BioVision

Human CellExp[™] HDAC5, Catalytic Domain, Human Recombinant, Active

CATALOG #:	P1268-50 50 µg
ALTERNATE NAMES:	HDAC5, HD5, Histone Deacetylase 5, Antigen NY-CO-9, KIAA0600
SOURCE:	HEK 293 cells (amino acids 679-1095)
PURITY:	≥ 95% by SEC
MOL. WEIGHT:	The protein has a calculated MW of 45 kDa.
FORM:	Liquid
FORMULATION:	In 30 mM HEPES, 140 mM NaCl, 10 mM KCl, 3% glycerol, 0.25 mM TCEP, pH 7.4
STORAGE CONDITIONS:	Store at -70°C. Thaw on ice, and aliquot into smaller working quantities to avoid multiple freeze/thaw cycles.

DESCRIPTION: Human HDAC5 is composed of 1122 amino acid residues. The deacetylase domain of HDAC5 is located at the C-terminal half of the molecule. The N-terminal non-deacetylase domain does not show any significant homology with any published sequence. Both domains are required for HDAC5- mediated repression of gene transcription. HDAC5 interacts with a growing number of transcriptional factors including MEF2A as well as other HDAC proteins. The interacting complexes bind to specific regions of chromatin and regulate gene transcription in these regions.

BIOLOGICAL 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), and 1 mM TCEP, pH 7.4, for 30 min at 37°C. The reaction was stopped by addition of 20 μ I 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 non-linear regression analysis.

Human recombinant HDAC5, Catalytic Domain Active



Figure 1: Coomassie blue-stained SDS-PAGE (10% acrylamide) of 1 µg of HDAC5 catalytic domain Figure 2: Steady-state kinetics of human HDAC5 Catalytic Domain using the Boc-K(TFA)-AMC substrate. Data represent mean values \pm s.d.; n = 3.

RELATED PRODUCTS:

- HDAC5 Antibody (Cat. No. 36105-30T, -100)
- HDAC Activity Fluorometric Assay Kit (Cat. No. K330-100)
- HDAC Activity Colorimetric Assay Kit (Cat. No. K331-100)
- HDAC Inhibitor Drug Screening Kit (Cat. No. K340-100)
- InSitu HDAC Activity Fluorometric Assay Kit (Cat. No. K339-100)
- TMP269 (Cat. No. 2679-5, -25)
- TMP-195 (Cat. No. B1860-5, -25)
- Human CellExp[™] HDAC6, Human Recombinant, Active (Cat. No. P1265-50)
- Human CellExp™ HDAC8, Human Recombinant, Active (Cat. No. P1266-50)
- Human CellExp™ HDAC11, Human Recombinant, Active (Cat. No. P1267-50)

FOR RESEARCH USE ONLY! Not to be used in humans.

