

## PRODUCT DATASHEET

HDAC5

(Histone deacetylase 5)

CATALOG NO.: KDA-21-280 LOT NO.:

**DESCRIPTION:** Human recombinant HDAC5 (residues 656-1122; Genbank Accession # NM\_005474; MW = 51.1 kDa) expressed in insect cells with a C-terminal His-fusion tag.

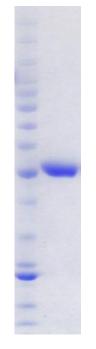
PURITY: >95% by SDS-PAGE

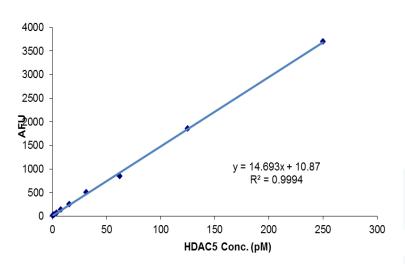
ASSAY CONDITIONS: RBC's HDAC5 displays lysine deacetylase activity in an endpoint, trypsin-coupled reaction with a fluorogenic substrate. The deacetylation reaction is performed in 50 mM Tris-HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl<sub>2</sub>, 1 mg/ml BSA, with Boc-K(Ac)-AMC as substrate (see 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 uM 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 as determined by OD<sub>280</sub>

**STORAGE:** -70°C. Thaw quickly and store ethanol on ice before use. The remaining, unused, undiluted protein should be snap frozen, for example in a dry/ice 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 bluestained SDS-PAGE (4-12% acrylamide) of 4 µg of RBC HDAC5. MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, 50, 40, 30, 25, 20, 15, 10 kDa.





Assay of HDAC5 Lysine Deacetylase Activity. Reactions were 60 min.,  $37^{\circ}$ C with  $100~\mu$ M Boc-K(TFA)-AMC as substrate. Fifty  $\mu$ L 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 ( 14.693~AFU/pM/60~min.) corresponds to a specific activity of 9 mmol/min./ $\mu$ g under these conditions. (Calculated from an AMC standard curve, slope =  $550~AFU/\mu$ M.)

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

## Reaction Biology

1 Great Valley Parkway, Malvern PA, USA 19355 requests@reactionbiology.com www.reactionbiology.com