

ZFYVE1 (C-12): sc-139117

BACKGROUND

ZFYVE1 (zinc finger FYVE domain-containing protein 1), also known as double FYVE-containing protein 1, SR3 or tandem FYVE fingers-1, is a 777 amino acid protein that mainly localizes to the cisternal stacks of Golgi apparatus. ZFYVE1 has two FYVE-type zinc fingers and exists as two isoforms formed by alternative splicing events. Isoform 1 is expressed in brain, placenta, lung, liver, skeletal muscle, pancreas and kidney while isoform 2 is detected in the testis. Both isoforms 1 and 2 are highly expressed in the heart. The gene encoding ZFYVE1 maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease (AD). The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder α 1-antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZFYVE1 (human) mapping to 14q24.2; Zfyve1 (mouse) mapping to 12 D1.

SOURCE

ZFYVE1 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZFYVE1 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-139117 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZFYVE1 (C-12) is recommended for detection of ZFYVE1 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 other ZFYVE family members.

Suitable for use as control antibody for ZFYVE1 siRNA (h): sc-92096, ZFYVE1 siRNA (m): sc-155602, ZFYVE1 shRNA Plasmid (h): sc-92096-SH, ZFYVE1 shRNA Plasmid (m): sc-155602-SH, ZFYVE1 shRNA (h) Lentiviral Particles: sc-92096-V and ZFYVE1 shRNA (m) Lentiviral Particles: sc-155602-V.

Molecular Weight of ZFYVE1 isoforms: 87/40 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.


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 Satisfaction
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Try **ZFYVE1 (A-9): sc-515049**, our highly recommended monoclonal alternative to ZFYVE1 (C-12).