

Recombinant HDAC3 complex

Catalog No: 31349

Expressed In: Baculovirus

Quantity: 50 µg

Concentration: 0.74 µg/µl

Source: Human

Buffer Contents: 50 µg recombinant HDAC3/SMRT complex supplied at a concentration of 0.74 µg/µl in 40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 16 mM glutathione and 20% glycerol.

Background: The **HDAC3/SMRT** subunits are members of the NCoR2 co-repressor complex that functions to mediate transcriptional silencing for various transcription factor pathways. **HDAC3** is a Class I histone deacetylase with broad specificity. **SMRT** (also known as **NCoR2**) is a transcriptional coregulatory protein that binds nuclear receptors and aids in the recruitment of histone deacetylases to DNA promoter regions. Together, the **HDAC3/SMRT** complex functions to assist nuclear receptors in the downregulation of target gene expression.

Protein Details: The **Recombinant HDAC3 complex, active** consists of the **HDAC3/SMRT** subunits of the NcoR2 corepressor complex. Recombinant full length HDAC3 (accession number NM_003883) was co-expressed in a baculovirus expression system with a C-terminal His tag (MW= 49.7 kDa) along with amino acids 395-489 of SMRT/NcoR2 (accession number NM_006312) containing an N-terminal GST tag (MW=37.6 kDa).

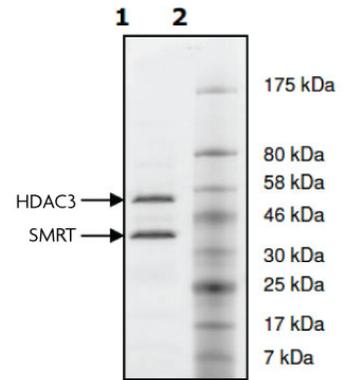
Application Notes: The HDAC3/SMRT complex is suitable for use in histone deacetylase assays. It can also be used to study enzyme kinetics, inhibitor screening, and selectivity profiling.

Specific Activity: 3000 pmol/min/µg.

Assay conditions: Prepare 25 mM Tris/HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂, 0.1 mg/ml BSA, 20 µM HDAC substrate and HDAC3/SMRT complex. Incubate for 30 minutes at 37°C.

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.

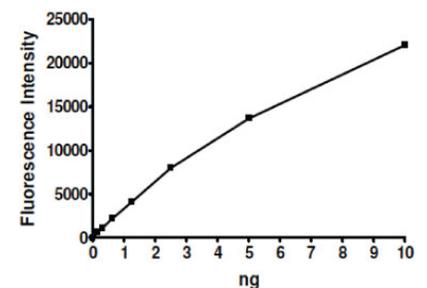
This product is for research use only and is not for use in diagnostic procedures.



SDS-PAGE gel of Recombinant HDAC3/SMRT protein complex.

Lane 1: 1 µg HDAC3/SMRT. Arrows indicate the HDAC3 and SMRT subunits.

Lane 2: Protein Marker



HDAC3/SMRT activity assay.

Recombinant HDAC3/SMRT activity measured using a fluorescent histone deacetylase assay.