



## Product Specification Sheet

### Anti-GST-FITC Conjugates

<b>Cat.</b> GST13-FITC	Goat Anti-GST IgG-FITC Conjugate	<b>SIZE:</b> 100 ul
	<b>FORM:</b> Soln	Lyophilized

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,  $\beta$ -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

Bacterial GST (*Schistosoma japonicum*, ~27 kda) was expressed in *E. coli* and purified (>97%). Purified GST was injected into **goats** to produce high titer polyclonal antibodies. Antibodies (IgG) were purified by delipidation, salt fractionation, and ion-exchange (IgG) (**cat # GST13-A**). It is supplied in PBS, pH 7.4 at 1 mg/100 ul in liquid or powder form. Dissolve in 100 ul water and use at 1:1K-1: 5K for Western and 1:1K-: 10K for ELISA.

Anti-GST IgG was coupled to Fluorescein isothiocyanate (FITC) (**Cat # GST13-FITC**). Antibody:FITC molar ratio is ~1.0-3.5). Anti-GST-FITC conjugate is supplied at 1 mg/100 ul in PBS, pH 7.4 containing 1% BSA and 0.01% azide as preservative or in powder form. Store liquid at 2-4oC for 2-4 weeks and at -20oC in suitable aliquots for long term storage. Do not store diluted (working solution) for more than a few hours.

Lyophilized vials or powder should be reconstituted in 100-500 ul PBS and stored in suitable size aliquots at -20oC or below.

#### Suggested usage

The products is suitable for IF or FACS and other antibody fluorescent based assays. An initial dilution of 1:50-1:1000 is suggested.

Antibody concentration must be optimized for each application under defined experimental conditions.

This product is for in vitro research use only.

#### Related material available from GSI

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

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

GST13-FITC      40818A