

Recombinant HDAC3 / NCOR2 Complex

Catalog No: 31526, 31926

Lot No: 17616001

Expressed In: Baculovirus

Quantity: 20 µg

Concentration: 0.2 µg/µl

Source: Human

Buffer Contents: Recombinant HDAC3 / NCOR2 Complex is supplied at a concentration of 0.2 µg/µl in 25 mM HEPES pH 7.5, 300 mM NaCl, 5% Glycerol, 0.04% Triton X-100, 0.2 mM TCEP.

Background: HDAC3 (Histone Deacetylase 3, also designated HD3) 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-ε-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 ε-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: class I (HDAC1, HDAC2, HDAC3 and HDAC8), class II (HDAC4, HDAC5, HDAC6, HDAC7, HDAC9 and 10), class III (SIRT1-7) and class IV (HDAC11).

By forming multi-protein complexes with the co-repressor NCOR2, HDAC3 regulates the transcription of a plethora of genes. A growing list of non-histone proteins extends the role of HDAC3 beyond transcriptional repression. HDAC1, HDAC2 and HDAC3 are also ubiquitously expressed and can deacetylate both H3 and H4 in free histones or nucleosome substrate.

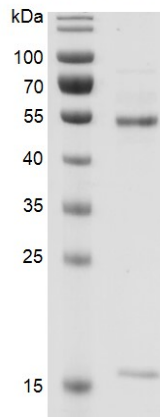
Protein Details: Recombinant HDAC3 / NCOR2 Complex that includes full length human HDAC3 protein (accession number NP_003874.2) with a C-terminal FLAG tag and human NCOR2 amino acids 395-489 (accession number NP_006303.4) with an N-terminal 6×His tag was expressed in Sf9 cells. The molecular weights of HDAC3 and NCOR2 (395-489) are 50.8 kDa and 14.6 kDa, respectively. The purity of HDAC3 / NCOR2 Complex is >90% by SDS-PAGE.

Application Notes: This protein is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

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.

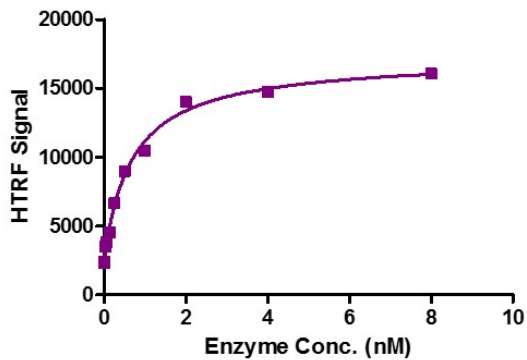
HDAC3/NCOR2 Complex



Recombinant HDAC3 / NCOR2 Complex gel.

HDAC3 / NCOR2 Complex was run on an 12% SDS-PAGE gel and stained with Coomassie Blue.

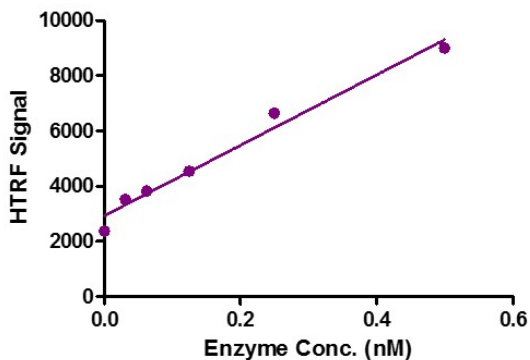
HDAC3/NCOR2 Titration



HTRF assay for HDAC3 / NCOR2 Complex activity

3 μ M Histone H3K9ac (1-21aa) peptide was incubated with different concentrations of HDAC3 / NCOR2 Complex in reaction buffer for 30 min at 37°C, Reaction product was detected by Anti-H3K9me0-Eu antibody. HTRF assay was used for activity detection.

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