SANTA CRUZ BIOTECHNOLOGY, INC.

# CRIPT (T-18): sc-8573

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The PSD-95/SAP 90 family of proteins, which are known to bind to and cluster various membrane proteins, are involved in the organization of synaptic structure. These proteins are physically and functionally linked to cytoskeletal and/or signaling proteins. CRIPT (for cysteine-rich interactor of PDZ three), a novel postsynaptic protein, binds specifically to the PDZ3 domain of PSD-95/SAP 90. CRIPT induces the recruitment of PSD-95/SAP 90 to microtubules, and it has been shown to bind directly to microtubules, indicating that it may be responsible for cytoskeletal anchoring of PSD-95/SAP 90. CRIPT is widely expressed outside of the brain and is highly conserved from animals to plants suggesting a wider role in regulating cytoskeleton-membrane associations.

## REFERENCES


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2. Ehlers, M.D., et al. 1996. Synaptic targeting of glutamate receptors. Curr. Opin. Cell Biol. 8: 484-489.
3. Kornau, H.C., et al. 1997. Interaction of ion channels and receptors with PDZ domain proteins. Curr. Opin. Neurobiol. 7: 368-373.
4. Ziff, E.B. 1997. Enlightening the postsynaptic density. Neuron 19: 1163-1174.
5. Niethammer, M., et al. 1998. CRIPT, a novel postsynaptic protein that binds to the third PDZ domain of PSD-95/SAP90. Neuron 20: 693-707.
6. Brenman, J.E., et al. 1998. Localization of postsynaptic density-93 to dendritic microtubules and interaction with microtubule-associated protein 1A. J. Neurosci. 18: 8805-8813.
7. Passafaro, M., et al. 1999. Microtubule binding by CRIPT and its potential role in the synaptic clustering of PSD-95. Nat. Neurosci. 2: 1063-1069.
8. Valtschanoff, J.G., et al. 2001. Laminar organization of the NMDA receptor complex within the postsynaptic density. J. Neurosci. 21: 1211-1217.
9. Piserchio, A., et al. 2002. The PDZ1 domain of SAP90. Characterization of structure and binding. J. Biol. Chem. 277: 6967-6973.


## CHROMOSOMAL LOCATIONS

Genetic locus: CRIPT (human) mapping to 2p21; Cript (mouse) mapping to 17 E4.

## SOURCE

CRIPT (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CRIPT of rat 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-8573 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CRIPT (T-18) is recommended for detection of CRIPT 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

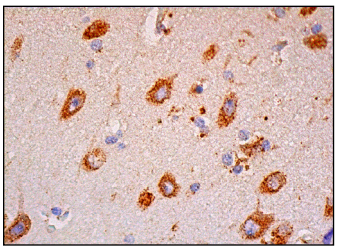
CRIPT (T-18) is also recommended for detection of CRIPT in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for CRIPT siRNA (h): sc-42281, CRIPT siRNA (m): sc-42282, CRIPT shRNA Plasmid (h): sc-42281-SH, CRIPT shRNA Plasmid (m): sc-42282-SH, CRIPT shRNA (h) Lentiviral Particles: sc-42281-V and CRIPT shRNA (m) Lentiviral Particles: sc-42282-V.

## 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



CRIPT (T-18): sc-8573. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells and glial cells.

## 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 or our catalog for detailed protocols and support products.