

## Recombinant NSUN3 protein

**Catalog No:** 81183

**Lot No:** 21618001

**Expressed In:** Baculovirus

**Quantity:** 20 µg

**Concentration:** 0.15 µg/µl

**Source:** Human

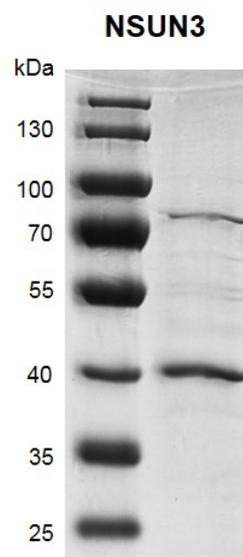
**Buffer Contents:** Recombinant NSUN3 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

**Background:** NSUN3 (NOP2/Sun RNA Methyltransferase Family Member 3), is a member of NSUN family. Gene Ontology (GO) annotations related to this gene include RNA binding and methyltransferase activity. NSUN3 is said to be a mitochondrial tRNA methyltransferase that mediates methylation of cytosine to 5-methylcytosine (m5C) at position 34 of mt-tRNA(Met). mt-tRNA(Met) methylation at cytosine(34) takes place at the wobble position of the anticodon and initiates the formation of 5-formylcytosine (f(5)c) at this position. mt-tRNA(Met) containing the f(5)c modification at the wobble position enables recognition of the AUA codon in addition to the AUG codon, expanding codon recognition in mitochondrial translation.

**Protein Details:** Recombinant NSUN3 protein was expressed in a baculovirus expression system as the full length protein (accession number NP\_071355.1) with an N-terminal FLAG tag. The molecular weight of the protein is 39.5 kDa.

**Application Notes:** Recombinant NSUN3 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 NSUN3 protein**  
10% SDS-PAGE Coomassie staining  
MW: 39.5 kDa  
Purity: >80%