

Recombinant HDAC2 protein

Catalog No: 31343

Expressed In: Baculovirus

Quantity: 25 µg

Concentration: 1.1 µg/µl

Source: Human

Buffer Contents: Full length recombinant HDAC2 protein supplied at a concentration of 1.1 µg/µl in 40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 80 µg/ml FLAG peptide and 10% glycerol.

Background: HDAC2 (Histone Deacetylase 2) is 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. Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation. Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A.

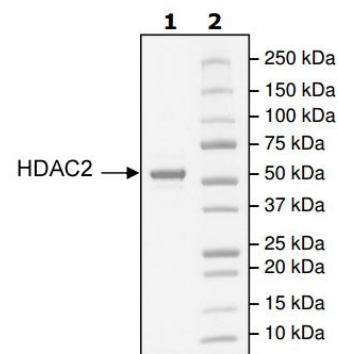
Protein Details: Full length recombinant human HDAC2 protein was expressed in a baculovirus expression system (accession number Q92769) with a C-terminal FLAG tag. The molecular weight of the protein is 60 kDa. This recombinant protein is >89% pure by SDS-PAGE.

Application Notes: Recombinant HDAC2 is suitable for use in histone deacetylase assays. This protein is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Specific Activity: 1020 pmol/min/µg.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

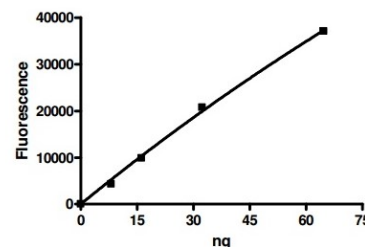
This product is for research use only and is not for use in diagnostic procedures.



HDAC2 protein gel.

HDAC2 (2.9 µg) run on a 4-20% SDS-PAGE gel and stained with Coomassie blue. Arrow indicates recombinant HDAC2.

Specific Activity



HDAC2 activity assay.

Recombinant HDAC2 activity measured using a fluorescent histone deacetylase assay.