



Asef (N-20): sc-13275

BACKGROUND

The adenomatous polyposis coli gene (APC) is mutated in familial adenomatous polyposis and in sporadic colorectal tumors. Familial adenomatous polyposis is a dominantly inherited disease characterized by multiple adenomatous polyps in the colon. The human full-length Asef cDNA encodes a protein of 619 amino acids with motifs found in the Dbl family of proteins. The APC gene product binds through its armadillo repeat domain to a Rac-specific guanine nucleotide exchange factor (GEF), termed APC-stimulated guanine nucleotide exchange factor (Asef). Endogenous APC has been shown to co-localize with Asef in mouse colon epithelial cells and neuronal cells. Furthermore, APC has been shown to enhance the GEF activity of Asef and stimulate Asef-mediated cell flattening, membrane ruffling and lamellipodia formation in MDCK cells, suggesting that the APC-Asef complex may regulate the actin cytoskeletal network, cell morphology and migration, and neuronal function. Full-length APC protein is located in both the membrane/cytoskeletal and the nuclear fractions.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Asef (human) mapping to 2q22; Asef (mouse) mapping to 1 B.

SOURCE

Asef (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Asef 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-13275 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Asef (N-20) is recommended for detection of Asef 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).

Suitable for use as control antibody for Asef siRNA (h): sc-41696 and Asef siRNA (m): sc-41697.

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.