

FUS-2 (M-17): sc-54384

BACKGROUND

FUS-2 is a 314 amino acid protein encoded by the human gene NAT6. FUS-2 belongs to the acetyltransferase family and contains one N-acetyltransferase domain. Acetyltransferases are essential enzymes for a wide variety of cellular processes and mutations in acetyltransferase genes have been associated with the development of certain cancers. FUS-2 is found in the cells cytoplasm and seems to be involved in N-acetylation. FUS-2 will act on peptides with an N-terminal Met followed by Asp, Glu or Asn. It is also believed FUS-2 can also act as a tumor suppressor. FUS-2 has NAT activity but not histone acetyltransferase activity. It uses a binary ping-pong process involving the formation of a covalent NAT/acetyl-coA intermediate, whereby acetyl-coA binds to the nucleophile in the active site of the enzyme before the acetyl group is transferred to the substrate by nucleophilic attack.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Nat6 (mouse) mapping to 9 F1.

SOURCE

FUS-2 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FUS-2 of mouse origin.

RESEARCH USE

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

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-54384 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FUS-2 (M-17) is recommended for detection of FUS-2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], 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 FUS-2 siRNA (m): sc-62359, FUS-2 shRNA Plasmid (m): sc-62359-SH and FUS-2 shRNA (m) Lentiviral Particles: sc-62359-V.

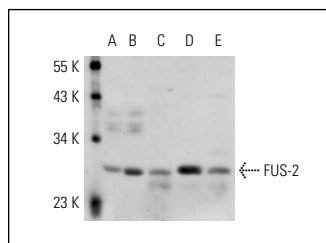
Molecular Weight of FUS-2: 34 kDa.

Positive Controls: A-10 cell lysate: sc-3806, NIH/3T3 whole cell lysate: sc-2210 or mouse heart extract: sc-2254.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



FUS-2 (M-17): sc-54384. Western blot analysis of FUS-2 expression in A-10 (A) and NIH/3T3 (B) nuclear extracts and mouse liver (C), rat skeletal muscle (D) and mouse heart (E) tissue extracts.

STORAGE

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