HDAC3/NCOR1 complex (human), (recombinant)

Highly active

Approximately 1:1 stoichiometric complex of recombinant human HDAC3 (histone deacetylase 3) with a GST fusion protein comprising the Deacetylase Activation Domain (DAD) of human NCOR1 (amino acids 397-503; SANT1 domain plus amino flanking residues). Produced by coexpression of HDAC3 with a GST-NCOR1(DAD) construct in an insect cell system, the complex displays ~100-fold higher deacetylase activity than isolated HDAC3 (based on equal weights HDAC3 assayed at a saturating concentration (100µM) of a fluorogenic peptide substrate p53 379-382, K(Ac)382; Prod. No. BML-KI177).This HDAC3 preparation is active with various fluorogenic peptide substrates, including FLUOR DE LYS® Substrate (Prod. No. BML-KI104) and FLUOR DE LYS®-SIRT1 (p53 379-382, K(Ac)382; Prod. No. BML-KI177).

HDAC3, although a class I HDAC, is found in co-repressor complexes with the SMRT/N-CoR proteins, complexes distinct from than those comprising other class I enzymes. It has a unique domain structure, including both nuclear localization and nuclear export sequences and has been assigned to its own phylogenetic subclass. Inhibition of HDAC3 may be the determining factor in the anti-proliferative effects of HDAC inhibitors on cancer cells and its caspase-dependent cleavage and relocation to the cytoplasm may be critical to the progression of apoptosis. It has been shown that HDAC3, rather than the class II HDACs 4 and 5, likely diretly deacetylates MEF2, implying an important role in pathways affecting heart disease.

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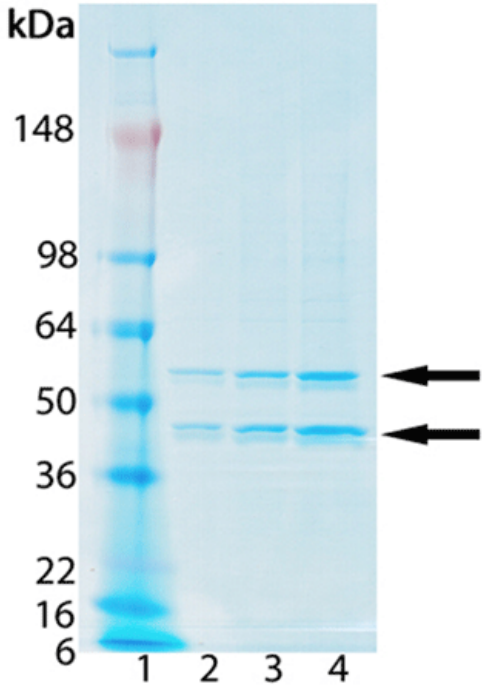
BML-SE515-0050	50µg

Manuals, SDS & CofA View Online »



SDS-PAGE Analysis: Lane 1: MWM; Lane 2: 0.5 µg; Lane 3: 1.0 µg; Lane 4: 2.0 µg of purified HDAC3/NCOR1 complex (human), (recombinant) Protein Prod. No. BML-SE515.

Handling & Storage

Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	Histone deacetylase 3/Nuclear receptor corepressor 1
Formulation	Liquid. In 50mM TRIS, pH 8.0, 138 mM NaCl and 10% glycerol.
Gene/Protein Identifier	NM_003883, NM_006311 (RefSeq)
MW	49/40 kDa
Purity	≥90% (SDS-PAGE)
Purity Detail	Purified by multi-step chromatography.
Source	Produced in insect cells. Produced in a baculovirus expression system.
Specific Activity	≥150 U/µg. One U=1 pmol/min at 37°C, 100 µM, FLUOR DE LYS®-SIRT1 deacetylase substrate (Prod. No. BML-KI177).
UniProt ID	O15379 (HDAC3), O75376 (NCOR1)

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