# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-219aa

**UniProt No.** Q9UKK9

NCBI Accession No. NP\_054861

## **Alternative Names**

Nudix hydrolase 5, ADP-sugar pyrophosphatase, 8-oxo-dGDP phosphatase, Nuclear ATP-synthesis protein NUDIX5, Nucleoside diphosphate-linked moiety X motif 5, Nudix motif 5, YSA1H, hYSAH1, NUDIX5

# **PRODUCT SPECIFICATION**

## **Molecular Weight**

26.5 kDa (239aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will be appear higher)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 0.1M NaCl

Purity

> 85% by SDS-PAGE

Tag His-Tag

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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

NuDT5 is a member of the nudix hydrolase family which eliminate toxic nucleotide derivatives from the cell. NuDT5 hydrolyzes ADP-ribose and ADP-mannose in the presence of magnesium, and also hydrolyzes other nucleotide sugars with low activity such as ADP-glucose and diadenosine diphosphate. As a nudix hydrolase, NuDT5 contains a central nudix motif and functions to eliminate toxic nucleotide metabolites from the cell while maintaining the levels of signaling nucleotides. NuDT5 is widely expressed but is most abundant in liver as a



homodimer. Recombinant human NuDT5 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

#### Amino acid Sequence

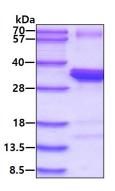
<MGSSHHHHHH SSGLVPRGSH> MESQEPTESS QNGKQYIISE ELISEGKWVK LEKTTYMDPT GKTRTWESVK RTTRKEQTAD GVAVIPVLQR TLHYECIVLV KQFRPPMGGY CIEFPAGLID DGETPEAAAL RELEEETGYK GDIAECSPAV CMDPGLSNCT IHIVTVTING DDAENARPKP KPGDGEFVEV ISLPKNDLLQ RLDALVAEEH LTVDARVYSY ALALKHANAK PFEVPFLKF

## **General References**

Yu HN., et al. (2007) Biochem Biophys Res Commun. 354(3):764-8.

## DATA

#### **SDS-PAGE**



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