

GSTO1 (M-14): sc-74939

BACKGROUND

GSTO1 (glutathione S-transferase ω 1), also known as p28 or GSTTlp28, is a 241 amino acid protein that localizes to the cytoplasm and contains both an N-terminal and a C-terminal GST domain. Expressed ubiquitously with highest expression in heart, liver and skeletal muscle, GSTO1 exists as a homodimer that functions as both a Glutathione-dependent thiol transferase and a dehydroascorbate reductase. Specifically, GSTO1 catalyzes the reaction of Glutathione with a wide variety of organic compounds to form thioethers, a process that is essential for the metabolism and detoxification of a variety of xenobiotics and carcinogens. Human GSTO1 shares 70% sequence homology with its rodent counterpart, suggesting a conserved role between species. Polymorphisms in the gene encoding GSTO1 may be associated with the development of childhood acute lymphoblastic leukemia, Parkinson's disease and Alzheimer disease.

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CHROMOSOMAL LOCATION

Genetic locus: *Gsto1* (mouse) mapping to 19 D1.

SOURCE

GSTO1 (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GSTO1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-74939 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSTO1 (M-14) is recommended for detection of GSTO1 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).

GSTO1 (M-14) is also recommended for detection of GSTO1 in additional species, including canine and bovine.

Suitable for use as control antibody for GSTO1 siRNA (m): sc-75208, GSTO1 shRNA Plasmid (m): sc-75208-SH and GSTO1 shRNA (m) Lentiviral Particles: sc-75208-V.

Molecular Weight of GSTO1: 31 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.

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.



Try **GSTO1/2 (H-12): sc-166121**, our highly recommended monoclonal alternative to GSTO1 (M-14).