

HDAC 2 (Histone deacetylase 2; HD2)

**CATALOG NO.:** KDA-21-277

**LOT NO.:**

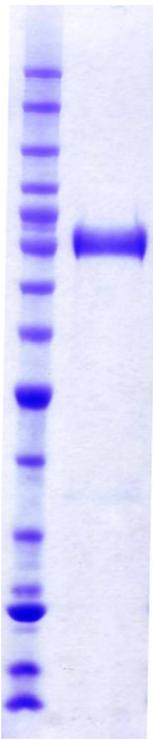
**DESCRIPTION:** Human recombinant HDAC2 (Full length) (residues 1-488; Genbank Accession # NM\_001527; MW = 82.9 kDa) expressed in insect cells with a C-terminal GST-fusion tag.

**PURITY:** >95% by SDS-PAGE

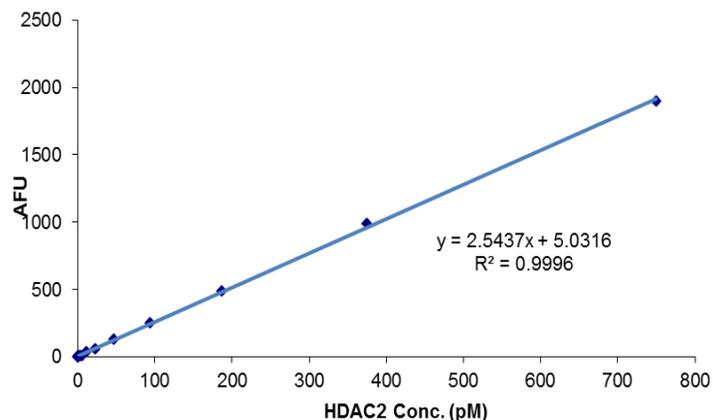
**ASSAY CONDITIONS:** RBC's HDAC2 displays lysine deacetylase activity in an endpoint, trypsin-coupled reaction with a fluorogenic substrate. The deacetylation reaction is performed in 50 mM Tris-HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl<sub>2</sub>, 1 mg/ml BSA, with RHK-K(Ac)-AMC as substrate (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 MgCl<sub>2</sub>.

**SUPPLIED AS:** \_ μg/μL in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 10 % glycerol

**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 (12% acrylamide) of 2 μg of RBC HDAC2.** MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, **50**, 40, 30, 25, **20**, 15, 10 kDa.



**Assay of HDAC2 Lysine Deacetylase Activity.** Reactions were 60 min., 37°C with 50 μM RHK-K(Ac)-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 (2,543.7 AFU/pM/60 min.) corresponds to a specific activity of 12.2 pmol/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.