

Recombinant KAT8 / MYST1 protein

Catalog No: 81225, 81925

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.6 µg/µl

Source: Human

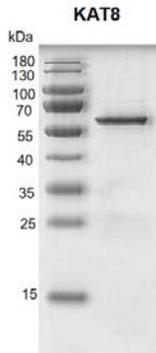
Buffer Contents: Recombinant KAT8 / MYST1 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

Background: KAT8 (Lysine Acetyltransferase 8), also called as MYST1 or HMOF, is a histone acetyltransferase which may be involved in transcriptional activation. It may influence the function of ATM. As part of the MSL complex it is involved in acetylation of nucleosomal histone H4 producing specifically H4K16ac. As part of the NSL complex it may be involved in acetylation of nucleosomal histone H4 on several lysine residues. That activity is less specific than the one of the MSL complex. KAT8 can also acetylate TP53 / p53 at 'Lys-120'. Diseases associated with KAT8 include Atrial Septal Defect 4. Among its related pathways are Chromatin Regulation / Acetylation and Chromatin organization.

Protein Details: Full length of Recombinant KAT8 / MYST1 protein (accession number NP_115564.2) was expressed in a baculovirus expression system and contains an N-terminal FLAG tag. The molecular weight of the protein is 53.7 kDa.

Application Notes: Recombinant KAT8 / MYST1 protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



Recombinant KAT8 / MYST1 protein gel

10% SDS-PAGE gel with Coomassie blue staining

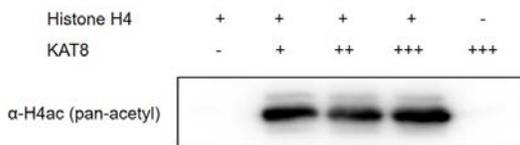
MW: 53.7 kDa

Purity: >90%



Recombinant KAT8 / MYST1 protein activity assay

2 μ g Recombinant Mononucleosomes H3.1 (Cat. No. 81070) was incubated with 0 μ g (-), 0.1 μ g (+), 0.2 μ g (++) and 0.4 μ g (+++) KAT8 / MYST1 protein in a 20 μ l reaction system containing 50 mM Tris-HCl pH 8.6, 2 mM MgCl₂, 1 mM TCEP, 0.02% Triton X-100 and 20 μ M Acetyl-CoA for 2 hr at RT. Reaction products were detected by Western blot using H4ac (pan-acetyl) antibody (Cat. No. 39243, 1:5000 dilution).



Recombinant KAT8 / MYST1 protein activity assay

0.5 μ g Recombinant Histone H4 (Cat. No. 31493) was incubated with 0 μ g (-), 0.1 μ g (+), 0.2 μ g (++) and 0.4 μ g (+++) KAT8 / MYST1 protein in a 20 μ l reaction system containing 50 mM Tris-HCl pH 8.6, 2 mM MgCl₂, 1 mM TCEP, 0.02% Triton X-100 and 20 μ M Acetyl-CoA for 2 hr at RT. Reaction products were detected by Western blot using H4ac (pan-acetyl) antibody (Cat. No. 39243, 1:5000 dilution).