



# GSTO1 (6): sc-130318

## BACKGROUND

GSTO1 (glutathione S-transferase  $\omega$  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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GSTO1 (human) mapping to 10q25.1.

## SOURCE

GSTO1 (6) is a mouse monoclonal antibody raised against recombinant GSTO1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

GSTO1 (6) is recommended for detection of GSTO1 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 GSTO1 siRNA (h): sc-75207, GSTO1 shRNA Plasmid (h): sc-75207-SH and GSTO1 shRNA (h) Lentiviral Particles: sc-75207-V.

Molecular Weight of GSTO1: 31 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## 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](http://www.scbt.com) for detailed protocols and support products.