

Human Glutathione S-Transferase mu 1/ GS Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF6894

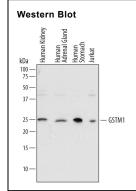
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Glutathione S-Transferase mu 1/GS in direct ELISAs and Western blots.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	E. coli-derived recombinant human Glutathione S-Transferase mu 1/GS Met1-Lys218 Accession # P09488		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 μg/mL	See Below

DATA



Detection of Human Glutathione S-Transferase mu 1/GS by Western Blot. Western blot shows lysates of human kidney tissue, human adrenal gland tissue, human stomach tissue, and Jurkat human acute T cell leukemia cell line. PVDF membrane was probed with 0.2 µg/mL of Sheep Anti-Human Glutathione S-Transferase mu 1/GS Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6894) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Glutathione S-Transferase mu 1/GS at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE			
Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.		
Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended belo			
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.		

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Glutathione S-Transferases (GSTs) are members of the phase II detoxification enzyme family that conjugate glutathione to various electrophilic compounds, including metabolites generated by oxidative processes in the body, environmental toxins or carcinogens, and anti-cancer drugs. GSTM1 is a cytosolic protein that belongs to the mu class of the GST superfamily. The gene encoding GSTM1 is mapped onto human chromosome 1p13.3 and is known to be highly polymorphic (1). Mostly notably, the widely occurring GSTM1-null genotype has been linked to a variety of cancers including lung (2), gastric (3), bladder (4) and prostate (5). In addition to its role in releasing oxidative stress, GSTM1 has also been suggested to act as a hormone binding protein and play a role in maintaining hormone homeostasis in the body (6, 7).

References:

- 1. Pearson, W. R. et al. (1993) Am. J. Hum. Genet. 53:220.
- 2. Mohr, L.C. et al. (2003) Anticancer. Res. 23:2111.
- 3. Wang, H. et al. (2010) Dig. Dis. Sci. 55:1824.
- 4. Engel, L. S. et al. (2002) Am. J. Epidermiol. 156:95.
- 5. Mo, Z. et al. (2009) Prostate. 69:662.
- 6. Mukherjee, S. B. et al. (1999) Biochem. J. 340:309.
- 7. Ishigaki, S. et al. (1989) Arch. Biochem. Biophys. 273:265.

Rev. 2/6/2018 Page 1 of 1

