

## EF-CAB2 (E-18): sc-246500

### BACKGROUND

EF-CAB2 (EF-hand calcium-binding domain-containing protein 2) is a 269 amino acid protein containing 2 EF-hand domains. Existing as two alternatively spliced isoforms, the gene encoding EF-CAB2 maps to human chromosome 1q44. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. 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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8. Scaffidi, P. and Misteli, T. 2006. Lamin A-dependent nuclear defects in human aging. *Science* 312: 1059-1063.
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### CHROMOSOMAL LOCATION

Genetic locus: EFCAB2 (human) mapping to 1q44; Efcab2 (mouse) mapping to 1 H4.

### SOURCE

EF-CAB2 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EF-CAB2 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-246500 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

EF-CAB2 (E-18) is recommended for detection of EF-CAB2 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); non cross-reactive with other EF-CAB family members.

EF-CAB2 (E-18) is also recommended for detection of EF-CAB2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EF-CAB2 siRNA (h): sc-88716, EF-CAB2 siRNA (m): sc-143301, EF-CAB2 shRNA Plasmid (h): sc-88716-SH, EF-CAB2 shRNA Plasmid (m): sc-143301-SH, EF-CAB2 shRNA (h) Lentiviral Particles: sc-88716-V and EF-CAB2 shRNA (m) Lentiviral Particles: sc-143301-V.

Molecular Weight of EF-CAB2 isoforms 1/2: 30/19 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.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.