

CaBP1 (h): 293T Lysate: sc-114090

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

1. Peter, F., Nguyen Van, P. and Söling, H.D. 1992. Different sorting of Lys-Asp-Glu-Leu proteins in rat liver. *J. Biol. Chem.* 267: 10631-10637.
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., Pohlmann, N. and Söling, H.D. 2001. Functional roles and efficiencies of the thioresoxin boxes of calcium-binding proteins 1 and 2 in protein folding. *Biochem. J.* 357: 83-95.
5. Haeseleer, F., Imanishi, Y., Maeda, T., Possin, D.E., Maeda, A., Lee, A., Rieke, F. and Palczewski, K. 2004. Essential role of Ca^{2+} -binding protein 4, a $\text{Ca}_v1.4$ channel regulator, in photoreceptor synaptic function. *Nat. Neurosci.* 7: 1079-1087.
6. SWISS-PROT/TrEMBL (P57796). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: CABP1 (human) mapping to 12q24.31.

PRODUCT

CaBP1 (h): 293T Lysate represents a lysate of human CaBP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

CaBP1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CaBP1 antibodies. Recommended use: 10-20 µl per lane.

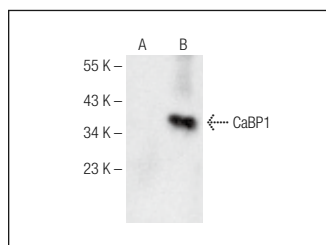
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CaBP1 (A-4): sc-365522 is recommended as a positive control antibody for Western Blot analysis of enhanced human CaBP1 expression in CaBP1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

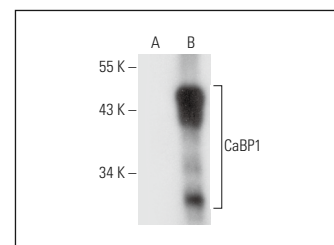
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-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.

DATA



CaBP1 (A-4): sc-365522. Western blot analysis of CaBP1 expression in non-transfected: sc-117752 (A) and human CaBP1 transfected: sc-114090 (B) 293T whole cell lysates.



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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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