

Genethonin-1 (A-14): sc-164462

BACKGROUND

Genethonin-1, also known as STBD1 (starch binding domain 1) or GENX-3414, is a 358 amino acid single-pass type III membrane protein that contains one CBM20 (carbohydrate binding type-20) domain. A hydrophobic protein, Genethonin-1 is highly expressed in cardiac and skeletal muscle and is found at moderate levels in placenta and liver. Genethonin-1 and is thought to function in carbohydrate binding. The gene encoding Genethonin-1 maps to human chromosome 4, which represents approximately 6% of the human genome, contains nearly 900 genes and is associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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4. Bouju, S., et al. 1998. Molecular cloning and functional expression of a novel human gene encoding two 41-43 kDa skeletal muscle internal membrane proteins. *Biochem. J.* 335: 549-556.
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CHROMOSOMAL LOCATION

Genetic locus: STBD1 (human) mapping to 4q21.1; Stbd1 (mouse) mapping to 5 E2.

SOURCE

Genethonin-1 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of Genethonin-1 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-164462 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Genethonin-1 (A-14) is recommended for detection of Genethonin-1 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).

Genethonin-1 (A-14) is also recommended for detection of Genethonin-1 in additional species, including equine and bovine.

Suitable for use as control antibody for Genethonin-1 siRNA (h): sc-88962, Genethonin-1 siRNA (m): sc-145382, Genethonin-1 shRNA Plasmid (h): sc-88962-SH, Genethonin-1 shRNA Plasmid (m): sc-145382-SH, Genethonin-1 shRNA (h) Lentiviral Particles: sc-88962-V and Genethonin-1 shRNA (m) Lentiviral Particles: sc-145382-V.

Molecular Weight of Genethonin-1: 39 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.