GST (B-14): sc-138

**BACKGROUND**

Plasmid vectors for the expression of coding regions of eukaryotic genes in *E. coli* are in common usage; such expression vectors often encode hybrid fusion proteins containing part prokaryotic and part eukaryotic specified proteins. For instance, the pGEX.3X expression vector developed by Smith and Johnson allows for synthesis of fusion proteins between glutathione-S-transferase (GST) and proteins encoded by inserted cDNA sequences. Antibodies derived from these GST fusion proteins are useful for checking protein expression both in plaques and on Western blots as well as for immunoaffinity purification of proteins expressed in *E. coli.*

**SOURCE**

GST (B-14) is a mouse monoclonal antibody raised against the 26 kDa GST specific domain of a fusion protein encoded by a pGEX.3X recombinant vector.

**PRODUCT**

Each vial contains 200 μg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GST (B-14) is available conjugated to agarose (sc-138 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-138 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycocerythrin (sc-138 PE), fluorescein (sc-138 FITC), Alexa Fluor® 488 (sc-138 AF488), Alexa Fluor® 546 (sc-138 AF546), Alexa Fluor® 594 (sc-138 AF594) or Alexa Fluor® 647 (sc-138 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM, and to either Alexa Fluor® 680 (sc-138 AF680) or Alexa Fluor® 790 (sc-138 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, GST (B-14) is available conjugated to biotin (sc-138 B), 200 μg/ml, for WB, IHC(P) and ELISA; and to either TRITC (sc-138 TRITC), 200 μg/ml, or Alexa Fluor® 405 (sc-138 AF405), 100 μg/2 ml, for IF, IHC(P) and FCM.

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**APPLICATIONS**

GST (B-14) is recommended for detection of GST fusion proteins and glutathione-S-transferase (GST) of *Schistosoma japonicum* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation (1-2 μg per 100-500 μg of total protein [1 ml of cell lysate]); of recombinant GST fusion proteins expressed in *E. coli* specifically designed to be used in combination with GST expression vectors such as pGEX.3X and pGEX.2T (Smith and Johnson, Gene 67: 31, 1998).

Molecular Weight of GST: 26 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGx BP-HRP: sc-516102 or m-IgGx BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**STORAGE**

Store at 4°C, **“DO NOT FREEZE”**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

GST (B-14) Alexa Fluor® 790: sc-138 AF790. Direct near-infrared western blot analysis of GST expression in Stat4 human recombinant (A) and *Schistosoma japonicum* recombinant GST fusion proteins. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 680: sc-516730.

GST (B-14) HRP: sc-138 HRP. Direct western blot analysis of *Schistosoma japonicum* recombinant GST fusion protein.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.