

EF-CAB14 (C-16): sc-164751

BACKGROUND

EF-CAB14 (EF-hand calcium binding domain 14), also known as KIAA0494, is a 495 amino acid protein that contains two EF-hand domains, which are helix-loop-helix structures that are usually found in calcium binding proteins. The gene encoding EF-CAB14 maps to human chromosome 1p33. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. The rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EFCAB14 (human) mapping to 1p33; 4732418C07Rik (mouse) mapping to 4 D1.

RESEARCH USE

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

SOURCE

EF-CAB14 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EF-CAB14 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-164751 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EF-CAB14 (C-16) is recommended for detection of EF-CAB14 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 EF-CAB14 siRNA (h): sc-88023, EF-CAB14 siRNA (m): sc-108954, EF-CAB14 shRNA Plasmid (h): sc-88023-SH, EF-CAB14 shRNA Plasmid (m): sc-108954-SH, EF-CAB14 shRNA (h) Lentiviral Particles: sc-88023-V and EF-CAB14 shRNA (m) Lentiviral Particles: sc-108954-V.

Molecular Weight of EF-CAB14: 55 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.

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.