



## Product Specification Sheet

**Glutathione Transferase (GST/Fusion Protein) Protein Antibodies**

<b>Cat.</b> GST11-S	Rabbit Anti-GST (E. coli) Protein antiserum	<b>SIZE:</b> 100 ul
<b>Cat.</b> GST11-A	Rabbit Anti-GST (E. coli) protein IgG, aff pure	<b>SIZE:</b> 100 ug
<b>Cat.</b> GST11-C	Recombinant purified GST protein WB +ve control	<b>SIZE:</b> 100 ul

Expression of genes in E. coli or yeast or baculovirus offers a convenient system to produce large amounts of recombinant proteins that may otherwise be difficult to isolate from natural cells and tissues. Very often antibodies to these newly identified proteins are not available to study its biochemical properties, monitor protein expression, and purification. In order to circumvent this problem, short pieces of well-defined peptides (Poly-His, Flag-epitope or c-myc epitope or HA-tag) or small proteins (bacterial GST, MBP, Thioredoxin, b-Galactosidase, VSV-Glycoprotein etc) are often cloned along with the target gene. Proteins are expressed as fusion proteins. Antibodies to these fusion-tags are already available to monitor fusion protein expression and purification. Therefore, fusion-tags serve as universal tags much like secondary antibodies. Many tags have their own characteristics. Poly-His-fusion proteins (6 x His) can bind to Nickel-Sepharose or Nickel-HRP. GST-fusion proteins can bind to glutathione-Sepharose. Therefore, a high degree of purification of fusion protein can be achieved in just one affinity purification step. Purity of fusion proteins can be followed by Tag-antibodies. Very often, fusion proteins are directly injected into animals to generate antibodies. Some fusion tags can be removed later by treatment with enzymes to generate tag-free recombinant proteins.

**Source of Antigen and Antibodies**

<b>Antigen</b>	Bacterial GST (Schistosoma japonicum, ~27 kda) was expressed in E. coli and purified (>97%).
<b>Ab Host/type</b>	Rabbit, Polyclonal antiserum # <b>GST11-S</b> and IgG purified over antigen-agarose ( <b>Cat # GST11-A</b> )
<b>2-Ab</b>	Cat # SA-20320, goat anti-rabbit IgG- HRP (AP, biotin, FITC conjugates also available).
<b>-ve</b>	Cat # SA-20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Bacterial GST (Schistosoma japonicum, ~27 kda) was expressed in E. coli and purified (>97%). **For WB +ve control, Cat # GST11-C**, is formulated in SDS-PAGE sample buffer (reduced). This preparation is not biologically **inactive**. It is not suitable for ELISA or other applications where native protein is required. It is supplied in 100 ul/vial. For WB, heat once and load 10 ul/lane and visualize with appropriate antibodies (#GST11-S or GST11-A or GST12-M). This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Store frozen in suitable aliquots. Do not freeze, thaw, or heat repeatedly.

**Form & Storage of Antibodies/Peptide Control****Antiserum (unpurified)**

□ 100ul □ □ solution □ lyophilized powder  
Supplied 0.05% azide, **Reconstitute** powder in 100 ul PBS

**Affinity pure IgG**

□ 100 ug/100ul □ solution □ lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder** in PBS at 1mg/ml

**Storage**

**Short-term:** unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder

**Recommended Usage**

This antiserum or IgG have been tested by ELISA (suggested dilution 1K-10K) using 50-100 ng/well GST-coated ELISA plates. It recognizes both native GST or GST fusion proteins in Western blots (suggested dilution 1K). Antibody dilution will vary depending upon the type of technique used to detect primary antibody such calorimetric or chemiluminescence substrates. The nature and concentration of GST or GST fusion proteins may also affect antibody concentration.

This product is for in vitro research use only.

**Related material available from GSI****GST or GST-fusion protein ELISA kit**

Purified GST, Monoclonal anti-GST, GST Coated ELISA plates; Anti-Rabbit HRP conjugates'

**Western blot Recycling Kit;** Strips antibodies in 5-10 min at room temp.