

FUS-2 (AT2F4): sc-517402

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 (human) mapping to 3p21.31.

SOURCE

FUS-2 (AT2F4) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-308 of FUS-2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS (pH 7.4) with 0.02% sodium azide and 10% glycerol.

APPLICATIONS

FUS-2 (AT2F4) is recommended for detection of FUS-2 of 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FUS-2 siRNA (h): sc-62358, FUS-2 shRNA Plasmid (h): sc-62358-SH and FUS-2 shRNA (h) Lentiviral Particles: sc-62358-V.

Molecular Weight of FUS-2: 34 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.