

Recombinant HDAC11 (2-347) protein

Catalog No: 31538, 31938

Lot No: 20417002

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.15 µg/µl

Source: Human

Buffer Contents: Recombinant HDAC11 (2-347) protein is supplied at a concentration of 0.15 µg/µl in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 5% glycerol, 0.04% Triton X-100, 0.2 mM TCEP.

Background: HDAC11 (Histone Deacetylase 11) is a member of the class IV mammalian histone deacetylases (HDACs) involved in regulating chromatin structure during transcription. These enzymes catalyze the removal of acetyl groups from lysine residues of histones and other cellular proteins. Lysine N-ε-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in regulation of gene expression in various cellular functions. It consists of the transfer of an acetyl moiety from an acetyl coenzyme A to the ε-amino group of a lysine residue. In humans, expression of HDAC11 is limited to only a few organs, including brain, heart, muscle and kidney, suggesting an important role of HDAC11 in those tissues.

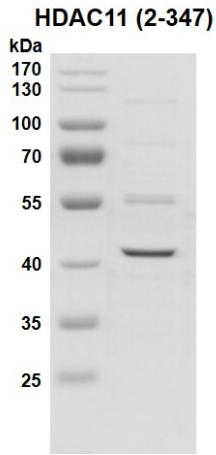
Protein Details: Recombinant HDAC11 (2-347) protein that includes amino acids 2-347 of human HDAC11 protein (accession number NP_079103.2) was expressed in Sf9 cells and contains an N-terminal FLAG-Tag with a molecular weight of 42.2 kDa. The purity of HDAC11 protein is >70% by SDS-PAGE.

Application Notes: Recombinant HDAC11 protein is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

HDAC Activity Assay Conditions: 1 µM H3K9ac peptide was incubated with different concentrations of HDAC11 protein in a 10 µl reaction system containing 25 mM Tris-HCl pH 8.0, 137 mM NaCl, 2.7 mM MgCl₂, 1 mM KCl and 0.1 mg/ml BSA for 30 minutes. 10 µl H3K9ac0 antibody and SA-CL665 mixture (each at 1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min. All reactions were performed at room temperature. HTRF assay was used for detection.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



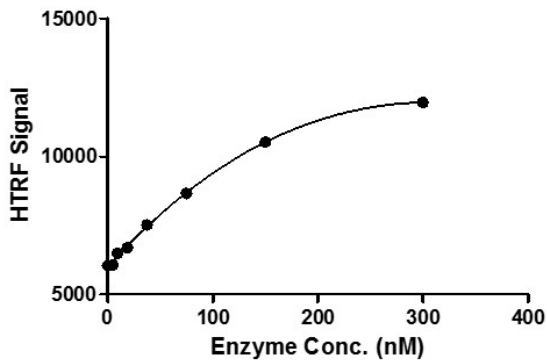
Recombinant HDAC11 (2-347) protein gel.

HDAC11 (2-347) protein was run on an 8% SDS-PAGE gel and stained with Coomassie Blue.

MW: 42.2 kDa

Purity: > 70%

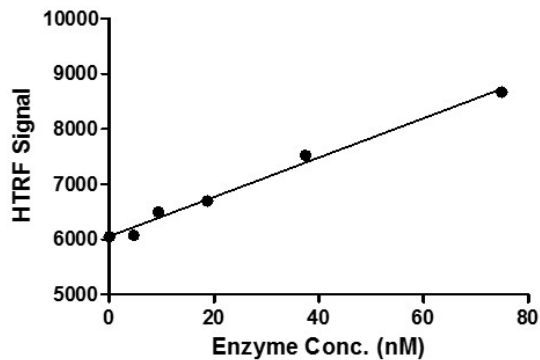
HDAC11 (2-347) Titration



HTRF assay for HDAC11 (2-347) protein activity

1 μ M histone peptide H3K9ac (1-21) was incubated with HDAC11 (2-347) in reaction buffer for 30 minutes at 37°C. H3K9me0 antibody was used to detect reaction products.

HDAC11 (2-347) Titration



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