

CR16 (P-14): sc-167543

BACKGROUND

CR16 (corticosteroids and regional expression protein 16 homolog), also known as WIPF3 (WAS/WASL interacting protein family, member 3), is a 483 amino acid proline-rich cytoplasmic protein that is thought to regulate cytoskeletal organization. A member of both the verprolin and Wiskott-Aldrich syndrome protein (WASP)-interacting protein (WIP) families, CR16 colocalizes with N-WASP (neuronal Wiskott-Aldrich syndrome protein) in tips of growth cone filopodia, primary hippocampal neurons and Sertoli cell-spermatid junctions. CR16 and N-WASP functionally interact to influence spermatogenesis. CR16 is predominantly expressed in brain and testis, contains one WH2 domain, a KLKR motif, three profilin-binding motifs and is encoded by a gene that maps to human chromosome 7p14.3.

REFERENCES

1. Masters, J.N., et al. 1996. Modulation of a novel RNA in brain neurons by glucocorticoid and mineralocorticoid receptors. *Neuroendocrinology* 63: 28-38.
2. Ho, H.Y., et al. 2001. CR16 forms a complex with N-WASP in brain and is a novel member of a conserved proline-rich actin-binding protein family. *Proc. Natl. Acad. Sci. USA* 98: 11306-11311.
3. Zettl, M., et al. 2002. The WH1 and EVH1 domains of WASP and Ena/VASP family members bind distinct sequence motifs. *Curr. Biol.* 12: 1617-1622.
4. Salazar, M.A., et al. 2003. Tuba, a novel protein containing bin/amphiphysin/Rvs and Dbl homology domains, links dynamin to regulation of the actin cytoskeleton. *J. Biol. Chem.* 278: 49031-49043.
5. Suetsugu, S., et al. 2007. Male-specific sterility caused by the loss of CR16. *Genes Cells* 12: 721-733.
6. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612432. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: WIPF3 (human) mapping to 7p14.3; Wipf3 (mouse) mapping to 6 B3.

SOURCE

CR16 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CR16 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-167543 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

CR16 (P-14) is recommended for detection of CR16 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).

CR16 (P-14) is also recommended for detection of CR16 in additional species, including equine.

Suitable for use as control antibody for CR16 siRNA (m): sc-142556, CR16 shRNA Plasmid (m): sc-142556-SH and CR16 shRNA (m) Lentiviral Particles: sc-142556-V.

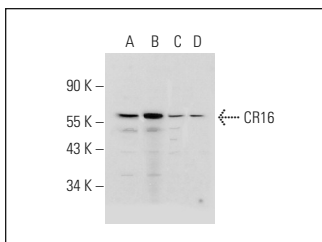
Molecular Weight of CR16: 43 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

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.

DATA



CR16 (P-14): sc-167543. Western blot analysis of CR16 expression in Jurkat (A), K-562 (B) and NIH/3T3 (C) whole cell lysates and human liver tissue extract (D).

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.