Recombinant HDAC9 (604-1066) protein

Catalog No: 31537, 31937
Lot No: 20017002
Expressed In: Baculovirus
Quantity: 20, 1000 µg
Concentration: 0.25 µg/µl
Source: Human

Buffer Contents: Recombinant HDAC9 (604-1066) protein is supplied at a concentration of 0.25 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: HDAC9 (Histone Deacetylase 9) is a member of the class IIa 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 vivo, acetylation is controlled by the antagonistic activities of histone acetyltransferases (HATs) and histone deacetylases (HDACs). The HDACs are grouped into four classes, on the basis of similarity to yeast counterparts: HDAC class I (HDAC1, HDAC2, HDAC3 and HDAC8), class II (HDAC4, HDAC5, HDAC6, HDAC7, 9 and 10), class III (SIRT1-7) and class IV (HDAC11).In humans, HDAC9 is expressed in a wide variety of tissues. This gene is orthologous to the Xenopus and mouse MITR genes. HDAC9 represses MEF2 activity through recruitment of multicomponent corepressor complexes that include CtBP and HDAC1 and/or HDAC3. HDAC9 may play a role in hematopoiesis. It seems to inhibit skeletal myogenesis and to be involved in heart development. HDAC9 protects neurons from apoptosis, both by inhibiting JUN phosphorylation by MAPK10 and by repressing JUN transcription via HDAC1 recruitment to JUN promoter.

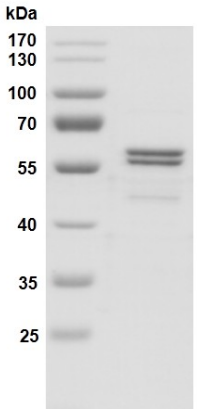
Protein Details: Recombinant HDAC9 (604-1066) protein that includes amino acids 604-1066 of human HDAC9 protein (accession number NP_848510.1) was expressed in Sf9 cells and contains an C-terminal FLAG-Tag with a molecular weight of 60.3 kDa. The purity of HDAC9 protein is >80% by SDS-PAGE.

Application Notes: Recombinant HDAC9 (604-1066) protein is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiing.

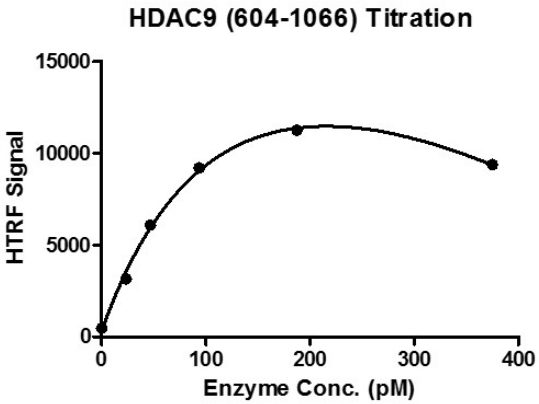
HDAC Activity Assay Conditions: Activity of HDAC6 protein was performed using HDAC-Glo™ Class IIa Assay from Promega. Different concentrations of HDAC Class IIa proteins were incubated with Final Detection Buffer containing 3.5 µM substrate and 1/20,000 developer reagent in 20 µl reaction system. Luminescence is detected after incubation for 20 min. at room temperature.

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.

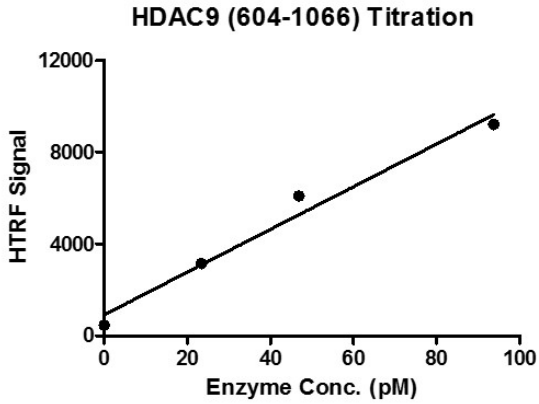
This product is for research use only and is not for use in diagnostic procedures.



Recombinant HDAC9 (604-1066) protein gel.HDAC9 (604-1066) protein was run on an 8% SDS- PAGE gel and stained with Coomassie Blue.
MW: 60.3 kDa
Purity: > 80%



HDAC-Glo™ Class IIa Assay for HDAC9 activity. Assay was performed using HDAC-Glo Class IIa Assay from Promega. 3.5 µM substrate was incubated with HDAC9 proteins and 1/20,000 developer reagent at room temperature, then luminescence was detected after incubation for 20 min.



HDAC-Glo™ Class IIa Assay for HDAC9 activity.Assay was performed using HDAC-Glo Class IIa Assay from Promega. 3.5 µM substrate was incubated with HDAC9 proteins and 1/20,000 developer reagent at room temperature, then luminescence was detected after incubation for 20 min.