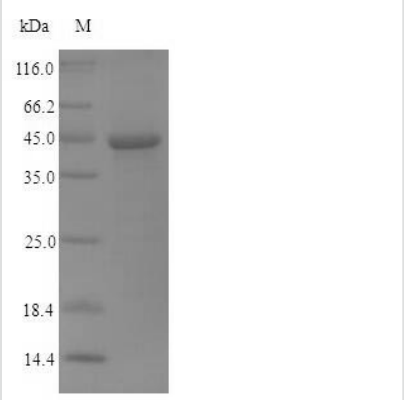
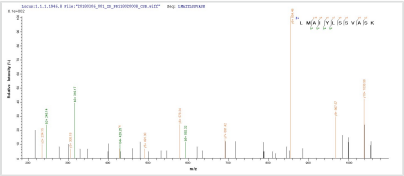
Recombinant Human parvovirus B19 Non-capsid protein NS-1 (NS1), partial

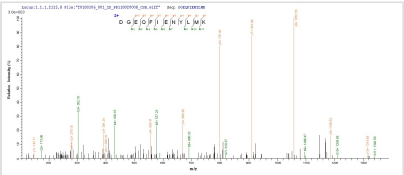
Product Code	CSB-EP357083HPM
Relevance	Seems necessary for viral DNA replication.
Abbreviation	Recombinant Human parvovirus B19 NS1 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, 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.	P07298
Alias	NCVP1 Non-structural protein NS1
Product Type	Recombinant Protein
Immunogen Species	Human parvovirus B19 (isolate AU) (HPV B19)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MELFRGVLQVSSNVLDCANDNWWCSLLDLDTSDWEPLTHTNRLMAIYLSSVA SKLDFTGGPLAGCLYFFQVECNKFEEGYHIHVVTGGPGLNPRNLTVCVEGLFN NVLYHLVTENVKLKFLPGMTTKGKYFRDGEQFIENYLMKKIPLNVVWCVTNIDG YIDTCISATFRRGACHAKKPRITTAINDTSSDAGESSGTGAEVVPFNGKGTKASI KFQTMVNWLCENRVFTEDKWKLVDFNQYTLLSSSHSGSFQI
Research Area	Microbiology
Source	E.coli
Target Names	NS1
Protein Names	Recommended name: Non-capsid protein NS-1 Alternative name(s): NCVP1 Non-structural protein NS1
Expression Region	1-255aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	44.6kDa
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-EP357083HPM could indicate that this peptide derived from E.coli-expressed Human parvovirus B19 (isolate AU) (HPV B19) NS1.



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Description

The production of this recombinant HPV B19 NS1 protein is just like all recombinant proteins. The process involved transfecting E.coli cells with DNA vector containing the template of recombinant DNA. The E.coli cells containing the template were then cultured so that they could transcribe and translate the NS1 protein. N-terminal 6xHis-SUMO tag was used in the process. The purity is 0.9 determined by SDS-PAGE.

The non-structural protein 1 (NS1) of human parvovirus B19 plays a critical role in viral DNA replication, which performs many diferent functions during the virus life cycle. NS1 of parvovirus B19 induces cell death by apoptosis in at least erythroid-lineage cells by a pathway that involves caspase 3, whose activation may be a key event during NS1-induced cell death. Some studies showed that have shown that NS1 initiates apoptosis by activating caspase 3 (but not caspase 1) in a manner which is deferent from the IL-6 activation pathway. The cytotoxicity of NS1 in such cells results from chromosomal DNA damage caused by the DNA-nicking and DNA-attaching activities of NS1. Studies have been shown NS1 covalently binds to cellular DNA and is modiied by PARP (Poly ADP ribose polymerase), an enzyme involved in repairing single-stranded DNA nicks.

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.

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