

ZIP5 (N-16): sc-109162

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. ZIP5, also known as SLC39A5 (solute carrier family 39 (metal ion transporter), member 5) or LZT-Hs7, is a 539 amino acid multi-pass membrane protein that localizes to the basolateral cell membrane and belongs to the ZIP family of zinc transporters. Expressed in colon, liver, pancreas, kidney, spleen and small intestine, ZIP5 is thought to play a role in serosal-to-mucosal zinc transport, thereby influencing polarized cells and controlling organismal zinc status. The gene encoding ZIP5 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC39A5 (human) mapping to 12q13.3; Slc39a5 (mouse) mapping to 10 D3.

SOURCE

ZIP5 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of ZIP5 of human origin.

RESEARCH USE

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

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-109162 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZIP5 (N-16) is recommended for detection of ZIP5 of mouse, rat and human 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 other ZIP family members.

Suitable for use as control antibody for ZIP5 siRNA (h): sc-95666, ZIP5 siRNA (m): sc-155621, ZIP5 shRNA Plasmid (h): sc-95666-SH, ZIP5 shRNA Plasmid (m): sc-155621-SH, ZIP5 shRNA (h) Lentiviral Particles: sc-95666-V and ZIP5 shRNA (m) Lentiviral Particles: sc-155621-V.

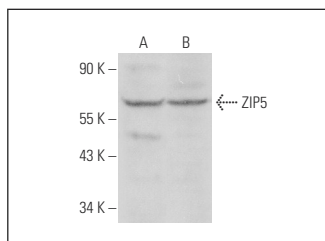
Molecular Weight of ZIP5: 59 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or COLO205 whole cell lysate.

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



ZIP5 (N-16): sc-109162. Western blot analysis of ZIP5 expression in Hep G2 (A) and COLO 205 (B) whole cell lysates.

STORAGE

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