# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-282aa

**UniProt No.** P11086

NCBI Accession No. NP\_002677

### **Alternative Names**

Phenylethanolamine N-methyltransferase, PENT, PNMTase, Noradrenaline-N-methyltransferase, Phenylethanolamine N-methyltransferase

# **PRODUCT SPECIFICATION**

#### **Molecular Weight**

30.8 kDa (282aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity > 95% by SDS-PAGE

Tag Non-Tagged

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

PNMT, also known as phenylethanolamine N-methyltransferase, is an enzyme found in the adrenal medulla that catalyzes the last step of the catecholamine biosynthesis pathway, which methylates norepinephrine to form epinephrine (adrenaline). The enzyme also has beta-carboline 2N-methyltransferase activity. This gene is thought to play a key step in regulating epinephrine production. Recombinant PNMT protein was expressed in E. coli and purified by using conventional chromatography techniques.



### **Amino acid Sequence**

MSGADRSPNA GAAPDSAPGQ AAVASAYQRF EPRAYLRNNY APPRGDLCNP NGVGPWKLRC LAQTFATGEV SGRTLIDIGS GPTVYQLLSA CSHFEDITMT DFLEVNRQEL GRWLQEEPGA FNWSMYSQHA CLIEGKGECW QDKERQLRAR VKRVLPIDVH QPQPLGAGSP APLPADALVS AFCLEAVSPD LASFQRALDH ITTLLRPGGH LLLIGALEES WYLAGEARLT VVPVSEEEVR EALVRSGYKV RDLRTYIMPA HLQTGVDDVK GVFFAWAQKV GL

### **General References**

Kaneda N., et al. (1998) Biochem Biophys Res Commun. 249(2):405-9. Ji Y., et al. (2005) J. Neurochem. 95:1766-1776.

## DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.