

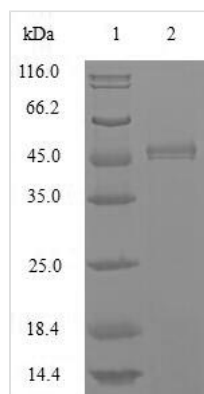


Recombinant Apis mellifera Major royal jelly protein 1 (MRJP1)

Product Code	CSB-BP522725DNK
Relevance	<p>Major royal jelly protein 1: induces the differentiation of honeybee larvae into queens through an Egfr-mediated signaling pathway. Promotes body size increase by activating p70 S6 kinase, stimulates ovary development by augmenting the titer of vitellogenin (Vg) and juvenile hormone, and reduces developmental time by increasing the activity of mitogen-activated protein kinase and inducing the 20-hydroxyecdysone protein (20E). Most abundant protein found in the royal jelly which is the food of the queen honey bee larva. The royal jelly determines the development of the young larvae and is responsible for the high reproductive ability of the honeybee queen. Jellein-1: has antibacterial activity against the Gram-positive bacteria S.aureus ATCC 6535, S.saprophyticus and B.subtilis CCT2471, and the Gram-negative bacteria E.coli CCT1371, E.cloacae ATCC 23355, K.pneumoniae ATCC 13883 and P.aeruginosa ATCC 27853, and antifungal activity against C.albicans. Lack cytolytic activity and does not induce rat peritoneal mast cell degranulation. Jellein-2: has antibacterial activity against the Gram-positive bacteria S.aureus ATCC 6535, S.saprophyticus and B.subtilis CCT2471, and the Gram-negative bacteria E.coli CCT1371, E.cloacae ATCC 23355, K.pneumoniae ATCC 13883 and P.aeruginosa ATCC 27853, and antifungal activity against C.albicans. Lack cytolytic activity and does not induce rat peritoneal mast cell degranulation. Jellein-4: lacks antibacterial and antifungal activity. Lacks cytolytic activity and does not induce rat peritoneal mast cell degranulation.</p>
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O18330
Product Type	Recombinant Protein
Immunogen Species	Apis mellifera (Honeybee)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	<p>NILRGESLNKSLPILHEWKFFDYDFGSDERRQDAILSGEYDYKNNYPSDIDQW HDKIFVTMLRYNGVPSSLNVISKVGDGGPLLQPYPDWSFAKYDDCSGIVSAS KLAIKCDRLWVLD SGLVNNTQPMCSPKLLTFDLTTSQLLKQVEIPHDVAVNAT TGKGR LSSLAVQSLDCNTNSDTMVYIADEKGEGLIVYHNSDDS FHR L TSNTFD YDPKFTKMTIDGESYTAQDGISGMALSPMTNNLYSPVASTSLYYVNTEQFRT SDYQQNDIHYEGVQNILDTQSSAKVVS KSGVLFFGLVGDSALGCWNEHRTLE RHNIRTVAQSDETLQMIASMKIKEALPHVPIFDRIYINREYILVLSNKMQKVMVND FNFDDVNFRIMNANVNELILNTRCENPDNDRTPFKISIH L</p>
Lead Time	3-7 business days
Research Area	others



Source	Baculovirus
Gene Names	MRJP1
Protein Names	56-kDa protein 4
Expression Region	20-432aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	49.4kDa
Protein Description	Full Length of Mature Protein

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.