SANTA CRUZ BIOTECHNOLOGY, INC.

GST (3D4): sc-57753

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

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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.
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4. Soler, D., et al. 1995. Matrilysin: expression, purification and characterization. J. Protein Chem. 14: 511-520.
5. 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.
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SOURCE

GST (3D4) is a mouse monoclonal antibody raised against GST of *Schistosoma japonicum* origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GST (3D4) 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of GST: 26 kDa.

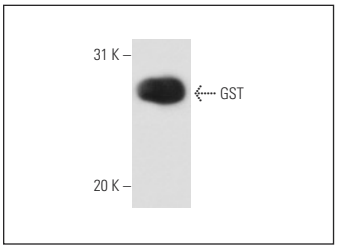
RESEARCH USE

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

STORAGE

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

DATA



GST (3D4): sc-57753. Western blot analysis of recombinant GST protein.

SELECT PRODUCT CITATIONS

1. Dennis, P.B. and Mercer, C.A. 2009. The GST-BHMT assay and related assays for autophagy. Methods Enzymol. 452: 97-118.
2. Knauer, S.K., et al. 2011. Bioassays to monitor Taspase1 function for the identification of pharmacogenetic inhibitors. PLoS ONE 6: e18253.
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CONJUGATES

See **GST (B-14): sc-138** for GST antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.