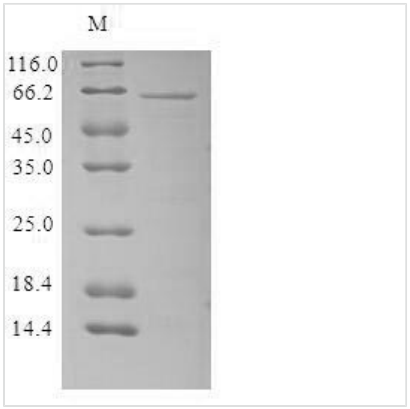
Recombinant Human parvovirus B19 Minor capsid protein VP1, partial

Product Code	CSB-BP362102HPM
Relevance	Capsid protein self-assembles to form an icosahedral capsid with a T=1 symmetry, about 22 nm in diameter, and consisting of 60 copies of two size variants of the capsid proteins, VP1 and VP2, which differ by the presence of an N-terminal extension in the minor protein VP1. The capsid encapsulates the genomic ssDNA. Capsid proteins are responsible for the attachment to host cell receptors, such as the glycosphingolipid globoside or the integrin heterodimer ITGAV/ITGB1. This attachment induces virion internalization predominantly through clathrin-dependent endocytosis. Binding to the host receptors also induces capsid rearrangements leading to surface exposure of VP1 N-terminus, specifically its phospholipase A2-like region and nuclear localization signal(s). VP1 N-terminus might serve as a lipolytic enzyme to breach the endosomal membrane during entry into host cell. Intracytoplasmic transport involves microtubules and interaction between capsid proteins and host dynein. Exposure of nuclear localization signal probably allows nuclear import of capsids
Abbreviation	Recombinant Human parvovirus B19 Minor capsid protein VP1 protein, partial
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.	P07299
Product Type	Recombinant Protein
Immunogen Species	Human parvovirus B19 (isolate AU) (HPV B19)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MTSVNSAEASTGAGGGGSNSVKSMWSEGATFSANSVTCTFSRQFLIPYDPEH HYKVFSPAASSCHNASGKEAKVCTISPIMGYSTPWRYLDFNALNLFFSPLEFQ HLIENYGSIAPDALTVTISEIAVKDVTDKTGGGVQVTDSTTGRLCMLVDHEYKY PYVLGQGQDTLAPELPIWVYFPPQYAYLTVGDVNTQGISGDSKKLASEESAFY VLEHSSFQLLGTGGTASMSYKFPPVPPENLEGCSQHFYEMYNPLYGSRLGVP DTLGGDPKFRSLTHEDHAIQPQNFMPGPLVNSVSTKEGDSSNTGAGKALTGL STGTSQNTRISLRPGPVSQPYHHWDTDKYVTGINAISHGQTTYGNAEDKEYQ QGVGRFPNEKEQLKQLQGLNMHTYFPNKGTQQYTDQIERPLMVGSVWNRRA LHYESQLWSKIPNLDDSFKTQFAALGGWGLHQPPPQIFLKILPQSGPIGGIKSM GITTLVQYAVGIMTVTMTFKLGPRKATGRWNPQPGVYPPHAAGHLPYVLYDPT ATDAKQHHRHGYEKPEELWTAKSRVHPL
Research Area	Others
Source	Baculovirus
Protein Names	Coat protein VP1

Expression Region	228-781aa
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 and C-terminal Myc-tagged
Mol. Weight	64.8 kDa
Protein Length	Partial

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.
Shelf Life	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.