

Active Recombinant Human HDAC8 Protein

Cat. No. HDAC8-314H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HDAC8 Protein is produced by HEK293 cells expression system.
Species	Human
Source	HEK293
ProteinLength	amino acids 1–377
Description	Human Histone Deacetylase 8 (HDAC8) is a member of the class I Histone Deacetylases. HDACs are important enzymes for the transcriptional regulation of gene expression in eukaryotic cells. HDACs catalyze the removal of acetyl groups from lysines near the N-termini of histones. Human HDACs have been implicated in a variety of human diseases such as cardiomyopathy, osteodystrophy, neurodegenerative disorders, aging and cancer. Expression of HDAC8 is restricted to cells showing smooth muscle differentiation in normal human tissue and is a novel marker of smooth muscle differentiation. Like other class I and II HDAC members, the activity of HDAC8 is sensitive to HDAC inhibitor Trichostatin A (TSA).
Form	Liquid, In 30 mM HEPES, 140 mM NaCl, 10 mM KCl, 3% glycerol, 0.25 mM TCEP, pH 7.5.
Bio-activity	Deacetylation activity was determined using the Boc-K(TFA)-AMC substrate. Reactions were carried out in a 384-well plate in 20 µl of reaction buffer comprising of 50 mM HEPES, 140 mM NaCl, 10 mM KCl, 1 mg/ml bovine serum albumin (BSA),

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and 1 mM TCEP, pH 7.4, for 30 min at 37°C. The reaction was stopped by addition of 20 µl of trypsin solution (2 mg/ml trypsin) and the fluorescence signal of released AMC was quantified using a fluorometer. The enzyme kinetic values were calculated by nonlinear regression analysis

Molecular Mass	41 kDa
Purity	≥95% 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	HDAC8 histone deacetylase 8 [Homo sapiens]
Official Symbol	HDAC8
Synonyms	HDAC8; histone deacetylase 8; HDACL1, histone deacetylase like 1; RPD3; histone deacetylase-like 1; HD8; CDA07; HDACL1;
Gene ID	55869
mRNA Refseq	NM_001166418
Protein Refseq	NP_001159890

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MIM	300269
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UniProt ID	Q9BY41
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Coomassie blue-stained SDS-PAGE (10% acrylamide) of 1 ug of HDAC8.

Steady-state kinetics of full human HDAC8 using the Boc-K(TFA)-AMC substrate.
Data represent mean values $\pm$ s.d.; n=3.

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