

Recombinant SETD8 protein

Catalog No: 31427, 31827

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.3 µg/µl

Source: Human

Buffer Contents: Full length recombinant SETD8 protein is supplied at a concentration of 0.3 µg/µl in 25 mM Tris pH 8.0, 300 mM NaCl, 5% Glycerol, 0.04% Triton X-100 and 0.2 mg/ml 3× Flag peptide.

Background: SETD8 (SET Domain Containing (Lysine Methyltransferase) 8) is Protein-lysine N-methyltransferase that monomethylates both histones and non-histone proteins. It specifically catalyzes monomethylation of histone H4 lysine 20 (H4K20) which is enriched during mitosis and represents a specific tag for epigenetic transcriptional repression. H4K20me0 is also involved in DNA damage response. Besides H4K20, SETD8 monomethylates non-histone substrates including proliferating cell nuclear antigen (PCNA) and promotes carcinogenesis by deregulating PCNA expression. It also mediates monomethylation of p53/TP53 at 'Lys-382' and leads to repress p53/TP53-target genes.

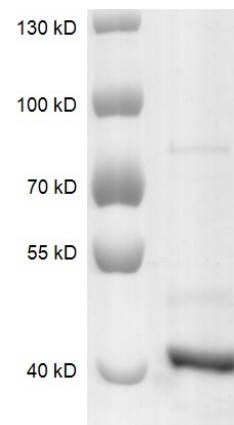
Protein Details: Full length recombinant SETD8 protein (accession number NP_065115.3) was expressed in Sf9 cells and contains an N-terminal Flag tag with a molecular weight of 42.2 kDa. The recombinant protein is >85% pure by SDS-PAGE.

Application Notes: Recombinant SETD8 protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

Specific Activity: H4K20 monomethyltransferase

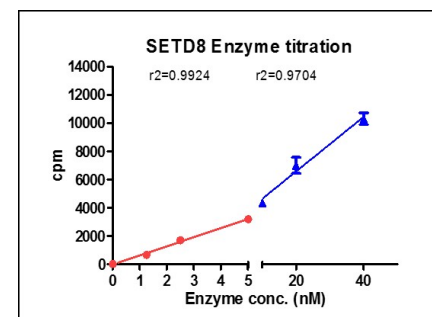
Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

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



Recombinant SETD8 protein gel.

Recombinant SETD8 was run on an 8% SDS-PAGE gel and stained with Coomassie blue.



Recombinant SETD8 protein activity assay.

Recombinant SETD8 activity titration was assessed using a Radiometry assay. Titration curves were generated to show signal response in the presence of histone peptide substrate at increasing SETD8 concentrations. Data provided courtesy of ChemPartner.