## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-320aa

**UniProt No.** Q9BXD5

NCBI Accession No. NP\_110396

Alternative Names N-acetylneuraminate lyase, c112, C1orf13, DHDPS1, MGC149582, MGC61869, NPL1

# **PRODUCT SPECIFICATION**

Molecular Weight 37.3 kDa (340aa) confirmed by MALDI-TOF

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

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl,1mM DTT

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

**Tag** His-Tag

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

NPL, also known as N-acetylneuraminate lyase, is an enzyme that catalyzes the chemical reaction. (Nacetylneuraminate ->N-acetyl-D-mannosamine + pyruvate) This protein belongs to the family of lyases, specifically the oxo-acid-lyases, which cleave carbon-carbon bonds. It participates in amino sugars metabolism. Recombinant human NPL protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.



#### **Amino acid Sequence**

<MGSSHHHHHH SSGLVPRGSH> MAFPKKKLQG LVAATITPMT ENGEINFSVI GQYVDYLVKE QGVKNIFVNG TTGEGLSLSV SERRQVAEEW VTKGKDKLDQ VIIHVGALSL KESQELAQHA AEIGADGIAV IAPFFLKPWT KDILINFLKE VAAAAPALPF YYYHIPALTG VKIRAEELLD GILDKIPTFQ GLKFSDTDLL DFGQCVDQNR QQQFAFLFGV DEQLLSALVM GATGAVGSTY NYLGKKTNQM LEAFEQKDFS LALNYQFCIQ RFINFVVKLG FGVSQTKAIM TLVSGIPMGP PRLPLQKASR EFTDSAEAKL KSLDFLSFTD LKDGNLEAGS

#### **General References**

Schauer R. et al. (1982) Adv Carbohydr Chem Biochem. 40:131-234. COMB DG. et al. (1960) J Biol Chem. 235:2529-2537

### DATA

#### SDS-PAGE



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