

MACF1-4 (G-20): sc-82661

BACKGROUND

MACF1-4 (microtubule-Actin cross-linking factor 1, isoform 4) is a 5,327 amino acid protein that is encoded by the human gene MACF1. MACF1-4 belongs to the plakin or cytolinker family and contains one Actin-binding domain, two CH (calponin-homology) domains, two EF-hand domains, nineteen Plectin repeats and thirty-seven spectrin repeats. MACF1-4 is an F-Actin-binding protein which may play a role in cross-linking cytoskeletal proteins by binding intermediate filaments to the N-terminal Plectin repeats and microtubules to the C-terminus. 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). MACF1-4 is a cytoplasmic protein expressed mainly in heart, lung, pituitary and placenta; however, it is not found in brain, kidney, liver, pancreas or skeletal muscle.

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 or our catalog for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: MACF1 (human) mapping to 1p34.3.

SOURCE

MACF1-4 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MACF1 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-82661 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MACF1-4 (G-20) is recommended for detection of MACF1, isoform 4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with isoforms MACF1-1, MACF1-2, or MACF1-5.

Molecular Weight of MACF1-4: 671 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.

RESEARCH USE

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


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Try **MACF1-4 (D-10): sc-377534**, our highly recommended monoclonal alternative to MACF1-4 (G-20).