

Recombinant human TPMT protein

Catalog Number: TPM0701

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-245aa

UniProt No.

Q9BS45

NCBI Accession No.

AAH05339

Alternative Names

Thiopurine S-methyltransferase, Thiopurine S-methyltransferase, TPMT, Thiopurine S-methyltransferase HGNC:12014, S adenosyl L methionine thiopurine S methyltransferase, Thiopurine methyltransferase, Thiopurine S methyltransferase.

PRODUCT SPECIFICATION

Molecular Weight

28 kDa (245aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2mM PMSF, 2mM EDTA

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

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

TPMT, thiopurine S-methyltransferase, is a cytosolic enzyme that metabolizes thiopurine drugs via S-adenosyl-L-methionine as the S-methyl donor and S-adenosyl-L-homocysteine as a byproduct. Thiopurine drugs such as 6-

Recombinant human TPMT protein

Catalog Number: TPM0701

mercaptapurine and azathioprine are used as chemotherapeutic agents. TPMT activity exhibits autosomal codominant genetic polymorphism, and patients inheriting TPMT-deficiency are at high risk of potentially fatal hematopoietic toxicity. Recombinant human TPMT was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

MDGTRTSLDI EEYSDTEVQK NQVLTLEEWQ DKWVNGKTAF HQEQGHQLLK KHLDTFLKGG SGLRVFFPLC GKAVEMKWFA
DRGHSVVGVE ISELGIQEFF TEQNLSYSEE PITEIPGTKV FKSSSGNISL YCCSIFDLPR TNIGKFDMIW DRGALVAINP
GDRKCYADTM FSLLGKKFQY LLCVLSYDPT KHPGPPFYVP HAEIERLFGK ICNIRRLEKV DAFEERHKSW GIDCLFEKLY LLTEK

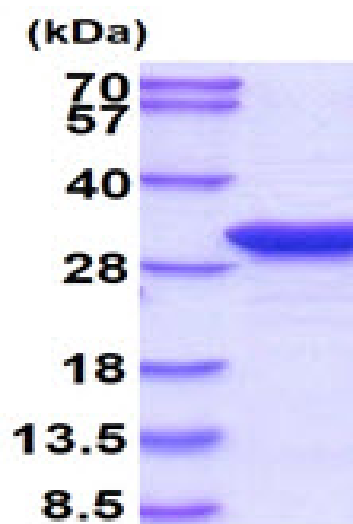
General References

Tai HL., et al. (1997) Proc Natl Acad Sci uSA. 94:6444-9.

Odani S., et al.(2001) J Biochem. 129(2):213-9.

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)