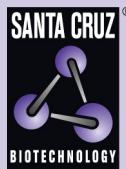


GST (110-218): sc-33614



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*.

REFERENCES

- Maniatis, T., Fritsch, E.F. and Sambrook, J. 1982. Molecular Cloning. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory.
- Smith, D.B. and Johnson, K.S. 1988. Single-step purification of polypeptides expressed in *Escherichia coli* as fusions with glutathione S-transferase. *Gene* 67: 31-40.
- Crabb, B.S. and Studdert, M.J. 1995. Expression of small regions of equine herpesvirus 1 glycoprotein C in *Escherichia coli*. *Vet. Microbiol.* 46: 181-191.
- Soler, D., Nomizu, T., Brown, W.E., Shibata, Y. and Auld, D.S. 1995. Matrixin: expression, purification and characterization. *J. Protein Chem.* 14: 511-520.
- Yu, L., Deng, K. and Yu, C.A. 1995. Cloning, gene sequencing and expression of the small molecular mass ubiquinone-binding protein of mitochondrial biquinol-cytochrome c reductase. *J. Biol. Chem.* 270: 25634-25638.
- Driscoll, J., Zuo, Y., Xu, T., Choi, J.R., Troxler, R.F. and Oppenheim, F.G. 1995. Functional comparison of native and recombinant human salivary histatin 1. *J. Dental Res.* 74: 1837-1844.
- Chen, Y.R., Yu, C.A. and Yu, L. 1996. Functional expression of subunit IV of *Rhodobacter sphaeroides* cytochrome Bcl complex and reconstitution of recombinant protein with three-subunit core complex. *J. Biol. Chem.* 271: 2057-2062.
- Xu, J., Lyons, P.A., Carter, M.D., Booth, T.W., Davis-Poynter, N.J., Shellam, G.R. and Scalzo, A.A. 1996. Assessment of antigenicity and genetic variation of glycoprotein B of murine cytomegalovirus. *J. Gen. Virol.* 77: 49-59.
- Murthy, T.V. 2004. Expression of GST-fused kinase domain of human Csk homologous kinase from *Pichia pastoris* facilitates easy purification. *Biotechnol. Lett.* 26: 443-449.

SOURCE

GST (110-218) is a rabbit polyclonal antibody raised against amino acids 110-218 mapping at the C-terminus of GST of *Schistosoma japonicum* origin.

PRODUCT

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

APPLICATIONS

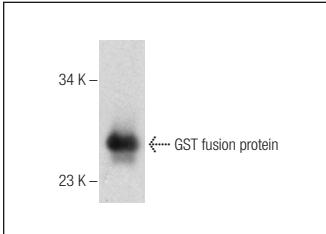
GST (110-218) is recommended for detection of GST fusion proteins and glutathione-S-transferase (GST) of *Schistosoma japonicum* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of GST: 26 kDa.

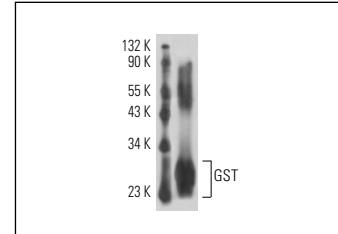
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GST (110-218): sc-33614. Western blot analysis of recombinant GST fusion protein.



GST (110-218): sc-33614. Western blot analysis of recombinant GST under reducing conditions.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **GST (B-14): sc-138** or **GST (A-6): sc-374171**, our highly recommended monoclonal alternatives to GST (110-218). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GST (B-14): sc-138**.