

FNDC3B (E-12): sc-99894

BACKGROUND

Adipogenesis, the process of transforming pre-adipocytes into mature fat cells, is of particular interest due to the role adipocytes play in obesity and type II diabetes. Adipocytes have been shown to affect a variety of functions, including hemostasis, angiogenesis and energy balance, by secreting hormones and bioactive peptides. The FNDC3B protein, also designated FAD104 (factor for adipocyte differentiation 104) or HCV NS5A-binding protein 37, is expressed during early adipogenesis. Belonging to the FNDC3 family of proteins, FNDC3B is a 1,204 amino acid protein that contains 9 fibronectin type-III domains. FNDC3B-deficient mice die within one day of birth, suggesting that FNDC3B is crucial for postpartum survival. Mouse embryonic fibroblasts (MEFs) with loss of FNDC3B function displayed a reduction in stress fiber formation, indicating a role for FNDC3B in cell proliferation, adhesion, spreading and migration.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FNDC3B (human) mapping to 3q26.31; Fndc3b (mouse) mapping to 3 A3.

RESEARCH USE

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

SOURCE

FNDC3B (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of FNDC3B of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99894 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FNDC3B (E-12) is recommended for detection of FNDC3B 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 FNDC family members.

FNDC3B (E-12) is also recommended for detection of FNDC3B in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for FNDC3B siRNA (h): sc-78339, FNDC3B siRNA (m): sc-145212, FNDC3B shRNA Plasmid (h): sc-78339-SH, FNDC3B shRNA Plasmid (m): sc-145212-SH, FNDC3B shRNA (h) Lentiviral Particles: sc-78339-V and FNDC3B shRNA (m) Lentiviral Particles: sc-145212-V.

Molecular Weight of FNDC3B isoforms: 133/70/8 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.



Try **FNDC3B (B-1): sc-393997** or **FNDC3B (B-6): sc-393875**, our highly recommended monoclonal alternatives to FNDC3B (E-12).