SANTA CRUZ BIOTECHNOLOGY, INC.

GSTM4 (PL-B12): sc-134353

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the glutathione S-transferase (GST) family of proteins function in the detoxification of xenobiotics to protect cells against toxicant-induced damage. There are eight families of GST proteins, namely α, ζ, θ, κ, μ, π, σ and ω, each of which are composed of proteins that have a variety of functions throughout the cell. The GSTM proteins (GSTM1-GSTM5 in human and GSTM1-GSTM7 in mouse) are members of the μ class of enzymes that conjugate with glutathione and function in the detoxification of carcinogens, environmental toxins and products of oxidative stress.

REFERENCES

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3. Ross, V.L., et al. 1993. Chromosomal mapping of the human μ class glutathione S-transferases to 1p13. Genomics 18: 87-91.
4. Comstock, K.E., et al. 1993. Isolation and analysis of the gene and cDNA for a human μ class glutathione S-transferase, GSTM4. J. Biol. Chem. 268: 16958-16965.
5. Liloglou, T., et al. 2002. A T2517C polymorphism in the GSTM4 gene is associated with risk of developing lung cancer. Lung Cancer 37: 143-146.
6. Denson, J., et al. 2006. Screening for inter-individual splicing differences in human GSTM4 and the discovery of a single nucleotide substitution related to the tandem skipping of two exons. Gene 379: 148-155.
7. Knight, T.R., et al. 2007. Constitutive mRNA expression of various glutathione S-transferase isoforms in different tissues of mice. Toxicol. Sci. 100: 513-524.
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CHROMOSOMAL LOCATION

Genetic locus: GSTM4 (human) mapping to 1p13.3.

SOURCE

GSTM4 (PL-B12) is a mouse monoclonal antibody raised against recombinant GSTM4 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

GSTM4 (PL-B12) is recommended for detection of GSTM4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GSTM4 siRNA (h): sc-105427, GSTM4 shRNA Plasmid (h): sc-105427-SH and GSTM4 shRNA (h) Lentiviral Particles: sc-105427-V.

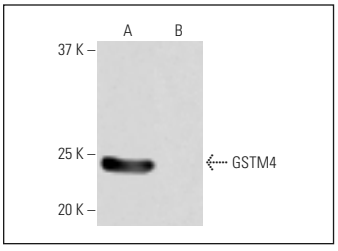
Molecular Weight of GSTM4: 26 kDa.

Positive Controls: huaman GSTM4 transfected 293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GSTM4 (PL-B12): sc-134353. Western blot analysis of GSTM4 expression in human GSTM4 transfected (**A**) and non-transfected (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Cheng, S.Y., et al. 2021. Glutathione S-transferase M3 is associated with glycolysis in intrinsic temozolomide-resistant glioblastoma multiforme cells. Int. J. Mol. Sci. 22: 7080.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.