

32-6861: NNMT Human, Active

Application : Functional Assay

Alternative Name : Nicotinamide N-methyltransferase, EC 2.1.1.1, NNMT.

Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

NNMT is part of the family of transferases, especially those transferring one-carbon group methyltransferases. NNMT is mostly expressed in the liver, and a lower expression is seen in the kidney, lung, skeletal muscle, placenta and heart. NNMT catalyzes the N-methylation of nicotinamide and other pyridines to form pyridinium ions. This activity is significant for biotransformation of many drugs and xenobiotic compounds. NNMT is accountable for the enzymatic activity which uses S-adenosyl methionine as the methyl donor. NNMT expression is related with tumor stage and DFS time in hepatocellular carcinoma cases. NNMT is a good candidate as a tumor marker of various kinds of cancers. NNMT serum levels have significance in the premature detection and in the management of patients with colorectal cancer.

NNMT Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 284 amino acids (1-264 a.a) and having a molecular mass of 37.7kDa. NNMT is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : NNMT protein solution (1mg/ml) containing 20 mM Tris-HCl buffer (pH 8.0) and 20% glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : MGSSHHHHHH SSGLVPRGSH MESGFTSKDT YLSHFNPRDY LEKYYKFGSR HSAESQILKH LLKNLFKIFC LDGVKGDLLI DIGSGPTIYQ LLSACESFKE IVVTDYSDQN LQELEKWLLK EPEAFDWSPV VTYVCDLEGN RVKGPEKEEK LRQAVKQVLK CDVTQSQPLG AVPLPPADCV LSTLCLDAAC PDLPTYCRAL RNLGSLKPG GFLVIMDALK SSYYMIGEYK FSSLPLGREY VEAAYKEAGY TIEWFEVISQ SYSSTMANNE GLFSLVARKL SRPL.

Application Note

Specific activity is > 100 nmol/min/mg, and is defined as the amount of enzyme that transfer 1.0 nmole of methyl group per minute at 37C.