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-

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mercaptopurine 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

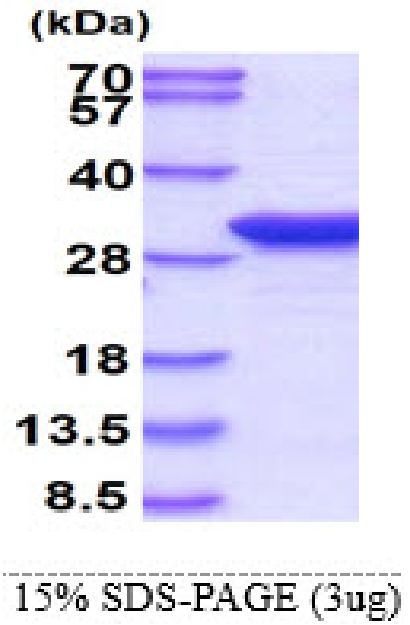
MDGTRTSLDI EEYSDTEVQK NQVLTLEEWQ DKWVNGKTAF HQEQGHQLLK KHLDTFLKGK SGLRVFFPLC GKAVEMKWFA DRGHSVVGVE ISELGIQEFF TEQNLSYSEE PITEIPGTKV FKSSSGNISL YCCSIFDLPR TNIGKFDMIW DRGALVAINP GDRKCYADTM FSLLGKKFQY LLCVLSYDPT KHPGPPFYVP HAEIERLFGK ICNIRRLEKV DAFEERHKSW GIDCLFEKLY LLTEK

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



15% SDS-PAGE (3ug)

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