



Qty: 100 µg/200 µl
Mouse anti-GST
Catalog No. 13-6700
Lot No.

Mouse anti-GST

FORM

This monoclonal antibody is highly purified from mouse ascites by protein A-affinity chromatography and is supplied as a 200 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide (NaN₃).

CLONE: GST 3-4C

ISOTYPE: Mouse IgG_{2b}-kappa

IMMUNOGEN: GST protein from *Schistosoma japonicum* expressed from the pGEX vector.

SPECIFICITY

This antibody is specific for the 26 kDa GST protein from *S. japonicum*. It recognizes GST protein made in bacteria using the pGEX plasmid vectors. The antibody will recognize the GST protein alone or in combination with any fusion protein partner.

REACTIVITY

No cross-reactivity with *E. coli* proteins has been observed. The following fusion proteins tested positive with Zymed's GST 3-4C monoclonal antibody: GST, GST-Jak1, GST-Stat3, GST-p38, GST-Fyn, and GST-p21^{Cip1/WAF1}.

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature, and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA⁽⁴⁾: 0.1-1.0 µg/ml
Western Blotting⁽⁵⁾: 1 µg/ml
Immunoprecipitation: 2-5 µg

STORAGE

This antibody can be stored at 2-8 °C for at least one month. For long term storage, -20 °C is recommended; however, repeated freezing and thawing cycles should be avoided.

BACKGROUND⁽¹⁻³⁾

pGEX vectors are frequently utilized in bacterial systems to express polypeptides or entire proteins as fusions with glutathione S-transferase. Using this fusion system, a full-length protein or a shorter polypeptide sequence is linked to the C-terminus of the 26 kDa GST protein from *Schistosoma japonicum*. The bacterially expressed GST-fusion proteins are purified by absorption with glutathione-agarose beads. The fusion protein is subsequently eluted from the glutathione agarose in the presence of free glutathione. Antibodies to GST can be utilized as reagents for detecting the pGEX-expressed fusion proteins and as immuno-affinity reagents for purification of recombinant proteins.

(cont'd)

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PI136700

(Rev 06/09) DCC-08-1089

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REFERENCES**Review**

- Smith, D.B., Davern, K.M., Board, P.G., et. al.; Mr 26,000 antigen of *Schistosoma japonicum* recognized by resistant WEHI 129/J mice is a parasite glutathione S-transferase. *Proc. Natl. Acad. Sci. USA* 83:8703-8707 (1986).

Primary References

- Smith, D.B. and Johnson K.S. Single-step purification of polypeptides in *Escherichia coli* as fusions with glutathione S-transferase. *Gene* 67:31-40 (1988).
- Smith, D.B., and Corcoran, L.M. Expression and Purification of Glutathione-S-Transferase Fusion Proteins In: *Current Protocols in Molecular Biology* (Unit 16.7). Green Publishing Assoc. Inc, and John Wiley & Sons Inc (1991).
- Sheng, Z., et al; *PNAS* 94:5405-5410 (1997).
- Mattila, P., et al; *J. Biol. Chem.* 273(42):27633-27639 (1998).

RELATED PRODUCTS

Product	Clone/PAD*	Cat. No.	
Rb x GST	KG2	71-7500	
Ms x GST-Sepharose® 4B	---	13-6741	
Ms x GAL4	GAL-4-8	33-8600	
Ms x GFP	C163	33-2600	
Rb x HA	SG77	71-5500	
Ms x Maltose Binding Protein	R29	33-5100	
Ms x c-Myc	9E10	13-2500	→Best U.S. Price!!
Ms x Octapeptide Epitope Tag (DYKDDDDK)	OET-10CG + OET-7D4	33-4100	
Rb x Octapeptide Epitope Tag	Z4ER	71-5400	
Ms x Biotin	Z021	03-3700	
Ms x BrdU	ZBU30	03-3900	
Rb x DNP		71-3500	
Rb x FITC		71-1900	
Rb x Rhodamine		71-3600	

*PAD-Polyclonal Antibody Designation

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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