

## Nicotinamide N-Methyltransferase from Human, Recombinant

Cat. No. NATE-1656

Lot. No. (See product label)

### Introduction

**Description** Nicotinamide N-Methyltransferase (NNMT) methylates nicotinamide and other pyridine containing compounds. NNMT transfers a methyl group from S-adenosylmethionine (SAM) to nitrogen N1 of nicotinamide to produce 1-methylnicotinamide (MNA) and S-adenosylhomocysteine. MNA is a messenger molecule that increases neurite branching, serves as an anti-thrombotic, and has anti-inflammatory properties. The role of NNMT overexpression in cancers may be to alter epigenetic methylation patterns in two ways: by lowering the intracellular concentration of SAM, required by methyltransferase enzymes, and by depleting the available NAD<sup>+</sup> by transforming nicotinamide to MNA. Sirtuins use NAD<sup>+</sup> as a substrate to alter protein acetylation and ribosylation, including histone targets.

**Synonyms** NNMT

### Product Information

**Species** Human

**Source** recombinant N-terminal His- and SUMO-tagged protein expressed in E. coli

**Form** Liquid

**EC Number** E.C. 2.1.1.1

**Molecular Weight** 42.6 kDa

**Purity** > 95% by SDS-PAGE

### Storage and Shipping Information

**Storage** Store at -80°C

**Stability** As supplied, 6 months from the QC date provided on the Certificate of Analysis, when stored properly