

Technical Data Sheet

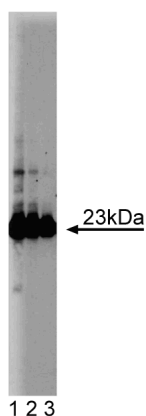
Purified Mouse Anti-GST- π **Product Information**

Material Number:	610718
Alternate Name:	Glutathione-S-Transferase- π
Size:	50 μ g
Concentration:	250 μ g/ml
Clone:	3/GST- π
Immunogen:	Human GST- π aa. 5-210
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat, Dog
Target MW:	23 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.

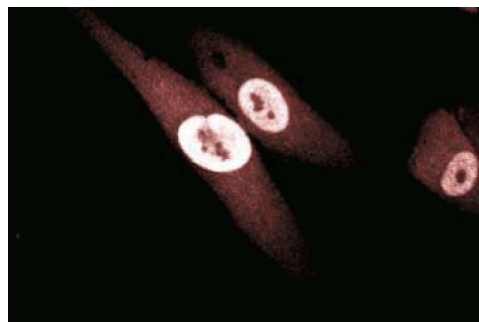
Description

Glutathione-S-Transferases (GSTs) are a family of dimeric proteins that catalyze the *S*-conjugation of glutathione with many compounds for detoxification. The GSTs are categorized into four classes based on their biochemical and structural properties: α , μ , π , and θ . GST- π is of particular interest because it is over-expressed in many tumors, but is either absent or expressed at low levels in the corresponding normal tissues. This high expression of GST- π is associated with malignant transformation and correlates with a decrease in GST activity. Three different GST- π proteins have been isolated and designated as hGSTP1*A, hGSTP1*B, and hGSTP1*C. These isoforms are nearly identical, varying by only one to two amino acids.

This antibody is routinely tested by western blot analysis. Other applications were routinely tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of GST- π on a HeLa cell lysate
(Human cervical epitheloid carcinoma; ATCC CCL-2.2). Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti- GST- π antibody.



Immunofluorescence staining of human fibroblasts.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20° C.

BD Biosciences

www.bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Ali-Osman F, Akande O, Antoun G, Mao JX, Buolamwini J. Molecular cloning, characterization, and expression in Escherichia coli of full-length cDNAs of three human glutathione S-transferase Pi gene variants. Evidence for differential catalytic activity of the encoded proteins. *J Biol Chem.* 1987; 272(15):10004-10012. (Biology)

Kano T, Sakai M, Muramatsu M. Structure and expression of a human class pi glutathione S-transferase messenger RNA. *Cancer Res.* 1987; 47(21):5626-5630. (Biology)

Zhou T, Evans AA, London WT. Glutathione S-transferase expression in hepatitis B virus-associated human hepatocellular carcinogenesis. *Cancer Res.* 1997; 57(13):2749-2753. (Biology)