

# PCP-4 (1E3): sc-293258

## BACKGROUND

PCP-4 (Purkinje cell protein 4), also known as PEP-19, is a calmodulin (CaM) regulatory protein that is highly expressed in neuronal cells. Through its IQ motif, PCP-4 mediates both the calcium-dependent binding properties of CaM and the rates of association and dissociation of calcium from the C-terminal domain of CaM. The IQ motif contains a serine residue which can be phosphorylated by all isoforms of protein kinase C (PKC). PCP-4 is implicated in uterine leiomyomas, as well as in neurodegenerative disorders such as Alzheimer's disease and Huntington's disease. Additionally, overexpression of PCP-4 is thought to play a role in cerebellar hypoplasia, a key feature of Down syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PCP4 (human) mapping to 21q22.2; Pcp4 (mouse) mapping to 16 C4.

## SOURCE

PCP-4 (1E3) is a mouse monoclonal antibody raised against full length recombinant PCP-4 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

PCP-4 (1E3) is recommended for detection of PCP-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

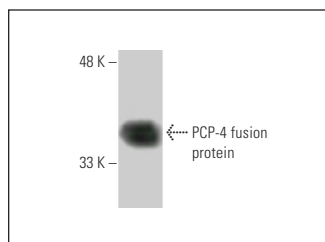
Suitable for use as control antibody for PCP-4 siRNA (h): sc-76091, PCP-4 siRNA (m): sc-76092, PCP-4 shRNA Plasmid (h): sc-76091-SH, PCP-4 shRNA Plasmid (m): sc-76092-SH, PCP-4 shRNA (h) Lentiviral Particles: sc-76091-V and PCP-4 shRNA (m) Lentiviral Particles: sc-76092-V.

Molecular Weight of PCP-4: 7 kDa.

## 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).

## DATA



PCP-4 (1E3): sc-293258. Western blot analysis of human recombinant PCP-4 fusion protein.

## 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.