Datasheet for ABIN7549865

NNMT Protein (AA 1-264) (His tag)

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Overview

Quantity:	1 mg
Target:	NNMT
Protein Characteristics:	AA 1-264
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NNMT protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant NNMT Protein expressed in mammalian cells.
Sequence:	MESGFTSKDT YLSHFNPRDY LEKYYKFGSR HSAESQILKH LLKNLFKIFC LDGVKGDLLI DIGSGPTIYQ LLSACESFKE IVVTDYSDQN LQELEKWLKK EPEAFDWSPV VTYVCDLEGN RVKGPEKEEK LRQAVKQVLK CDVTQSQPLG AVPLPPADCV LSTLCLDAAC PDLPTYCRAL RNLGSLLKPG GFLVIMDALK SSYYMIGEQK FSSLPLGREA VEAAVKEAGY TIEWFEVISQ SYSSTMANNE GLFSLVARKL SRPL **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts.

Product Details

	• Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	NNMT
Alternative Name:	NNMT (NNMT Products)
Background:	Nicotinamide N-methyltransferase (EC 2.1.1.1),FUNCTION: Catalyzes the N-methylation of nicotinamide using the universal methyl donor S-adenosyl-L-methionine to form N1-methylnicotinamide and S-adenosyl-L-homocysteine, a predominant nicotinamide/vitamin B3 clearance pathway (PubMed:8182091, PubMed:21823666, PubMed:23455543). Plays a central role in regulating cellular methylation potential, by consuming S-adenosyl-L-methionine and limiting its availability for other methyltransferases. Actively mediates genome-wide epigenetic and transcriptional changes through hypomethylation of repressive chromatin marks, such as H3K27me3 (PubMed:26571212, PubMed:23455543, PubMed:31043742). In a developmental context, contributes to low levels of the repressive histone marks that characterize pluripotent embryonic stem cell pre-implantation state (PubMed:26571212). Acts as a metabolic regulator primarily on white adipose tissue energy expenditure as well as hepatic gluconeogenesis and cholesterol biosynthesis. In white adipocytes, regulates polyamine flux by consuming S-adenosyl-L-methionine which provides for propylamine group in polyamine biosynthesis, whereas by consuming nicotinamide controls NAD(+) levels through the salvage pathway (By similarity). Via its product N1-methylnicotinamide regulates protein acetylation in hepatocytes,

Target Details

	by repressing the ubiquitination and increasing the stability of SIRT1 deacetylase (By similarity). Can also N-methylate other pyridines structurally related to nicotinamide and play a role in xenobiotic detoxification (PubMed:30044909). {ECO:0000250|UniProtKB:O55239, ECO:0000269|PubMed:21823666, ECO:0000269|PubMed:23455543, ECO:0000269|PubMed:26571212, ECO:0000269|PubMed:30044909, ECO:0000269|PubMed:31043742, ECO:0000269|PubMed:8182091}.
Molecular Weight:	29.6 kDa
UniProt:	P40261

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

