

Product No. G-7781 Lot 076H4835

Anti-Glutathione-S-Transferase (GST)

Developed in Rabbit IgG Fraction of Antiserum

Anti-Glutathione-S-Transferase (GST) is developed in rabbit using repeated injections of GST as the immunogen. Whole antiserum is fractionated and then further purified by ion-exchange chromatography to provide the IgG fraction of antiserum which is essentially free of other rabbit serum proteins. The product is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

Anti-Glutathione-S-Transferase is specific for GST from *Schistosoma japonicum*, but does not recognize GST from rabbit liver, porcine liver, bovine liver, rat liver or human placenta when tested by ELISA.

Description

Glutathione-S-Transferase (GST) is an enzyme which catalyzes the reaction of glutathione with a wide range of electrophilic substrates and therefore plays a role in the detoxication of potential alkylating agents. GST, a 27.5 kD molecule, can be expressed as part of a fusion protein in several expression systems. Antibodies to GST are used to identify the successful expression of fusion proteins. Anti-Glutathione-S-Transferase recognizes native as well as denatured forms of GST.

Working Dilution 1:2,000

The working dilution was determined by indirect immunoblotting using purified recombinant GST or lysates of induced *E. coli* expressing GST.

In order to obtain best results, it is recommended that each individual user determine their optimum working dilutions by titration assay.

Total Protein: 11 mg/ml by absorbance at 280 nm $(E_{280}^{1\%} = 14.0)$.

Uses

Rabbit Anti-Glutathione-S-Transferase may be used in a variety of immunoassays to identify the expression of GST fusion proteins. These assays include immunoblotting of bacterial lysates, dot blot immunoassay, ELISA or staining of cells transfected with a fusion protein expressing vector.

Storage

For continuous use, store at 2-8°C. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

*Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Reference

1. Smith, D., et al., Proc. Natl. Acad. Sci. USA, **83**, 8703 (1986).

Sigma warrants that its products conform to the information contained in this and other Sigma publications. Purchaser must determine the suitability of the products for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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