

CaBP2 (L-16): sc-28087

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 CaBP 5 are restricted to retinal rod and cone cells.

REFERENCES

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2. Lundstrom-Ljung, J., Birnbach, U., Rupp, K., Soling, H.D. and Holmgren, A. 1995. Two resident ER-proteins, CaBP1 and CaBP2, with thioredoxin domains, are substrates for thioredoxin reductase: comparison with protein disulfide isomerase. FEBS Lett. 357: 305-308.
3. Janson, I.M., Ek, B. and Ek, P. 1997. Phosphorylation of CaBP1 and CaBP2 by protein kinase CK2. J. Biochem. 121: 112-117.
4. 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 Ca²⁺-binding protein (CABP) subfamily with similarity to calmodulin. J. Biol. Chem. 275: 1247-1260.
5. Kramer, B., Ferrari, D.M., Klappa, P., Pohlmann, N. and Soling, 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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URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: CABP2 (human) mapping to 11q13.2; Cabp2 (mouse) mapping to 19 A.

SOURCE

CaBP2 (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CaBP2 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-28087 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CaBP2 (L-16) is recommended for detection of CaBP2 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).

CaBP2 (L-16) is also recommended for detection of CaBP2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for CaBP2 siRNA (h): sc-105172, CaBP2 siRNA (m): sc-141962, CaBP2 shRNA Plasmid (h): sc-105172-SH, CaBP2 shRNA Plasmid (m): sc-141962-SH, CaBP2 shRNA (h) Lentiviral Particles: sc-105172-V and CaBP2 shRNA (m) Lentiviral Particles: sc-141962-V.

Molecular Weight of CaBP2: 18 kDa.

Positive Controls: Mouse brain extract: sc-2253 or Y79 cell lysate: sc-2240.

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.



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Try **CaBP (A-4): sc-365522**, our highly recommended monoclonal alternative to CaBP2 (L-16).