

GI24 (N-12): sc-164466

BACKGROUND

Platelet receptor GI24, also known as SISP1 or PP2135, is a 311 amino acid single-pass type I membrane protein that contains one Ig-like (immunoglobulin-like) domain. GI24 is thought to contribute to tumor-invasive growth in the collagen matrix and is encoded by a gene that maps to human chromosome 10q22.1. Chromosome 10 contains over 800 genes, 135 million nucleotides and comprises nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome which is characterized by extreme photosensitivity and premature aging. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10. As with most trisomies, trisomy 10 is rare and is deleterious.

REFERENCES

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3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
4. Zhang, Z. and Henzel, W.J. 2004. Signal peptide prediction based on analysis of experimentally verified cleavage sites. *Protein Sci.* 13: 2819-2824.
5. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
6. Yin, Y. and Shen, W.H. 2008. PTEN: a new guardian of the genome. *Oncogene* 27: 5443-5453.
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CHROMOSOMAL LOCATION

Genetic locus: C10orf54 (human) mapping to 10q22.1; 4632428N05Rik (mouse) mapping to 10 B4.

SOURCE

GI24 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of GI24 of human origin.

STORAGE

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

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-164466 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GI24 (N-12) is recommended for detection of GI24 of human origin, Platelet receptor Gi24 of mouse origin and the corresponding rat homolog 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).

GI24 (N-12) is also recommended for detection of GI24 in additional species, including bovine and porcine.

Suitable for use as control antibody for GI24 siRNA (h): sc-90756, Platelet receptor Gi24 siRNA (m): sc-152293, GI24 shRNA Plasmid (h): sc-90756-SH, Platelet receptor Gi24 shRNA Plasmid (m): sc-152293-SH, GI24 shRNA (h) Lentiviral Particles: sc-90756-V and Platelet receptor Gi24 shRNA (m) Lentiviral Particles: sc-152293-V.

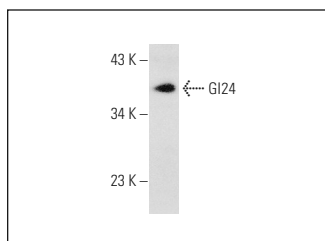
Molecular Weight of GI24: 34 kDa.

Positive Controls: mouse platelet extract: sc-364248.

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



GI24 (N-12): sc-164466. Western blot analysis of GI24 expression in mouse platelet extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.