

GST (K-18): sc-34073

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

1. Maniatis, T., Fritsch, E.F. and Sambrook, J. 1982. Molecular Cloning. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory.
2. 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.
3. 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.
4. Soler, D., Nomizu, T., Brown, W.E., Shibata, Y. and Auld, D.S. 1995. Matri-lysin: expression, purification and characterization. *J. Protein Chem.* 14: 511-520.
5. 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.
6. 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.
7. 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.
8. 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.

SOURCE

GST (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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.

Blocking peptide available for competition studies, sc-34073 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GST (K-18) 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), 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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

MONOS
Satisfaction
Guaranteed

Try **GST (B-14): sc-138** or **GST (A-6): sc-374171**, our highly recommended monoclonal alternatives to GST (K-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GST (B-14): sc-138**.