

## Recombinant HDAC5 protein, catalytic domain

**Catalog No:** 31351**Expressed In:** Baculovirus**Quantity:** 10 µg**Concentration:** 0.65 µg/µl**Source:** Human

**Buffer Contents:** 10 µg recombinant HDAC5 protein, catalytic domain, active supplied at a concentration of 0.65 µg/µl in a buffer of 45 mM Tris-HCl, pH 8.0, 124 mM NaCl, 2.4 mM KCl, 225 mM imidazole, and 10% glycerol.

**Background:** HDAC5 (Histone Deacetylase 5) 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. Involved in muscle maturation by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer.

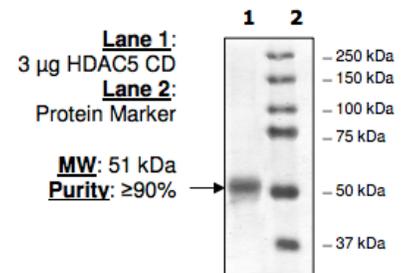
**Protein Details:** The catalytic domain, variant 1 (amino acids 657-1123) of human HDAC5 (accession number NM\_005474), was expressed with a C-terminal His tag (MW= 51 kDa) using a baculovirus expression system.

**Application Notes:** Recombinant HDAC5 protein, catalytic domain is suitable for use in histone deacetylase (HDAC) assays. It can also be used to study enzyme kinetics, inhibitor screening, and selectivity profiling.

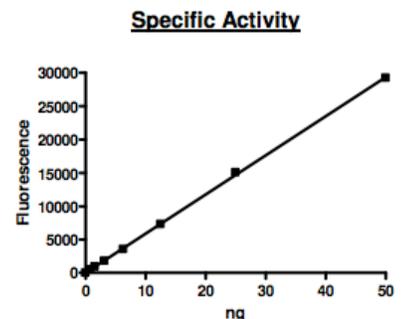
**Specific Activity:** 1000 pmol/min/µg.

**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.



**HDAC5 catalytic domain protein gel.** HDAC5 catalytic domain run on an SDS-PAGE gel and stained with Coomassie blue.



**HDAC5 catalytic domain activity assay.** Recombinant HDAC5 catalytic domain activity measured using a fluorescent HDAC assay.