Technical Data Sheet

Purified Mouse Anti- GST-π

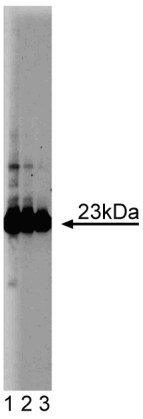
Product Information

Material Number:	**610719**
Alternate Name:	Glutathione-S-Transferase-π
Size:	150 µg
Concentration:	250 µg/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 ≤0.09% sodium azide.

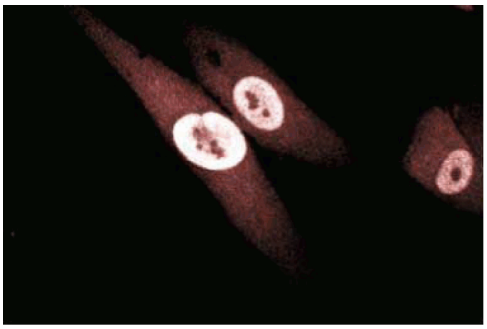
Description

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 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.

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

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)