OriGene Technologies Inc.

9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene EU

Acris Antibodies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info@acris-antibodies.com

Polyclonal Antibody to CRMP1 (CT) - Aff - Purified

Alternate names: Collapsin response mediator protein 1 / DRP-1 / dihydropyropyrimidinase-related protein 1

Catalog No.: AP05218PU-N

Quantity: 0.1 mg

Concentration: Lot specific

Background: Collapsin-response mediator proteins (CRMPs) are highly expressed in the developing brain where they play major roles in axonal outgrowth, neurite differentiation, and apoptosis (1). Their continued expression in areas of high synaptic remodeling such as the cerebellum, hippocampus, and the olfactory system suggests that these proteins may also be involved in adult brain plasticity (2). CRMP-1 was initially identified as a dihydro-pyrimidinase expressed exclusively in brain (3); later studies have shown that it is involved with neurotrophin (NT) 3-induced neurite formation and outgrowth (4). CRMP-1 localization switches from axonal to somatodendritic when neurons reach functional maturity, suggesting that it is involved in early neuronal differentiation as well as in later processes related to the survival or death of the newly generated neurons (5).

Host / Isotype: Rabbit / IgG

Immunogen: Rabbit polyclonal CRMP1 antibody was raised against a 15 amino acid peptide from near the carboxy terminus of human CRMP1.

Format: **State:** Liquid purified Ig
Buffer System: Phosphate buffered saline with 0.02% sodium azide

Applications: Western Blot: 0,5 - 1 µg/ml; 3T3 cell lysate can be used as positive control.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody reacts to CRMP1 (CT).
Species: Human, Mouse, Rat.
Other species not tested.

Storage: The antibody can be shipped at ambient temperature. Store (in aliquots) at -20°C only. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Charrier E, Reibel S, Rogemond V, et al. Collapsin response mediator proteins (CRMPs): involvement in nervous system development and adult neurodegenerative disorders. Mol. Neurobiol. 2003; 28:51 - 64.
2. Cameron HA and McKay RD. Adult neurogenesis produces a large pool of new granule cells in the dentate gyrus. J. Comp. Neurol. 2001; 435:406 - 417.
3. Hamajima N, Matsuda K, Sakata S, et al. A novel gene family defined by human dihydropyrimidinase and three related proteins with differential tissue distribution.Gene. 1996; 180:157 - 63.

4. Quach TT, Duchemin A-M, Rogemond V, et al. Involvement of collapsin response mediator proteins in the neurite extension induced by neurotrophins in dorsal root ganglion neurons. Mol. Cell Neurosci. 2004; 25:433 - 43.

Pictures:

Western blot analysis of CRMP1 in 3T3 cell lysate with CRMP1 antibody at (A) 0.5, (B) 1 and (C) 2 µg/ml.