

TPMT, 1-245aa, Human, Recombinant, E.coli

Cat.NO.: TP04288

3th Edition

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

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-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.

Form: In 20mM Tris 8.0, 0.2mM PMSF, 2mM EDTA

Molecular Weight: 28 kDa (245 aa), confirmed by MALDI-TOF.

Sequences:

MDGTRTSLDIEEYSDTEVQKNQVLTLEEWQDKWVNGKTAHQEQGHQLLKKHLDTFLKKGKSGLRVFFPLCGKAVE
MKWFADRGHSVVGVEISELGIQEFFTEQNLSEEPITEIPGTVFKSSSGNISLYCCSIFDLPRNTNIGKFDMIWDRG
ALVAINPGDRKCYADTMFSLGKFKFYLLCVLSYDPTKHPGPPFYVPHAEIERLFGKICNIRRLEKVDAFEERHKSW
GIDCLFEKLYLLTEK

Purity: > 95% by HPLC

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

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.