SANTA CRUZ BIOTECHNOLOGY, INC.

CRMP-5 (CR-3): sc-58516

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Collapsin response mediator proteins (CRMPs), including CRMP-1 (DRP-1), CRMP-2 (DRP-2 or TOAD64), CRMP-3 (DRP-4), CRMP-4 (DRP-3) and CRMP-5 (DRP-5), mediate signal transduction after exposure of neural cells to the axon guidance molecule Semaphorin 3A/collapsin. CRMPs are present in the developing cerebral cortex and neocortical neurons and are responsive to Semaphorin 3A. In the adult brain, the expression of CRMPs is dramatically downregulated. However, they remain expressed in structures that retain their capacity for differentiation and plasticity. CRMP-5, which is phylogenetically divergent from the other four CRMPs, is expressed in the filopodia of growth cones as well as in adult central and peripheral neurons, including synapses. The paraneoplastic CRMP-5 autoantibody (CRMP-5-IgG) is also associated with small cell lung carcinoma or thymoma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DPYSL5 (human) mapping to 2p23.3; Dpysl5 (mouse) mapping to 5 B1.

SOURCE

CRMP-5 (CR-3) is a rat monoclonal antibody raised against amino acids 1-64 of CRMP-5 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CRMP-5 (CR-3) is recommended for detection of CRMP-5 of mouse, rat, human and bovine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with other CRMP isoforms.

Suitable for use as control antibody for CRMP-5 siRNA (h): sc-60449, CRMP-5 siRNA (m): sc-60450, CRMP-5 shRNA Plasmid (h): sc-60449-SH, CRMP-5 shRNA Plasmid (m): sc-60450-SH, CRMP-5 shRNA (h) Lentiviral Particles: sc-60449-V and CRMP-5 shRNA (m) Lentiviral Particles: sc-60450-V.

Molecular Weight of CRMP-5: 62 kDa.

Positive Controls: Y79 cell lysate: sc-2240, SK-N-SH cell lysate: sc-2410 or mouse brain extract: sc-2253.

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 for detailed protocols and support products.