

Recombinant *S. Japonicum* Glutathione S-transferase/GST protein

Catalog Number: ATGP0401

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-218aa

UniProt No.

P08515

NCBI Accession No.

AAB59203.1

Alternative Names

Glutathione S-transferase class-mu 26 kDa isozyme, GST 26, Sj26 antigen, SjGST

PRODUCT SPECIFICATION

Molecular Weight

28.3 kDa (244aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

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

Biological Activity

Specific activity is > 10unit/mg, and is defined as the amount of enzyme that conjugate 1.0 umole 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

Recombinant *S. Japonicum* Glutathione S-transferase/GST protein

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Description

Glutathione S-transferase (GST) represents a major group of detoxification enzymes. This enzyme acts by catalyzing the reaction of glutathione with an acceptor molecule to form an S-substituted glutathione (S=sulfur). The reactions utilizing glutathione contribute the transformation of a wide range of compounds, including carcinogens, therapeutic drugs, and products of oxidative stress. As well as its enzymatic activities, GST may also bind toxins and function as transport protein. Because of this, an early term for GSTs was ligandin. Glutathione S-transferase was originally separated from *Schistosoma japonicum* but currently isolated from recombinant *E. coli* source. Recombinant *Schistosoma japonicum* GST, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

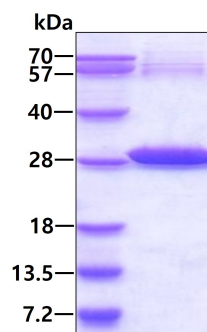
<MGSSHHHHHH SSGLVPRGSH> MSPILGYWKI KGLVQPTRL L LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID GDVKLTQSMA IIRYIADKHN MLGGCPKERA EISMLEGAVL DIRYGVSRIA YSKDFETLKV DFLSKLPEML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFPKLVCFK KRIEAIQID KYLKSSKYIA WPLQGQWQATF GGGDHPPK<SD LVPR>

General References

Hayes JD., et al. (1995). Crit Rev Biochem Mol Biol. 30(6):445-600
Bekett GJ., et al. (1987). J. Clin Biochem Nutr. 2:1-24
Smith DB., et al. (1988). Mol Biochem Parasitol. 27(2-3):249-56.

DATA

SDS-PAGE



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