SANTA CRUZ BIOTECHNOLOGY, INC.

CaBP1 (F-5): sc-514449

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The calcium binding protein (CaBP) family shares much similarity to calmodulin. It has been shown that CaBP proteins can substitute functionally for, and probably augment the function of, calmodulin. Calcium binding proteins are a crucial part of calcium mediated cellular signal transduction in the central nervous system. There are several members of the family with varying expression patterns. CaBP1 and CaBP2 can be expressed as multiple, alternatively spliced variants in brain and retina. CaBP3, CaBP4 and CaBP5 are restricted to retinal rod and cone cells.

REFERENCES

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2. Janson, I.M., Ek, B. and Ek, P. 1997. Phosphorylation of CaBP1 and CaBP2 by protein kinase CK2. J. Biochem. 121: 112-117.
3. Haeseleer, F., Sokal, I., Verlinde, C.L., Erdjument-Bromage, H., Tempst, P., Pronin, A.N., Benovic, J.L., Fariss, R.N. and Palczewski, K. 2000. Five members of a novel Ca^{2+}-binding protein (CABP) subfamily with similarity to calmodulin. J. Biol. Chem. 275: 1247-1260.
4. Kramer, B., Ferrari, D.M., Klappa, P., Pöhlmann, N. and Söling, H.D. 2001. Functional roles and efficiencies of the thioredoxin boxes of calcium-binding proteins 1 and 2 in protein folding. Biochem. J. 357: 83-95.
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6. Rieke, F., Lee, A. and Haeseleer, F. 2008. Characterization of Ca^{2+}-binding protein 5 knockout mouse retina. Invest. Ophthalmol. Vis. Sci. 49: 5126-5135.
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CHROMOSOMAL LOCATION

Genetic locus: CABP1 (human) mapping to 12q24.31; Cabp1 (mouse) mapping to 5 F.

SOURCE

CaBP1 (F-5) is a mouse monoclonal antibody raised against amino acids 317-353 mapping within an internal region of CaBP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

CaBP1 (F-5) is recommended for detection of CaBP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for CaBP siRNA (h): sc-105171, CaBP1 siRNA (m): sc-141961, CaBP shRNA Plasmid (h): sc-105171-SH, CaBP1 shRNA Plasmid (m): sc-141961-SH, CaBP shRNA (h) Lentiviral Particles: sc-105171-V and CaBP1 shRNA (m) Lentiviral Particles: sc-141961-V.

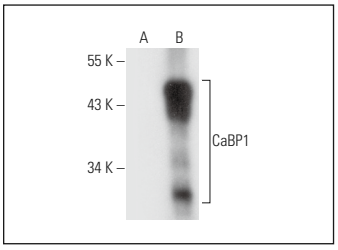
Molecular Weight of CaBP1: 26 kDa.

Positive Controls: CaBP1 (h): 293T Lysate: sc-114090.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CaBP1 (F-5): sc-514449. Western blot analysis of CaBP1 expression in non-transfected: sc-117752 (**A**) and human CaBP1 transfected: sc-114090 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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