# SANTA CRUZ BIOTECHNOLOGY, INC.

# EF-CAB1 (C-20): sc-87093



## BACKGROUND

Made up of nearly 146 million bases, chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and are typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome. The gene encoding EF-CAB1 (EF-hand calcium-binding domain-containing peptide protein 1) is located on the long arm of chromsome 8. This 211 amino acid protein contains 3 EF-hand domains, which are helix-loop-helix structures that are usually found in calcium binding proteins. Other well-studied calcium binding proteins that contain EF-hand motifs include calmodulin (CaM), Troponin C, myosin regulatory light chain (MYL) and S-100 proteins.

## REFERENCES

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- Morgan, R.O., et al. 2006. Deciphering function and mechanism of calciumbinding proteins from their evolutionary imprints. Biochim. Biophys. Acta 1763: 1238-1249.
- 4. Lakowski, T.M., et al. 2007. Peptide binding by a fragment of calmodulin composed of EF-hands 2 and 3. Biochemistry 46: 8525-8536.
- Capozzi, F., et al. 2007. Essential dynamics of helices provide a functional classification of EF-hand proteins. J. Proteome Res. 6: 4245-4255.
- Paulsson, K., et al. 2007. Trisomy 8 as the sole chromosomal aberration in acute myeloid leukemia and myelodysplastic syndromes. Pathol. Biol. 55: 37-48.
- 7. Lakowski, T.M., et al. 2007. Calcium-induced folding of a fragment of calmodulin composed of EF-hands 2 and 3. Protein Sci. 16: 1119-1132.

# CHROMOSOMAL LOCATION

Genetic locus: EFCAB1 (human) mapping to 8q11.21; Efcab1 (mouse) mapping to 16 A1.

## SOURCE

EF-CAB1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of EF-CAB1 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87093 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

EF-CAB1 (C-20) is recommended for detection of EF-CAB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

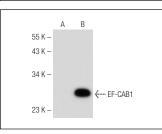
EF-CAB1 (C-20) is also recommended for detection of EF-CAB1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EF-CAB1 siRNA (h): sc-77819, EF-CAB1 siRNA (m): sc-143300, EF-CAB1 shRNA Plasmid (h): sc-77819-SH, EF-CAB1 shRNA Plasmid (m): sc-143300-SH, EF-CAB1 shRNA (h) Lentiviral Particles: sc-77819-V and EF-CAB1 shRNA (m) Lentiviral Particles: sc-143300-V.

Molecular Weight of EF-CAB1: 24 kDa.

Positive Controls: EF-CAB1 (h): 293T Lysate: sc-114069.

## DATA



EF-CAB1 (C-20): sc-87093. Western blot analysis of EF-CAB1 expression in non-transfected: sc-117752 (A) and human EF-CAB1 transfected: sc-114069 (B) 293T whole cell lysates.

## **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.

# MONOS Satisfation Guaranteed

Try **EF-CAB1 (B-2):** sc-515554, our highly recommended monoclonal alternative to EF-CAB1 (C-20).