**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**


**CHROMOSOMAL LOCATION**

Genetic locus: CABP4 (human) mapping to 11q13.2; Cabbp4 (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 µg 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 µg 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 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 CaBP4 siRNA (h): sc-105173, CaBP4 siRNA (m): sc-141963, CaBP4 siRNA Plasmid (h): sc-105173-SH, CaBP4 siRNA Plasmid (m): sc-141963-SH, CaBP4 siRNA (h) Lentiviral Particles: sc-105173-V and CaBP4 siRNA (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 BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blotting Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG 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**

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

**STORAGE**

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

**PRODUCTS**

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