

HDAC 4 (Histone deacetylase 4)

CATALOG NO.: KDA-21-279

LOT NO.:

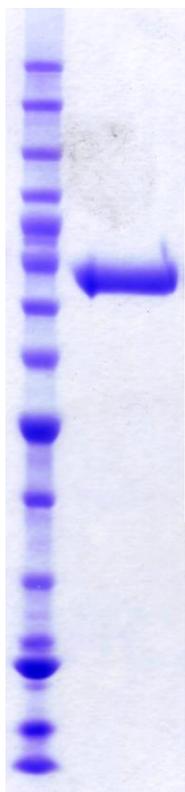
DESCRIPTION: Human recombinant HDAC4 (residues 627-1084; Genbank Accession # NM_006037; MW = 76.9 kDa) expressed in insect cells with both a N-terminal GST-fusion tag and a C-terminal His tag.

PURITY: >95% by SDS-PAGE

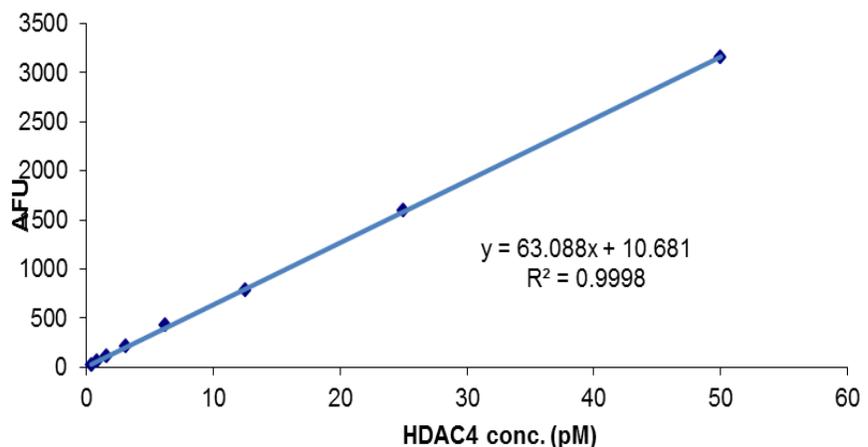
ASSAY CONDITIONS: RBC's HDAC4 displays lysine deacetylase activity in an endpoint, trypsin-coupled reaction with a fluorogenic substrate. The deacetylation reaction is performed in 50 mM Tris-HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂, 1 mg/ml BSA, with Boc-K(Ac)-AMC as substrate (see Figure below). The reaction is terminated and fluorescence signal (Ex. 360 nm/Em. 460 nm) developed (~30 min.) by addition of an equal volume of 2 μM trichostatin A, 16 mg/mL trypsin in 50 mM Tris-HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂.

SUPPLIED AS: _ μg/μL in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 10% glycerol as determined by OD₂₈₀.

STORAGE: -70°C. Thaw quickly and store on ice before use. The remaining, unused, undiluted protein should be snap frozen, for example in a dry/ice ethanol bath or liquid nitrogen. Minimize freeze/thaws if possible, but very low volume aliquots (<5 μl) or storage of diluted enzyme is not recommended.



Coomassie blue-stained SDS-PAGE (4-12% acrylamide) of 2 μg of RBC HDAC4. MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, 50, 40, 30, 25, 20, 15, 10 kDa.



Assay of HDAC4 Lysine Deacetylase Activity. Reactions were 60 min., 37°C with 100 μM Boc-K(TFA)-AMC as substrate. Fifty μL reactions were performed in a white 96-well plate (Corning 3992) and fluorescence read, after development, in a Fluoroskan Ascent FL fluorimeter (Thermo). Slope of the plot (63.088 AFU/pM/60 min.) corresponds to a specific activity of 25 nmol/min./μg under these conditions. (Calculated from an AMC standard curve, slope = 550 AFU/μM.)

This product is NOT intended for therapeutic or diagnostic use in animals or in humans.