

## Anti-GST Rabbit Monoclonal Antibody Product Datasheet

**Catalog#** AYD03-100

**Clone#** RR697

**Predicted Molecular Wt:** Depending on customers' target of interest

**Purity:** ProA affinity purified IgG

**Species Cross-reactivity:** Species independent

**Form:** Liquid

*Species cross-reactivity determined by WB*

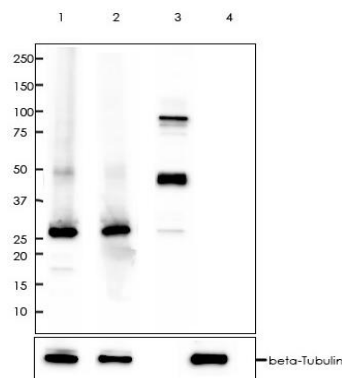
**Swissprot ID:** P08515

**Applications:** WB IF/ICC FC IP

### Background:

GST (Glutathione S-Transferase) is a 26kDa protein encoded by the parasitic helminth *Schistosoma japonicum* and widely used in the pGEX family of GST plasmid expression vectors as a fusion protein with foreign proteins.

This antibody can recognize both



Predicted MW: Depend on fusion protein with GST tag

Lane 1: 293 cell lysates transfected with N-terminal GST tagged gene (RR697 at 1:5,000 dilution).

Lane 2: 293 cell lysates transfected with C-terminal GST tagged gene (RR697 at 1:5,000 dilution).

Lane 3: two fusion proteins, one (45KD) with GST tag on C-terminal (RR697 at 1:5,000 dilution), the other (83KD) with GST tag on N-terminal (RR697 at 1:5,000 dilution).

Lane 4: Mock 293 cell lysates (RR697 at 1:5,000 dilution)

Lane 1&2: 2 µg per lane

Lane 3: 20 ng per lane

Lane 4: 10 µg per lane

2nd Ab:

GAR HRP(H+L) 1:5,000

Exposure: 30s

### Immunogen:

Recombinant full length protein within *Schistosoma japonicum* GST aa 1-218. The exact sequence is proprietary.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### Storage conditions:

-20°C.

### Storage instructions:

Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

WB: 1:2,000 - 1:5,000

IF/ICC: 1:10,000 - 1:40,000

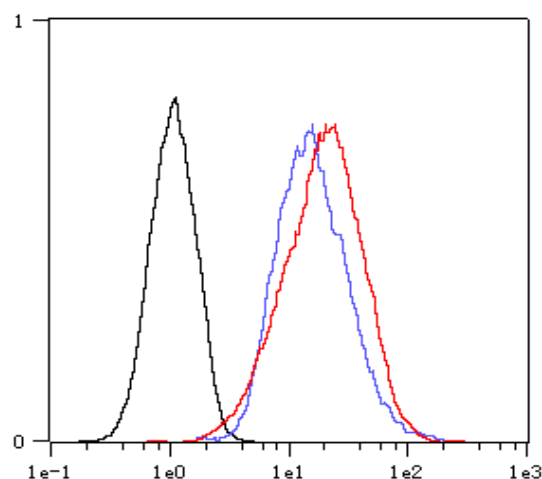
FC: 1:800 - 1:2,000

IP: 1:50

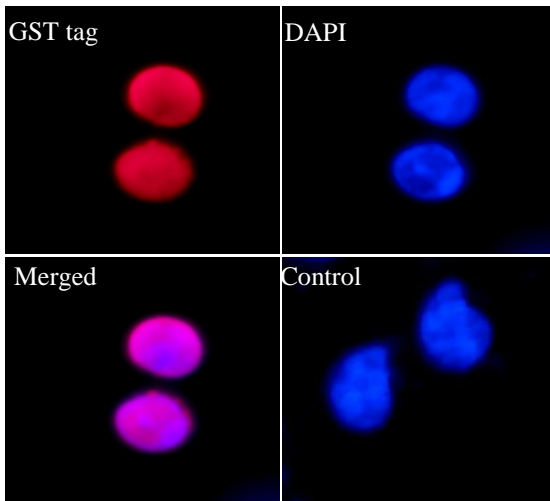
### Background References:

1. Wang T et al. *Onco Targets Ther* 10:1809-1819 (2017).

2. Su QP et al. *Sci Rep* 6:24002 (2016).

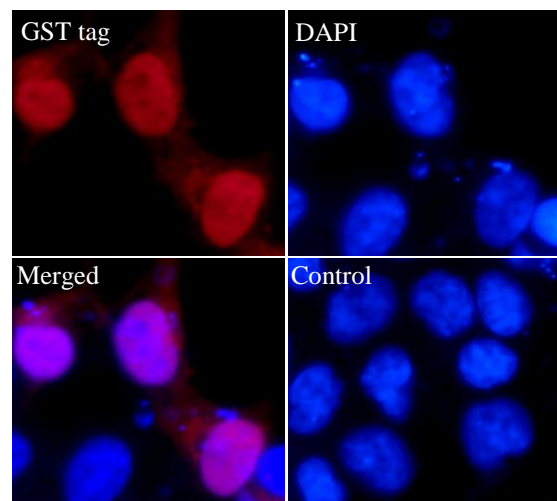


Overlay histogram showing 293 cells transfected with C-terminal (Red) and N-terminal (Blue) GST tagged gene stained with RR697. The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR697, 1:2,000 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.



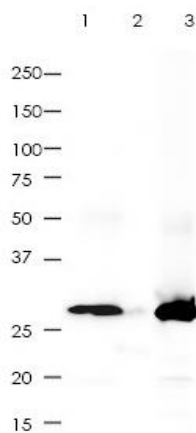
RR697 staining GST tag in 293 cells transfected with N-terminal GST tagged gene by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:40,000) at 4°C. An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain.

Control: PBS and secondary antibody, An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG (1:500).



RR697 staining GST tag in 293 cells transfected with C-terminal GST tagged gene by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:40,000) at 4°C. An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain.

Control: PBS and secondary antibody, An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG (1:500).



GST tag was immunoprecipitated from 0.2mg of 293 whole cell lysates transfected with C-terminal GST tagged gene with RR697 at 1:50 dilution.

2nd Ab:

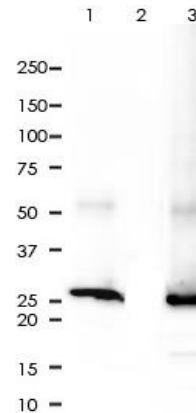
GAR HRP for IP 1:500

Lane 1: RR697 IP in 293 whole cell lysates transfected with C-terminal GST tagged gene

Lane 2: PBS instead of RR697 in 293 whole cell lysates transfected with C-terminal GST tagged gene

Lane 3: 293 whole cell lysate transfected with C-terminal GST tagged gene, 2 µg (input)

Exposure: 10s



GST tag was immunoprecipitated from 0.2mg of 293 whole cell lysates transfected with N-terminal GST tagged gene with RR697 at 1:50 dilution.

2nd Ab:


GAR HRP for IP 1:500

Lane 1: RR697 IP in 293 whole cell lysates transfected with N-terminal GST tagged gene

Lane 2: PBS instead of RR697 in 293 whole cell lysates transfected with N-terminal GST tagged gene

Lane 3: 293 whole cell lysate transfected with N-terminal GST tagged gene, 2 µg (input)

Exposure: 10s

Product QC'd by: 

For research use only. Not for use in diagnostic or therapeutic applications.