SANTA CRUZ BIOTECHNOLOGY, INC.

GSTK1 (N-13): sc-160412

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the glutathione S-transferase (GST) family of proteins function in the detoxification of xenobiotics to protect cells against toxicant-induced damage. There are eight families of GST proteins, namely α, ζ, θ, κ, μ, π, σ and ω, each of which are composed of proteins that have a variety of functions throughout the cell. GSTK1 (glutathione S-transferase kappa 1), also known as glutathione S-transferase subunit 13 (GST 13-13) or GSTK1-1, is a 226 amino acid ubiquitously expressed protein belonging to the κ class of the GST superfamily that functions in cellular detoxification. Localizing to peroxisome, GSTK1 exists as a homodimer that catalyzes the conjugation of glutathione to a number of hydrophobic substrates leading to their removal from the cell.

REFERENCES

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5. Nebert, D.W. and Vasiliou, V. 2004. Analysis of the glutathione S-transferase (GST) gene family. Hum. Genomics 1: 460-464.
6. Morel, F., Rauch, C., Petit, E., Piton, A., Theret, N., Coles, B. and Guillouzo, A. 2004. Gene and protein characterization of the human glutathione S-transferase κ and evidence for a peroxisomal localization. J. Biol. Chem. 279: 16246-16253.

CHROMOSOMAL LOCATION

Genetic locus: GSTK1 (human) mapping to 7q34; Gstk1 (mouse) mapping to 6 B2.1.

SOURCE

GSTK1 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GSTK1 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-160412 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSTK1 (N-13) is recommended for detection of GSTK1 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); non cross-reactive with other GST family members.

GSTK1 (N-13) is also recommended for detection of GSTK1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GSTK1 siRNA (h): sc-89816, GSTK1 siRNA (m): sc-145809, GSTK1 shRNA Plasmid (h): sc-89816-SH, GSTK1 shRNA Plasmid (m): sc-145809-SH, GSTK1 shRNA (h) Lentiviral Particles: sc-89816-V and GSTK1 shRNA (m) Lentiviral Particles: sc-145809-V.

Molecular Weight of GSTK1: 30 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.

PROTOCOLS

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