

Active Recombinant Human HDAC6 Protein

Cat. No. HDAC6-313H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human HDAC6 Protein is produced by HEK293 cells expression system.
Species	Human
Source	HEK293
ProteinLength	amino acids 2–1215
Description	<p>HDAC6 is a Class II HDAC. It is unique among human HDACs in having two full deacetylase domains. As a tubulin deacetylase, HDAC6 may act to promote autophagic clearing of Huntington aggregates and retard HIV1 infection. It can shuttle between the nucleus and cytoplasm, suggesting potential extra nuclear functions by regulating the acetylation status of non-histone substrates. By modifying chromatin structure and other non-histone proteins, HDACs play important roles in controlling complex biological events, including cell development, differentiation, programmed cell death, angiogenesis, and inflammation. Considering these major roles, it is conceivable that dysregulation of HDACs and subsequent imbalance of acetylation and deacetylation may be involved in the pathogenesis of various diseases, including cancer and inflammatory diseases.</p>
Form	Liquid, In 30 mM HEPES, 140 mM NaCl, 10 mM KCl, 3% glycerol, 0.25 mM TCEP, pH 7.4.
Bio-activity	Deacetylation activity was determined using GAK(Ac)-AMC, Boc-K(Ac)-AMC and

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Fluor-de-Lys (RHK-K(Ac)-AMC) substrates. Reactions were carried out in a 384-well plate in 20 μ of reaction buffer comprising of 50 mM HEPES, 140 mM NaCl, 10 mM KCl, 1 mg/ml bovine serum albumin (BSA), and 1 mM TCEP, pH 7.4, for 30 min at 37°C. The reaction was stopped by addition of 20 μ of trypsin solution (2 mg/ml trypsin) and a fluorescence signal of released AMC was quantified using a fluorometer. The enzyme kinetic values were calculated by non-linear regression analysis.

Molecular Mass 131 kDa

Purity \geq 90% by SDS-PAGE

Notes For Research Use Only! Not For Use in Humans.

Storage Store at -80 centigrade.

Handling Thaw on ice, and aliquot into smaller working quantities to avoid multiple freeze/thaw cycles.

GENE INFORMATION

Gene Name HDAC6 histone deacetylase 6 [Homo sapiens]

Official Symbol HDAC6

Synonyms HDAC6; histone deacetylase 6; FLJ16239; HD6; JM21; KIAA0901;

Gene ID 10013

mRNA Refseq NM_006044

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Protein Refseq NP_006035

MIM 300272

UniProt ID Q9UBN7

Coomassie blue-stained SDS-PAGE (10% acrylamide) of 1 ug of HDAC6.

Steady-state kinetics of full length human HDAC6 on commercial substrates. Data represent mean values \pm s.d.; n=3.

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