

Recombinant mouse Glutathione S-transferase mu 1/GSTM1 protein

Catalog Number: ATGP0413

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-218aa

UniProt No.

P10649

NCBI Accession No.

NP_034488

Alternative Names

pmGT10, GSTM1, GST1, GST mu, GST class mu 1, GST class Mu, GST 1-1, Glutathione S-transferase Mu 1, Glutathione S transferase mu

PRODUCT SPECIFICATION

Molecular Weight

28.1 kDa (238aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

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

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is > 40,000pmol/min/ug, and is defined as the amount of enzyme that conjugate 1.0 u mole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

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

GSTM1 is a glutathione S-transferase that belongs to the mu class. This enzyme acts by catalyzing the reaction of glutathione with an acceptor molecule to form an S-substituted glutathione (S=sulfur). The reactions utilizing

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glutathione contribute the transformation of a wide variety of electrophiles, including reactive products of lipid, protein, carcinogens, therapeutic drugs, environmental toxins, and products of oxidative stress. Recombinant GSTM1 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 MPMILGYWNV RGLTHPIRML LEYTDSSYDE KRYTMGDAPD FDRSQWLNEK FKLGLDFPNL
PYLIDGSHKI TQSNAILRYL ARKHHLDGET EEERIRADIV ENQVMDTRMQ LIMLCYNPDF EKQKPEFLKT IPEKMKLYSE
FLGKRPWFAG DKVTYVDFLA YDILDQYRMF EPKCLDAFPN LRDFLARFEG LKKISAYMKS SRYIATPIFS KMAHWSNK

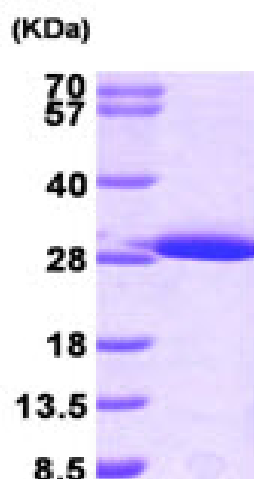
General References

Goekkurt E., et al. (2009) J Clin Oncol. 27(17):2863-73.

Koutros S., et al. (2009) Cancer Res. 69(5):1877-84.

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)