



Recombinant Protein Technical Manual

Recombinant Human HDAC4 Protein (aa 612084)

RPES5195

Product Data:

Product SKU: RPES5195

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_006028.2

Protein Information:

Molecular Mass: 50.9 kDa

AP Molecular Mass: 51 kDa

Tag:

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% gly

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

Application:

Synonyms: AHO3;BDMR;HA61116;HD4;HDAC-4;HDAC-A;HDACA

Immunogen Information:

Sequence: Met612-Leu1084

Background:

HDAC4 (histone deacetylase 4), belongs to class II of the histone deacetylase/acuc/apha family. 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 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 Zn²⁺-dependent enzymes. HDACs are ubiquitously expressed and they can exist in the nucleus or cytosol. Their subcellular localization is effected by protein-protein interactions and by the class to which they belong. 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. HDAC4 possesses histone deacetylase activity and represses transcription when tethered to a promoter. It does not bind DNA directly, but through transcription factors MEF2C and MEF2D. HDAC4 seems to interact in a multiprotein complex with RbAp48 and HDAC3.