SANTA CRUZ BIOTECHNOLOGY, INC.

CHIC2 (E-13): sc-104138

BACKGROUND

CHIC2 (cysteine-rich hydrophobic domain 2 protein), also known as BTL (BrX-like translocated in leukemia) and BTL/ETV6 fusion gene, is a 165 amino acid membrane protein whose gene is affected in a chromosomal translocation t(4;12)(q11;p13) occurring in acute myeloid leukemias (AML). CHIC2 is associated with the plasma membrane and vesicular structures, suggesting that it plays a role in regulating exocytosis. The cysteine-rich hydrophobic motif of CHIC2 contains cysteines that are palmitoylated, which is required for membrane association. In AML, the CHIC2 gene recombines with the TEL gene, resulting in a fusion protein containing the complete helix-loop-helix (HLH) and ETS DNA binding domains of TEL, but is transcribed via the CHIC2 promoter. Frequently, in systemic mast cell disease with associated eosinophilia, the gene encoding CHIC2 is deleted and a FIP1L1-PDGFR-α rearrangement is observed, a gene fusion which results in a constitutively active PDGFR-α.

REFERENCES

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6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 604332. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Fink, S.R., et al. 2009. Validation of a new three-color fluorescence *in situ* hybridization (FISH) method to detect CHIC2 deletion, FIP1L1/PDGFRA fusion and PDGFRA translocations. Leuk. Res. 33: 843-846.
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CHROMOSOMAL LOCATION

Genetic locus: CHIC2 (human) mapping to 4q12; Chic2 (mouse) mapping to 5 C3.3.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SOURCE

CHIC2 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CHIC2 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-104138 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CHIC2 (E-13) is recommended for detection of CHIC2 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); may cross-react with family member CHIC1.

Suitable for use as control antibody for CHIC2 siRNA (h): sc-89046, CHIC2 siRNA (m): sc-105202, CHIC2 shRNA Plasmid (h): sc-89046-SH, CHIC2 shRNA Plasmid (m): sc-105202-SH, CHIC2 shRNA (h) Lentiviral Particles: sc-89046-V and CHIC2 shRNA (m) Lentiviral Particles: sc-105202-V.

Molecular Weight of CHIC2: 19 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.