BACKGROUND

Members of the glutathione S-transferase (GST) family of proteins function in the detoxification of xenobiotics to protect cells against oxidant-induced damage. There are eight families of GST proteins, namely α, ζ, τ, 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. GSTM5 (glutathione S-transferase µ5), also designated GTM5, is a 218 amino acid cytoplasmic protein belonging to the µ family and GST superfamily. Expressed in brain, lung and testis, GSTM5 is found at low levels in heart, and contains single N- and C-terminal GST domains.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: Gstm5 (mouse) mapping to 3 F2.3.

SOURCE

GSTM5 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GSTM5 of mouse 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-160417 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSTM5 (S-12) is recommended for detection of GSTM5 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000), non cross-reactive with other GSTM family members.

Suitable for use as control antibody for Gstm5 siRNA (m): sc-145813, Gstm5 shRNA Plasmid (m): sc-145813-SH and Gstm5 shRNA (m) Lentiviral Particles: sc-145813-V.

Molecular Weight of GSTM5: 27 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HP: 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: 1:100-1:1400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

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.