

MGST2 (Y-15): sc-65130

BACKGROUND

MGST2 (Microsomal glutathione S-transferase 2) is a 147 amino acid protein encoded by the human gene MGST2. MGST2 can catalyze the production of LTC4 (leukotriene C4) from LTA4 (leukotriene A4) and reduced glutathione. It can also catalyze the conjugation of 1-chloro-2,4-dinitrobenzene with reduced glutathione. MGST2 is a multi-pass membrane protein found as a homodimer. MGST2 belongs to the MAPEG family and is expressed in liver, spleen, skeletal muscle, heart, adrenals, pancreas, prostate, testis, fetal liver, and fetal spleen. It has very low expression in lung, brain, placenta and bone marrow. Also, MGST2 is the only GST expressed in human umbilical vein endothelial cells (HUVECs).

REFERENCES

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- Sjöström, M., et al. 2001. Human umbilical vein endothelial cells generate leukotriene C4 via microsomal glutathione S-transferase type 2 and express the CysLT(1) receptor. *Eur. J. Biochem.* 268: 2578-2586.
- Schröder, O., et al. 2004. Microsomal glutathione S-transferases: selective upregulation of leukotriene C4 synthase during lipopolysaccharide-induced pyresis. *Cell. Mol. Life Sci.* 62: 87-94.
- Bresell, A., et al. 2005. Bioinformatic and enzymatic characterization of the MAPEG superfamily. *FEBS J.* 272: 1688-1703.
- Veeriah, S., et al. 2006. Apple flavonoids inhibit growth of HT29 human colon cancer cells and modulate expression of genes involved in the biotransformation of xenobiotics. *Mol. Carcinog.* 45: 164-174.
- Yan, K.L., et al. 2006. A novel MGST2 non-synonymous mutation in a Chinese pedigree with psoriasis vulgaris. *J. Invest. Dermatol.* 126: 1003-1005.

CHROMOSOMAL LOCATION

Genetic locus: MGST2 (human) mapping to 4q31.1; Mgst2 (mouse) mapping to 3 C.

SOURCE

MGST2 (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MGST2 of human origin.

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-65130 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MGST2 (Y-15) is recommended for detection of MGST2 of human and, to a lesser extent, mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MGST2 (Y-15) is also recommended for detection of MGST2 in additional species, including porcine and avian.

Suitable for use as control antibody for MGST2 siRNA (h): sc-62610, MGST2 siRNA (m): sc-62611, MGST2 shRNA Plasmid (h): sc-62610-SH, MGST2 shRNA Plasmid (m): sc-62611-SH, MGST2 shRNA (h) Lentiviral Particles: sc-62610-V and MGST2 shRNA (m) Lentiviral Particles: sc-62611-V.

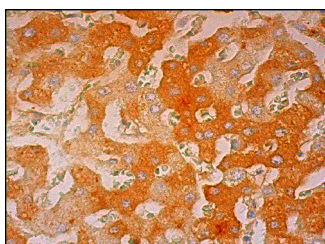
Molecular Weight of MGST2: 16 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



MGST2 (Y-15): sc-65130. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

RESEARCH USE

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

PROTOCOLS

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