

CRMP1 / DRP-1 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Collapsin Response Mediator Protein
(Involved in NT3 Induced Neurite Outgrowth)

Instruction Manual

Catalog Number	PK-AB718-3623
Synonyms	CRMP1 Antibody: Collapsin response mediator protein 1, DRP-1, dihydropyrimidinase-related protein 1
Description	Collapsin-response mediator proteins (CRMPs) are highly expressed in the developing brain where they play major roles in axonal outgrowth, neurite differentiation, and apoptosis. 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. CRMP-1 was initially identified as a dihydro-pyrimidinase expressed exclusively in brain; later studies have shown that it is involved with neurotrophin (NT) 3-induced neurite formation and outgrowth. 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.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal CRMP1 antibody was raised against a 15 amino acid peptide from near the carboxy terminus of human CRMP1 (Genbank accession No. AAH07613).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. CRMP1 antibody can be used for the detection of CRMP1 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL.
Images	Available upon request.
References	Charrier E, Reibel S, Rogemond V, et al. Collapsin response mediator proteins (CRMPs): involvement in nervous system development and adult neurodegenerative disorders. <i>Mol. Neurobiol.</i> 2003; 28:51-64. Cameron HA and McKay RD. Adult neurogenesis produces a large pool of new granule cells in the dentate gyrus. <i>J. Comp. Neurol.</i> 2001; 435:406-417. Hamajima N, Matsuda K, Sakata S, et al. A novel gene family defined by human dihydropyrimidinase and three related proteins with differential tissue distribution. <i>Gene.</i> 1996; 180:157-63. 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. <i>Mol. Cell. Neurosci.</i> 2004; 25:433-43.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3623P 7B3 Cell Lysate, Cat. No. PK-AB718-1212 FOR IN VITRO RES
	CRMP1 Antibody (IN), Cat. No. PK-AB718-3625