

CRMP1 Protein, Human

Cat. No.:	HY-P71547
Synonyms:	Collapsin response mediator protein 1; CRMP 1; CRMP-1; Crmp1; Dihydropyrimidinase like 1; Dihydropyrimidinase related protein 1; Dihydropyrimidinase-related protein 1; DPYL1_HUMAN; DPYSL1; DRP 1; DRP-1; DRP1; ULIP-3; Ulip3; Unc-33-like phosphoprotein 3
Species:	Human
Source:	E. coli
Accession:	Q14194 (M1-G572)
Gene ID:	1400
Molecular Weight:	Approximately 62.2 kDa

PROPERTIES

AA Sequence	MSYQGKKSLP HITSDRLLIK GGRIINDDQS LYADVYLEDG LIKQIGENLI VPGGVKTIEA NGRMVI PGGI DVNTYLQKPS QGMTAADDFF QGTRAALVGG TTMIIDHVVP EPGSSLLTSF EKWHEAADTK SCCDYS LHV D ITSWYDGVRE ELEVLVQDKG VNSFQVY MAY KD VY QMSDSQ LYEAF TFLKG LGAVILVHAE NGDLIAQE QK RILEMGITGP EGHALSRPEE LEAEAVFRAI TIAGRINCPV YITKVMKS SA ADIIALARKK GPLVFGEP IA ASLGT DGTHY WSKNWA KAAA FVTSPPLSPD PTTPDYLTSL LACGDLQVTG SGHC PYSTAQ KAVGKDNFTL IPEGVNGIEE RMTVVWDKAV ATGKM DENQF VAVTSTNAAK IFNL YPRKGR I AVGSDADVV IWDPDKLKTI TAKSHKSAVE YNIFEGMECH GSPLVVISQG KIVFEDGNIN VNKG MGRFIP RKAFPEHLYQ RVKIRNKVFG LQGVSRGMYD GPVYEVPATP KYATPAPSAK SSPSKHQPPP IRNLHQSNFS LSGAQIDDNN PRRTGHRIVA PPGGRSNITS LG
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

CRMP1 protein is essential for signaling mediated by class 3 semaphorins, playing a crucial role in the subsequent remodeling of the cytoskeleton. It actively participates in axon guidance, acting downstream of SEMA3A to induce the dissociation of FLNA from F-actin, leading to a reorganization of the actin cytoskeleton and the subsequent collapse of the growth cone. Beyond its role in axon guidance, CRMP1 is implicated in invasive growth and cell migration processes, suggesting its involvement in cellular dynamics. Additionally, there is evidence suggesting its potential contribution to cytokinesis. CRMP1 forms homotetramers and heterotetramers with DPYSL2, DPYSL3, DPYSL4, or DPYSL5, indicating its association with related proteins. Furthermore, it interacts with PLXNA1 and FLNA, specifically through FLNA's calponin-homology (CH) domain 1 and filamin repeat 24, altering FLNA's ternary structure and promoting its dissociation from F-actin, highlighting its intricate involvement in cytoskeletal dynamics.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA