



# Recombinant Human parvovirus B19 Minor capsid protein VP1, partial

<b>Product Code</b>	CSB-EP362102HPM
<b>Relevance</b>	<p>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 ITGA5/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 domain transport involves microtubules and interaction between capsid proteins and host dynein. Exposure of nuclear localization signal probably allows nuclear import of capsids.</p>
<b>Abbreviation</b>	Recombinant Human parvovirus B19 Minor capsid protein VP1 protein, partial
<b>Storage</b>	<p>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.</p>
<b>Uniprot No.</b>	P07299
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Human parvovirus B19 (isolate AU) (HPV B19)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	<p>MTSVNSAEASTGAGGGGSNSVKSMWSEGATFSANSVTCTFSRQFLIPYDPEH  HYKVFSPAASSCHNASGKEAKVCTISPIMGYSTPWRYLDFNALNLFFSPLEFQ  HLIENYGSIAPDALTVTISEIAVKDVTDKTGGGVQVTDSTTGRLCMLVDHEYKY  PYVLGQGQDTLAPELPIWVYFPPQYAYLTVGDVNTQGSGDSKKLASEESAFY  VLEHSSFQLLGTGGTASMSYKFPPVPPENLEGCSQHFYEMYNPLYGSRLGVP  DTLGGDPKFRSLTHEDHAIQPQNFMGPPLVNSVSTKEGDSSNTGAGKALTGL  STGTSQNTRISLRPGPVSQPYHHWDTDKYVTGINAISHGQTTYGNAEDKEYQ  QGVGRFPNEKEQLKQLQGLNMHTYFPNKGTTQYTDQIERPLMVGSVWNRRA  LHYESQLWSKIPNLDDSFKTQFAALGGWGLHQPPQIFLKILPQSGPIGGIKSM  GITTLVQYAVGIMTVTMTFKLGPRKATGRWNPQPGVYPPHAAGHLPYVLYDPT  ATDAKQHHRHGYEKEPEELWTAKSRVHPL</p>
<b>Source</b>	E.coli
<b>Expression Region</b>	228-781aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at

4°C for up to one week.

**Tag Info**

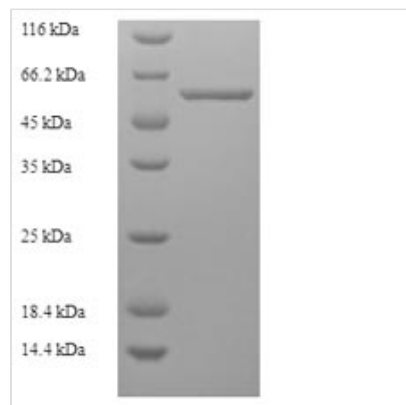
N-terminal 6xHis-tagged

**Mol. Weight**

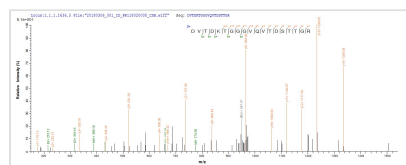
64.8 kDa

**Protein Length**

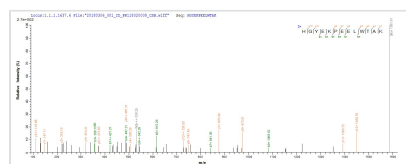
Partial

**Image**


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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP362102HPM could indicate that this peptide derived from E.coli-expressed Human parvovirus B19 (isolate AU) (HPV B19) N/A.



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**Description**

Discover our high-quality Recombinant Human parvovirus B19 Minor capsid protein VP1, an essential research tool designed specifically for studying the Minor capsid protein VP1 of Human parvovirus B19 (isolate AU) (HPV B19). As an integral component of the parvovirus B19 capsid, this protein is critical for understanding the virus's structure, host interactions, and potential therapeutic strategies targeting HPV B19 infection.

Our Recombinant Human parvovirus B19 Minor capsid protein VP1 is a partial protein (228-781aa) expressed in E. coli, providing you with a reliable and efficient resource for your research needs. The protein features an N-terminal 6xHis-tag for easy purification and detection in your experiments. With a purity greater than 90% as determined by SDS-PAGE and available in both liquid and lyophilized powder forms, this recombinant protein offers the quality and performance you require for your HPV B19 studies.

**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.