

# CaBP4 (D-6): sc-271885

## 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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- Maeda, T., et al. 2005. A critical role of CaBP4 in the cone synapse. *Invest. Ophthalmol. Vis. Sci.* 46: 4320-4327.
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## CHROMOSOMAL LOCATION

Genetic locus: CABP4 (human) mapping to 11q13.2; Cabp4 (mouse) mapping to 19 A.

## SOURCE

CaBP4 (D-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-21 at the N-terminus of CaBP4 of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-271885 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

CaBP4 (D-6) is recommended for detection of CaBP4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for CaBP4 siRNA (h): sc-105173, CaBP4 siRNA (m): sc-141963, CaBP4 shRNA Plasmid (h): sc-105173-SH, CaBP4 shRNA Plasmid (m): sc-141963-SH, CaBP4 shRNA (h) Lentiviral Particles: sc-105173-V and CaBP4 shRNA (m) Lentiviral Particles: sc-141963-V.

Molecular Weight (predicted) of CaBP4: 30/20 kDa.

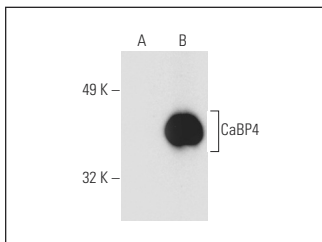
Molecular Weight (observed) of CaBP4: 35 kDa.

Positive Controls: CaBP4 (m): 293T Lysate: sc-118947.

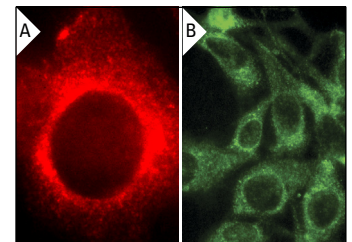
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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



CaBP4 (D-6): sc-271885. Western blot analysis of CaBP4 expression in non-transfected: sc-117752 (A) and mouse CaBP4 transfected: sc-118947 (B) 293T whole cell lysates.



CaBP4 (D-6): sc-271885. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization (A,B).

## 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](http://www.scbt.com) for detailed protocols and support products.