

FTSJ3 (E-14): sc-160338

BACKGROUND

FTSJ3, also known as putative rRNA methyltransferase 3, is an 847 amino acid nuclear protein that belongs to the RlmE family. Also belonging to the methyltransferase superfamily, FTSJ3 most likely functions as a methyltransferase. The gene that encodes FTSJ3 consists of approximately 8,239 bases and maps to human chromosome 17q23.3. Encoding more than 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FTSJ3 (human) mapping to 17q23.3; Ftsj3 (mouse) mapping to 11 E1.

SOURCE

FTSJ3 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FTSJ3 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-160338 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FTSJ3 (E-14) is recommended for detection of FTSJ3 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 FTSJ1 or FTSJ2.

FTSJ3 (E-14) is also recommended for detection of FTSJ3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FTSJ3 siRNA (h): sc-93919, FTSJ3 siRNA (m): sc-145265, FTSJ3 shRNA Plasmid (h): sc-93919-SH, FTSJ3 shRNA Plasmid (m): sc-145265-SH, FTSJ3 shRNA (h) Lentiviral Particles: sc-93919-V and FTSJ3 shRNA (m) Lentiviral Particles: sc-145265-V.

Molecular Weight of FTSJ3: 97 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.