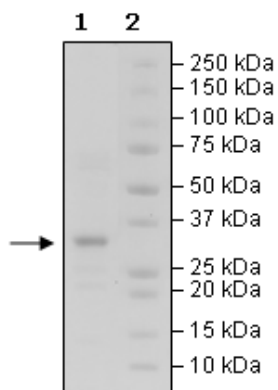


Product Information

Description:	Recombinant full-length human NMNAT2 (nicotinamide nucleotide adenylyltransferase 2) transcript variant 1, encompassing amino acids 2-307(end). This construct contains an N-terminal His-tag (6xHis). This protein was affinity purified.
Background:	NMNAT2 (nicotinamide nucleotide adenylyltransferase 2) is an NAD synthase involved in the NAD (nicotinamide adenine dinucleotide) biosynthetic pathway, by catalyzing the transfer of ATP to NMN (nicotinamide mononucleotide). It is present in the cytoplasm and Golgi apparatus, and it is abundant in the brain. It can function in several signaling pathways, being of the NMNAT2-NAD ⁺ -PARP (poly-ADP-ribosyl transferase proteins) and the NMNAT2-NAD ⁺ -SIRT (sirtuin) axis. The dysfunction of NMNAT2 is linked to neurodegeneration. Overexpression of this protein is found in several solid tumors, where it can promote cell proliferation and apoptosis. Targeting NMNAT2 can thus be a viable strategy in cancer therapy.
Species:	Human
Construct:	NMNAT2 (His-2-307(end))
Concentration:	0.23 mg/ml
Expression System:	<i>E. coli</i>
Purity:	70%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 20% glycerol, and 200 mM Imidazole
MW:	35 kDa
Genbank Accession:	NM_015039
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Specific Activity:	≥390 pmol/min/μg
Assay Conditions:	Increasing concentrations of recombinant NMNAT2 (3.2-200 ng) were incubated in 50 mM Tris-HCl, pH 7.4, 5 mM MgCl ₂ , 0.05% Tween-20, 0.1 mM NMN, and 0.1 mM ATP in a final volume of 50 μl. The reaction was incubated for 30 minutes at 37°C. The amount of ATP consumed was calculated using Kinase-Glo [®] Plus Luminescence Kinase Assay (Promega #V3771).
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



NMNAT2 Activity

