SANTA CRUZ BIOTECHNOLOGY, INC.

FEM1B (C-20): sc-67565

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FEM1B (FEM1 homolog β), also known as FIAA, F1A-ALPHA (FEM1-like in apoptotic pathway protein α) or FEM1-β, is a 627 amino acid protein that functions as a substrate recognition subunit of the E3 ubiquitin-protein ligase complex. Localizing to both cytoplasm and nucleus, FEM1B is widely expressed at low levels but is found at highest levels in testis. As a death receptor-associated protein, FEM1B regulates apoptosis and has additional roles including glucose homeostasis and stress-induced signaling, thereby activating Chk1. FEM1B contains eight ANK repeats and one TPR repeat, and belongs to the FEM1 family. The gene encoding FEM1B maps to human chromosome 15q23 and mouse chromosome 9 B.

REFERENCES

1. Ventura-Holman, T., et al. 1998. The murine fem1 gene family: homologs of the *Caenorhabditis elegans* sex-determination protein FEM-1. Genomics 54: 221-230.
2. Chan, S.L., et al. 1999. F1α, a death receptor-binding protein homologous to the *Caenorhabditis elegans* sex-determining protein, FEM-1, is a caspase substrate that mediates apoptosis. J. Biol. Chem. 274: 32461-32468.
3. Ventura-Holman, T., et al 2000. Rapid communication: the human FEM1B gene maps to chromosome 15q22 and is excluded as the gene for Bardet-Biedl syndrome, type 4. Am. J. Med. Sci. 319: 268-270.
4. Ventura-Holman, T. and Maher, J.F. 2000. Sequence, organization, and expression of the human FEM1B gene. Biochem. Biophys. Res. Commun. 267: 317-320.
5. Oyhenart, J., et al. 2005. Putative homeodomain transcription factor 1 interacts with the feminization factor homolog fem1b in male germ cells. Biol. Reprod. 72: 780-787.
6. Lu, D., et al. 2005. Abnormal glucose homeostasis and pancreatic islet function in mice with inactivation of the Fem1b gene. Mol. Cell. Biol. 25: 6570-6577.

CHROMOSOMAL LOCATION

Genetic locus: FEM1B (human) mapping to 15q23; Fem1b (mouse) mapping to 9 B.

SOURCE

FEM1B (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FEM 1B of human 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-67565 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

FEM1B (C-20) is recommended for detection of FEM-1-like death receptor binding protein 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).

FEM1B (C-20) is also recommended for detection of FEM-1-like death receptor binding protein in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FEM1B siRNA (h): sc-62311, FEM1B siRNA (m): sc-62312, FEM1B shRNA Plasmid (h): sc-62311-SH, FEM1B shRNA Plasmid (m): sc-62312-SH, FEM1B shRNA (h) Lentiviral Particles: sc-62311-V and FEM1B shRNA (m) Lentiviral Particles: sc-62312-V.

Molecular Weight of FEM1B: 70 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.