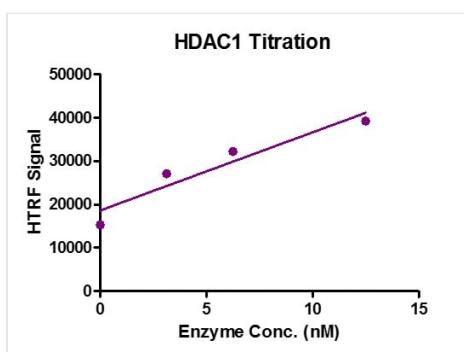
PRODUCT SYNONYMS

HDAC1; Recombinant HDAC1 protein; HD1; RPD3; GON-10; RPD3L1; HDAC1 recombinant protein

PRODUCT SPECIFICATIONS

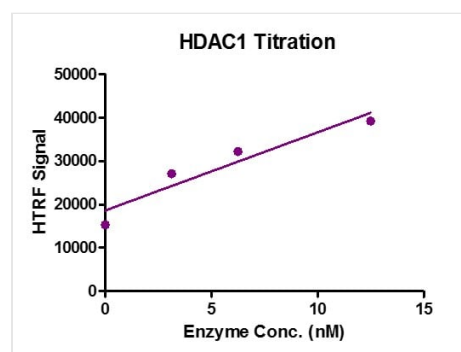
Host	Baculovirus
Purity/Purification	The recombinant protein is > 65% pure by SDS-PAGE.
Form/Format	Full length recombinant HDAC1 protein was expressed in Sf9 cells and is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



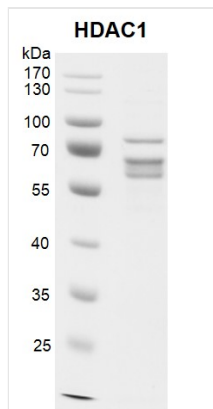
Application Data

Recombinant HDAC1 activity by HTRF Assay. 1 ?M H3K9ac (1-21aa.) peptide was incubated with different concentrations of HDAC1 protein in 10 ?l reaction system containing 25 mM Tris-HCl pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂, 0.1 mg/ml BSA for 30 min at room temperature, then 10 ?l anti-H3K9me0 antibody and SA-XL665 mixture (1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min at room temperature. All operations and reactions were performed at room temperature. HTRF assay was used for detection.



Application Data

Recombinant HDAC1 activity by HTRF Assay. 1 ?M H3K9ac (1-21aa.) peptide was incubated with different concentrations of HDAC1 protein in 10 ?l reaction system containing 25 mM Tris-HCl pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂, 0.1 mg/ml BSA for 30 min at room temperature, then 10 ?l anti-H3K9me0 antibody and SA-XL665 mixture (1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min at room temperature. All operations and reactions were performed at room temperature. HTRF assay was used for detection.



SDS-PAGE

Recombinant HDAC1 protein gel. HDAC1 protein was run on a 10% SDS-PAGE gel and stained with Coomassie blue. MW: 56 kDa Purity> >65%

ADDITIONAL INFORMATION

Related Product Information for HDAC1 recombinant protein	Short Description: Recombinant human HDAC1 was expressed in Sf9 cells as the full-length protein (accession number NP_004955.2) with a C-terminal DYKDDDDK-Tag. The molecular weight of the protein is 56 kDa. The recombinant protein is >65% pure by SDS-PAGE. It is suitable for use in histone deacetylase (HDAC) assays, in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: HDAC1 (Histone Deacetylase 1, also designated HD1) is a member of the class I mammalian histone deacetylases (HDACs) involved in regulating chromatin structure during transcription. These enzymes catalyze the removal of acetyl groups from lysine residues of histones and other cellular proteins. Lysine N-epsilon-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in regulation of gene expression in various cellular functions. It consists of the transfer of an acetyl moiety from an acetyl coenzyme A to the e-amino group of a lysine residue. In vivo, acetylation is controlled by the antagonistic activities of histone acetyltransferases (HATs) and histone deacetylases (HDACs). The HDACs are grouped into four classes, on the basis of similarity to yeast counterparts: HDAC class I (HDAC1, HDAC2, HDAC3 and HDAC8), class II (HDAC4, HDAC5, HDAC6, HDAC7, HDAC9 and HDAC10), class III (SIRT1, SIRT2, SIRT3, SIRT4, SIRT5, SIRT6 and SIRT7) and class IV (HDAC11). HDAC1 and HDAC2 are recruited to Mad-Max complexes, which associate with the mSin3 scaffold protein, and are required for the transcriptional repression of Mad-Max target genes. HDAC1 is also involved in the regulation of p53. HDAC1 is expressed in various tissues. HDAC1, HDAC2 and HDAC3 are also ubiquitously expressed and can deacetylate both Histone H3 and Histone H4 in free histones or nucleosome substrate.
Product Categories/Family for HDAC1 recombinant protein	Recombinant Proteins; Histone Deacetylase (HDAC)

NCBI AND UNIPROT INFORMATION

NCBI GI #	13128860
NCBI GeneID	3065
NCBI Accession #	NP_004955.2
NCBI GenBank Nucleotide #	NM_004964.2
UniProt Accession #	Q13547 ; Q92534
Molecular Weight	55,103 Da
NCBI Official Full Name	histone deacetylase 1
NCBI Official Synonym Full Names	histone deacetylase 1
NCBI Official Symbol	HDAC1
NCBI Official Synonym Symbols	HD1; RPD3; GON-10; RPD3L1

NCBI Protein Information	histone deacetylase 1; reduced potassium dependency, yeast homolog-like 1
UniProt Protein Name	Histone deacetylase 1
UniProt Gene Name	HDAC1
UniProt Synonym Gene Names	RPD3L1; HD1
UniProt Entry Name	HDAC1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/hdac1-recombinant-protein-baculovirus/59725>