Schistosoma japonicum Glutathione S-transferase / GST Protein

Catalog Number: **11213-HNAE**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

Glutathione S-transferase

Protein Construction:

A DNA sequence encoding the Glutathione S-transferase (P08515) (Met1-Lys218) was expressed.

Source: Schistosoma japonicum

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant Glutathione S-transferase (GST) consists of 218 amino acids and predicts a molecular mass of 25.5 KDa. It migrates as an approximately 29 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

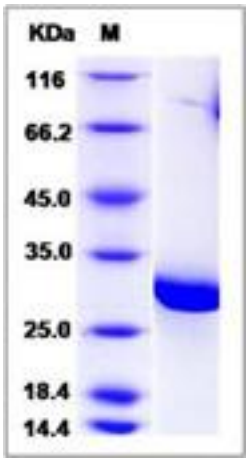
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Genetic engineers have used glutathione S-transferase to create the GST gene fusion system. This system is used to purify and detect proteins of interest. In a GST gene fusion system, the GST sequence is incorporated into an expression vector alongside the gene sequence encoding the protein of interest. Induction of protein expression from the vector's promoter results in expression of a fusion protein: the protein of interest fused to the GST protein. This GST-fusion protein can then be purified from cells via its high affinity for glutathione. GST is commonly used to create fusion proteins. The tag has the size of 220 amino acids (roughly 26 KDa), which, compared to other tags like the myc- or the FLAG-tag, is quite big. However, many commercially-available sources of GST-tagged plasmids include a thrombin domain for cleavage of the GST tag during protein purification.

References

1.Douglas KT . et al., 1987, Adv Enzymol Relat Areas Mol Biol.?59: 103-67.?
2.Beckett GJ. et al., 1993, ?Adv Clin Chem. 30: 281-380.
3.Wilce MC. et al., 1994, ?Biochim Biophys Acta. 1205?(1): 1-18.