Recombinant NSUN1 protein

Catalog No: 81170, 81870
Expressed In: Baculovirus

Quantity: 20, 1000 µg
Concentration: 0.4 µg/µl
Source: Human

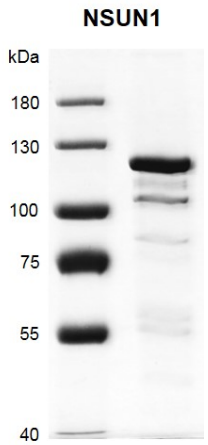
Buffer Contents: Recombinant NSUN1 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

Background: NSUN1, also called as NOP2 (Nucleolar Protein 2 Homolog), is a member of NSUN family. It is involved in ribosomal large subunit assembly. It's a S-adenosyl-L-methionine-dependent methyltransferase that specifically methylates the C(5) position of cytosine 4447 in 28S rRNA (Probable). NSUN1 may also play a role in the regulation of the cell cycle and the increased nucleolar activity that is associated with the cell proliferation.

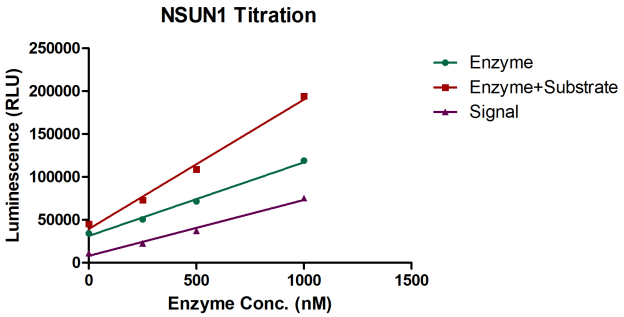
Protein Details: Recombinant NSUN1 protein was expressed in a baculovirus expression system as the full length protein (accession number NP_001245237.1) with an N-terminal FLAG tag. The molecular weight of the protein is 90.6 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

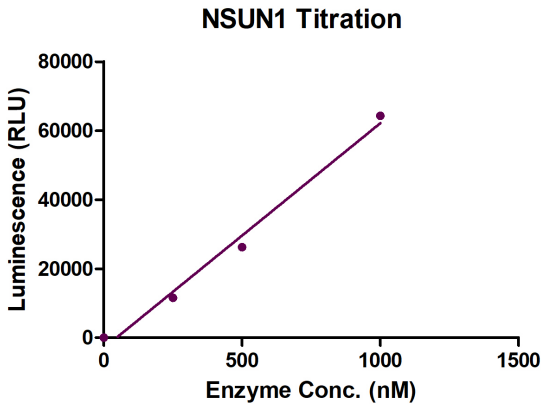
Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product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



Recombinant NSUN1 protein
7.5% SDS-PAGE Coomassie staining
MW: 90.6 kDa
Purity: >80%



MTase-Glo assay for NSUN1 methyltransferase activity
400 ng total RNA and 1 µM SAM was incubated with different concentrations of NSUN1 protein in 8 µl reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X -100, 2 mM MgCl2, 1 mM TCEP at room temperature for 1 hour (0.2 U/µL RRI was added in this system). 5×MTase-Glo Reagent was added to the products and incubated for 30 min. Then MTase-Glo Detection was added, and luminescence was read after another 30 min incubation.



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