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Datasheet for ABIN7317549

**HDAC3 Protein (GST tag,His tag)**

## Overview

Quantity:	50 µg
Target:	HDAC3
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC3 protein is labelled with GST tag,His tag.

## Product Details

Purpose:	Recombinant Human HDAC3 Protein (His & GST Tag)
Sequence:	Met 1-Ile 428
Characteristics:	A DNA sequence encoding the full length of human HDAC3 (O15379-1) (Met 1-Ile 428) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

## Target Details

Target:	HDAC3
Alternative Name:	HDAC3 ( <a href="#">HDAC3 Products</a> )
Background:	Background: Histone Deacetylases (HDACs) are a group of enzymes closely related to sirtuins. They catalyze the removal of acetyl groups from lysine residues in histones and non-histone proteins, resulting in transcriptional repression. In general, they do not act autonomously but as

## Target Details

components of large multiprotein complexes, such as pRb-E2F and mSin3A, that mediate important transcription regulatory pathways. There are three classes of HDACs, classes 1, 2 and 4, which are closely related Zn<sup>2+</sup>-dependent enzymes. HDACs are ubiquitously expressed and they can exist in the nucleus or cytosol. Their subcellular localization is effected by protein-protein interactions (for example HDAC-14.3.3 complexes are retained in the cytosol) and by the class to which they belong (class 1 HDACs are predominantly nuclear whilst class 2 HDACs shuttle between the nucleus and cytosol). HDACs have a role in cell growth arrest, differentiation and death and this has led to substantial interest in HDAC inhibitors as possible antineoplastic agents. Histone Deacetylases (HDACs) is Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2, 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. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1, increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor. Acts as a molecular chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation. Synonym: HD3,RPD3,RPD3-2

Molecular Weight: 76.7 kDa

Pathways: [Neurotrophin Signaling Pathway](#), [Regulation of Lipid Metabolism by PPARalpha](#), [Regulation of Muscle Cell Differentiation](#), [Skeletal Muscle Fiber Development](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 4 mM GSH, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.