SANTA CRUZ BIOTECHNOLOGY, INC.

MACF1 (H-12): sc-377533

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MACF1 (microtubule-Actin cross-linking factor 1) is a 5,327 amino acid protein that is encoded by the human gene MACF1. MACF1 belongs to the plakin or cytolinker family and contains one Actin-binding domain, 2 CH (calponin-homology) domains, 2 EF-hand domains, one SH3 domain and 37 spectrin repeats. MACF1 is an F-Actin-binding protein which may play a role in cross-linking actin to other cytoskeletal proteins and also binds to microtubules. The spectrin repeats, an important feature found in many proteins involved in cytoskeletal structure, forms a three helix bundle with the second helix (with proline interrupts in some sequences). MACF1 is a cytoplasmic protein expressed mainly in lung, brain, spinal cord, skeletal and cardiac muscle, and skin.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: Macf1 (mouse) mapping to 4 D2.2.

SOURCE

MACF1 (H-12) is a mouse monoclonal antibody raised against amino acids 1997-2240 mapping within an internal region of MACF1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MACF1 (H-12) is recommended for detection of MACF1 of mouse origin by Western Blotting (starting dilution 1:100, 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 MACF1 siRNA (m): sc-75725, MACF1 shRNA Plasmid (m): sc-75725-SH and MACF1 shRNA (m) Lentiviral Particles: sc-75725-V.

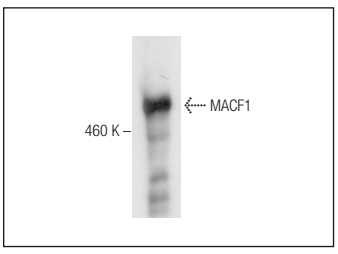
Molecular Weight of MACF1: 608 kDa.

Positive Controls: mouse brain extract: sc-2253.

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, UltraCruz® Blocking Reagent: sc-516214 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 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.

DATA



MACF1 (H-12): sc-377533. Western blot analysis of MACF1 expression in mouse brain tissue extract.

RESEARCH USE

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