

MGST3 (Q-13): sc-65132

BACKGROUND

MGST3 (microsomal glutathione S-transferase 3) is a 152 amino acid protein encoded by the human gene MGST3. 5-lipoxygenase-activating protein (FLAP), leukotriene C4 synthase (LTC4S) and microsomal glutathione S-transferase 2 (MGST2) are members of a family of small, membrane-associated proteins. Like FLAP, LTC4S and MGST2, MGST3 contains three predicted hydrophobic regions separated by hydrophilic domains. MGST3 shares 36% amino acid sequence identity with MGST2, 27% identity with LTC4S, 22% identity with MGST1 and 20% identity with FLAP. MGST3 also exhibits glutathione-dependent peroxidase activity and LTC4S activity. MGST3 is expressed in a wide variety of human tissues, with the highest expression in heart, skeletal muscle and adrenal cortex.

REFERENCES

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3. Nebert, D.W. and Vasiliou, V. 2004. Analysis of the glutathione S-transferase (GST) gene family. *Hum. Genomics* 1: 460-464.
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5. Efferth, T. and Volm, M. 2005. Glutathione-related enzymes contribute to resistance of tumor cells and low toxicity in normal organs to artesunate. *In Vivo* 19: 225-232.
6. Werz, O. and Steinhilber, D. 2006. Therapeutic options for 5-lipoxygenase inhibitors. *Pharmacol. Ther.* 112: 701-718.

CHROMOSOMAL LOCATION

Genetic locus: MGST3 (human) mapping to 1q24.1; Mgst3 (mouse) mapping to 1 H2.3.

SOURCE

MGST3 (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MGST3 of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-65132 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MGST3 (Q-13) is recommended for detection of MGST3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MGST3 (Q-13) is also recommended for detection of MGST3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MGST3 siRNA (h): sc-62612, MGST3 siRNA (m): sc-62613, MGST3 shRNA Plasmid (h): sc-62612-SH, MGST3 shRNA Plasmid (m): sc-62613-SH, MGST3 shRNA (h) Lentiviral Particles: sc-62612-V and MGST3 shRNA (m) Lentiviral Particles: sc-62613-V.

Molecular Weight of MGST3: 16 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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