

GST (1-109): sc-33613

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., et al. 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. Soler, D., et al. 1995. Matrilysin: expression, purification and characterization. *J. Protein Chem.* 14: 511-520.
4. Yu, L., et al. 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.
5. Driscoll, J., et al. 1995. Functional comparison of native and recombinant human salivary histatin 1. *J. Dental Res.* 74: 1837-1844.

SOURCE

GST (1-109) is a rabbit polyclonal antibody raised against amino acids 1-109 mapping at the N-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.

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.

APPLICATIONS

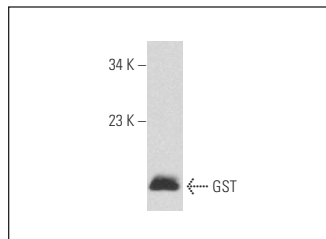
GST (1-109) is recommended for detection of GST fusion proteins and glutathione-S-transferase (GST) of *Schistosoma japonicum* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (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.

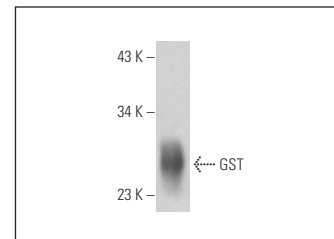
STORAGE

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

DATA



GST (1-109): sc-33613. Western blot analysis of *S. japonicum* recombinant GST.



GST (1-109): sc-33613. Western blot analysis of recombinant GST under reducing conditions.

SELECT PRODUCT CITATIONS

1. Yeh, T.Y., et al. 2006. Mitotic phosphorylation of Tankyrase, a PARP that promotes spindle assembly, by GSK-3. *Biochem. Biophys. Res. Commun.* 350: 574-579.
2. Gujral, T.S., et al. 2008. A novel RET kinase-β-catenin signaling pathway contributes to tumorigenesis in thyroid carcinoma. *Cancer Res.* 68: 1338-1346.
3. Bogerd, H.P. and Cullen, B.R. 2008. Single-stranded RNA facilitates nucleocapsid: APOBEC3G complex formation. *RNA* 14: 1228-1236.
4. Gu, B., et al. 2009. Pygo2 expands mammary progenitor cells by facilitating histone H3 K4 methylation. *J. Cell Biol.* 185: 811-826.
5. Goñi, S.E., et al. 2010. Expression and purification of Z protein from Junin virus. *J. Biomed. Biotechnol.* 2010: 970491.
6. Shin, M.E., et al. 2010. Spatiotemporal organization, regulation, and functions of tractions during neutrophil chemotaxis. *Blood* 116: 3297-3310.
7. Johnson, R.I., et al. 2011. Role for a Cindr-Arf6 axis in patterning emerging epithelia. *Mol. Biol. Cell* 22: 4513-4526.
8. Li, R., et al. 2013. Metal-dependent protein phosphatase 1A functions as an extracellular signal-regulated kinase phosphatase. *FEBS J.* 280: 2700-2711.
9. Han, J.S., et al. 2013. Catalytic assembly of the mitotic checkpoint inhibitor BubR1-Cdc20 by a Mad2-induced functional switch in Cdc20. *Mol. Cell* 51: 92-104.

MONOS
Satisfaction
Guaranteed

Try **GST (B-14): sc-138** or **GST (A-6): sc-374171**, our highly recommended monoclonal alternatives to GST (1-109). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **GST (B-14): sc-138**.