



SLC39A13 (G-12): sc-132837

BACKGROUND

Zinc is an essential cofactor that is involved in cell growth and development, as well as in protein, nucleic acid and lipid metabolism. The transport of zinc across the cell membrane is crucial for correct enzyme and overall cell function. SLC39A13 (solute carrier family 39 (zinc transporter), member 13), also known as ZIP13 (Zrt- and Irt-like protein 13), is a 371 amino acid multi-pass membrane protein that belongs to the ZIP transporter family. Expressed as multiple alternatively spliced isoforms, SLC39A13 acts as a zinc-influx transporter that, when defective, is associated with the development of Ehlers-Danlos syndrome-like spondylocheirodysplasia (SCD-EDS). SCD-EDS is a spondylocheiro dysplastic form of Ehlers-Danlos syndrome that is characterized by postnatal growth retardation, moderate short stature, protuberant eyes with bluish sclera, hands with finely wrinkled palms, atrophy of the thenar muscles and tapering fingers.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC39A13 (human) mapping to 11p11.2; Slc39a13 (mouse) mapping to 2 E1.

SOURCE

SLC39A13 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of SLC39A13 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132837 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC39A13 (G-12) is recommended for detection of SLC39A13 isoforms 1 and 2 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 SLC39A11 or SLC39A12.

Suitable for use as control antibody for SLC39A13 siRNA (h): sc-96741, SLC39A13 siRNA (m): sc-153557, SLC39A13 shRNA Plasmid (h): sc-96741-SH, SLC39A13 shRNA Plasmid (m): sc-153557-SH, SLC39A13 shRNA (h) Lentiviral Particles: sc-96741-V and SLC39A13 shRNA (m) Lentiviral Particles: sc-153557-V.

Molecular Weight of SLC39A13: 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.