

CR16 (N-13): sc-167542

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 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-167542 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 (N-13) 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 (N-13) is also recommended for detection of CR16 in additional species, including equine, bovine and porcine.

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.

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.

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.