

CRMP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58483

Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession <u>Q14194</u>

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 62184
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human CRMP1

Epitope Specificity 121-220/572

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm, cytoskeleton, centrosome. Cytoplasm, cytoskeleton,

spindle. Note=Associated with centrosomes and the mitotic spindle during

metaphase.

SIMILARITY Belongs to the DHOase family. Hydantoinase/dihydropyrimidinase subfamily.

SUBUNIT Homotetramer, and heterotetramer with DPYSL2, DPYSL3, DPYSL4 or DPYSL5.

Interacts with PLXNA1 (By similarity).

Important NoteThis product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions This gene encodes a member of a family of cytosolic phosphoproteins

expressed exclusively in the nervous system. The encoded protein is thought to be a part of the semaphorin signal transduction pathway implicated in semaphorin-induced growth cone collapse during neural development. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Jul 2008].

Additional Information

Gene ID 1400

Other Names Dihydropyrimidinase-related protein 1, DRP-1, Collapsin response mediator

protein 1, CRMP-1, Inactive dihydropyrimidinase, Unc-33-like phosphoprotein

3, ULIP-3, CRMP1, DPYSL1, ULIP3

Target/Specificity Brain.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name CRMP1

Synonyms DPYSL1, ULIP3

Function Necessary for signaling by class 3 semaphorins and subsequent remodeling

of the cytoskeleton (PubMed:<u>25358863</u>). Plays a role in axon guidance (PubMed:<u>25358863</u>). During the axon guidance process, acts downstream of SEMA3A to promote FLNA dissociation from F-actin which results in the rearrangement of the actin cytoskeleton and the collapse of the growth cone

(PubMed:<u>25358863</u>). Involved in invasive growth and cell migration (PubMed:<u>11562390</u>). May participate in cytokinesis (PubMed:<u>19799413</u>).

Cellular Location Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center,

centrosome. Cytoplasm, cytoskeleton, spindle. Cell projection, growth cone

{ECO:0000250|UniProtKB:P97427}. Cytoplasm, cytoskeleton

{ECO:0000250|UniProtKB:P97427}. Perikaryon

{ECO:0000250|UniProtKB:P97427}. Note=Associated with centrosomes and the mitotic spindle during metaphase (PubMed:11562390). Colocalizes with FLNA and tubulin in the central region of DRG neuron growth cone (By similarity). Following SEMA3A stimulation of DRG neurons, colocalizes with

F-actin (By similarity) {ECO:0000250 | UniProtKB:P97427,

ECO:0000269 | PubMed:11562390}

Tissue Location Brain.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.