

S3-12 (S-13): sc-169233

BACKGROUND

S3-12 (Adipocyte protein S3-12), also known as PLIN4 (Perilipin-4), is a 1,357 amino acid protein that belongs to the Perilipin family. S3-12 contains a repeated 33 amino acid motif also found in adipophilin, and it shares protein sequence identity to both adipophilin and TIP-47 in the COOH terminus, but not to Perilipin. S3-12 exhibits sequence similarity to the PAT proteins. Upregulated during adipocyte differentiation, S3-12 may play a role in triacylglycerol packaging into adipocytes, and functions as a coat protein involved in the biogenesis of lipid storage droplets. S3-12 demonstrates highest expression in skeletal muscle, followed by heart and liver, and lowest expression in adult whole brain. Existing as two alternatively spliced isoforms, the S3-12 gene is conserved in dog, cow and mouse, and maps to human chromosome 19p13.3.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: Plin4 (mouse) mapping to 17 D.

SOURCE

S3-12 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of S3-12 of mouse 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-169233 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

S3-12 (S-13) is recommended for detection of S3-12 of mouse and rat 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).

Suitable for use as control antibody for S3-12 siRNA (m): sc-153194, S3-12 shRNA Plasmid (m): sc-153194-SH and S3-12 shRNA (m) Lentiviral Particles: sc-153194-V.

Molecular Weight of S3-12 isoform 1/2: 134/141 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.

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.