



UFM1 (I-16): sc-84653

BACKGROUND

UFM1 (ubiquitin-fold modifier 1), also known as BM-002 or C13orf20, is an 85 amino acid protein that localizes primarily to the nucleus, but is also present in diffuse amounts in the cytoplasm. Expressed in a variety of tissues, including kidney, brain, heart, liver and lung, UFM1 interacts with UBA5 (an E1-like activating enzyme) and Ufc1 (an E2-like conjugating enzyme) and, via these interactions, conjugates to target proteins by a covalent linkage. The gene encoding UFM1 maps to human chromosome 13, which houses over 400 genes and comprises nearly 4% of the human genome. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: UFM1 (human) mapping to 13q13.3; Ufm1 (mouse) mapping to 3 C.

SOURCE

UFM1 (I-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of UFM1 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-84653 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UFM1 (I-16) is recommended for detection of UFM1 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).

Suitable for use as control antibody for UFM1 siRNA (h): sc-76804, UFM1 siRNA (m): sc-154891, UFM1 shRNA Plasmid (h): sc-76804-SH, UFM1 shRNA Plasmid (m): sc-154891-SH, UFM1 shRNA (h) Lentiviral Particles: sc-76804-V and UFM1 shRNA (m) Lentiviral Particles: sc-154891-V.

Molecular Weight of UFM1: 9 kDa.

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.

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.