SANTA CRUZ BIOTECHNOLOGY, INC.

CCBE1 (G-17): sc-84773

BACKGROUND

Encoding over 300 genes, chromosome 18 contains about 76 million bases. The gene encoding CCBE1 (collagen and calcium-binding EGF domain-containing protein 1) is located on chromosome 18 in a region that is frequently found to be deleted in breast and prostate cancers. CCBE1 is a 406 amino acid secreted protein that contains 2 collagen-like domains and one calcium-binding epidermal growth factor (EGF-like) domain. In general, EGF-like domains include six cysteine residues that are usually involved in disulfide bonds. Calcium-binding EGF-like domains are subject to amino acid substitutions that disrupt their structure or calcium affinity, therefore altering protein function. Downregulation of the gene encoding CCBE1 is observed with high frequency in breast cancer, suggesting that loss of CCBE1 results in changes in cell adhesion and mobility due to its characterization as an extracellular protein. There are three named isoforms of CCBE1 which are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CCBE1 (human) mapping to 18q21.32; Ccbe1 (mouse) mapping to 18 E1.

SOURCE

CCBE1 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCBE1 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-84773 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCBE1 (G-17) is recommended for detection of CCBE1 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 human isoform 2.

CCBE1 (G-17) is also recommended for detection of CCBE1 in additional species, including canine and porcine.

Suitable for use as control antibody for CCBE1 siRNA (h): sc-72818, CCBE1 siRNA (m): sc-142042, CCBE1 shRNA Plasmid (h): sc-72818-SH, CCBE1 shRNA Plasmid (m): sc-142042-SH, CCBE1 shRNA (h) Lentiviral Particles: sc-72818-V and CCBE1 shRNA (m) Lentiviral Particles: sc-142042-V.

Molecular Weight of CCBE1: 44 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 or our catalog for detailed protocols and support products.