BACKGROUND

Members of the glutathione S-transferase (GST) family of proteins function in the detoxification of toxins such as carcinogens, environmental toxins, products of oxidative stress and therapeutic drugs and protect cells against toxicant-induced damage. GSTs are divided into different classes/families based on their primary structures. GSTA4 (glutathione S-transferase A4), also known as mGsta4 or GST5.7, is a member of the α family of GSTs that is expressed in intermediate cells of the stria vascularis and is upregulated during oxidative stress via the JNK pathway. Localizing to the cytoplasm, GSTA4 participates in detoxification processes of many tissues and may have a novel function for cochlear melanocytes.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: Gsta4 (mouse) mapping to 9 E1.

SOURCE

GSTA4 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GSTA4 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-241482 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSTA4 (D-14) is recommended for detection of GSTA4 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), 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 Gsta1, Gsta2 or Gsta3.

GSTA4 (D-14) is also recommended for detection of GSTA4 in additional species, including equine and porcine.

Suitable for use as control antibody for GSTA4 siRNA (m): sc-145807, GSTA4 shRNA Plasmid (m): sc-145807-SH and GSTA4 shRNA (m) Lentiviral Particles: sc-145807-V.

Molecular Weight of GSTA4: 25 kDa.

Positive Controls: mouse placenta extract: sc-364247.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA

GSTA4 (D-14): sc-241482. Western blot analysis of GSTA4 expression in mouse placenta tissue extract.

 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.