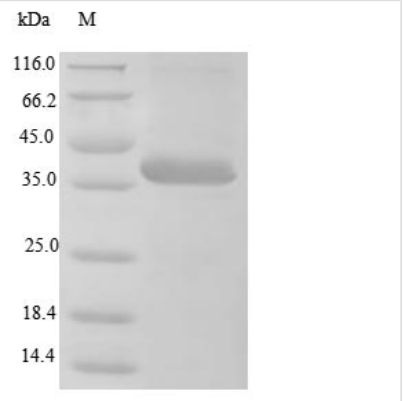
Recombinant BK polyomavirus Minor capsid protein VP2

Product Code	CSB-EP360956BGYb0
Relevance	Isoform VP2 is a structural protein that resides within the core of the capsid surrounded by 72 VP1 pentamers. Participates in host cell receptor binding together with VP1. Following virus endocytosis and trafficking to the endoplasmic reticulum, VP2 and VP3 form oligomers and integrate into the endoplasmic reticulum mbrane. Heterooligomer VP2-VP3 may create a viroporin for transporting the viral genome across the endoplasmic reticulum mbrane to the cytoplasm. Nuclear entry of the viral DNA involves the selective exposure and importin recognition of VP2 or Vp3 nuclear localization signal (shared C-terminus). Plays a role in virion assbly within the nucleus in particular through a DNA-binding domain located in the C-terminal region. A N-terminal myristoylation suggests a scaffold function for virion assbly .Isoform VP3: structural protein that resides within the core of the capsid surrounded by 72 VP1 pentamers. Following virus endocytosis and trafficking to the endoplasmic reticulum, VP2 and VP3 form oligomers and integrate into the endoplasmic reticulum mbrane. Heterooligomer VP2-VP3 may create a viroporin for transporting the viral genome across the endoplasmic reticulum mbrane to the cytoplasm. Nuclear entry of the viral DNA involves the selective exposure and importin recognition of VP2 or Vp3 nuclear localization signal (shared C-terminus). Isoform VP3 plays a role in virion assbly within the nucleus. May participate in host cell lysis when associated with VP4 .Isoform VP4 is a viroporin inducing perforation of cellular mbranes to trigger virus progeny release. Forms pores of 3 nm inner diameter. VP4 is expressed about 24 hours after the late structural proteins and is not incorporated into the mature virion .
Abbreviation	Recombinant BK polyomavirus Minor capsid protein VP2 protein
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.	P03094
Product Type	Recombinant Protein
Immunogen Species	BK polyomavirus (BKPyV) (Human polyomavirus 1)
Purity	≥ 85% as determined by SDS-PAGE.
Sequence	GAALALLGDLVASVSEAAAATGFSVAEIAAGEAAAAIEVQIASLATVEGITSTSE AIAAIGLTPQTYAVIAGAPGAIAGFAALIQTVSGISSLAQVGYRFFSDWDHKVST VGLYQQSGMALELFNPDEYYDILFPGVNTFVNNIQYLDPRHWGPSLFATISQAL WHVIRDDIPSITSQELQRRTERFFRDSLARFLEETTWTIVNAPINFYNYIQQYYS DLSPIRPSMVRQVAEREGTRVHFGHTYSIDDADSIEEVTQRMDLRNQQSVHS GEFIEKTIAPGGANQRTAPQWMLPLLLGLYGTVTPALEAYEDGPNQKKRRVSR GSSQKAKGTRASAKTTNKRRSRSSRS

Research Area	Others
Source	E.coli
Expression Region	2-351aa
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	41.7 kDa
Protein Length	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.
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.