# Recombinant JC polyomavirus Minor capsid protein VP2

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| **Product Code** | CSB-YP355948JAK |
| **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 . |
| **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.** | P03095 |
| **Storage Buffer** | Tris-based buffer,50% glycerol |
| **Product Type** | Recombinant Protein |
| **Species** | JC polyomavirus (JCPyV) (JCV) |
| **Purity** | Greater than 90% as determined by SDS-PAGE. |
| **Sequence** | GAALALLGDLVATVSEAAAATGFSVAEIAAGEAAATIEVEIASLATVEGITSTSEA IAAIGLTPETYAVITGAPGAVAGFAALVQTVTGGSAIAQLGYRFFADWDHKVST VGLFQQPAMALQLFNPEDYYDILFPGVNAFVNNIHYLDPRHWGPSLFSTISQAF WNLVRDDLPALTSQEIQRRTQKLFVESLARFLEETTWAIVNSPANLYNYISDYY SRLSPVRPSMVRQVAQREGTYISFGHSYTQSIDDADSIQEVTQRLDLKTPNVQ SGEFIERSIAPGGANQRSAPQWMLPLLLGLYGTVTPALEAYEDGPNKKKRRKE GPRASSKTSYKRRSRSSRS |

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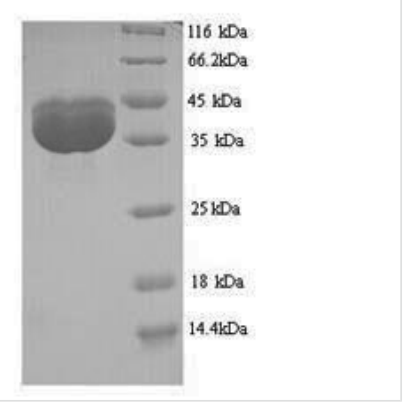
| **Research Area** | Others |
| **Source** | Yeast |
| **Gene Names** | N/A |
| **Protein Names** | Recommended name: Minor capsid protein VP2Alternative name(s): Minor structural protein VP2 |
| **Expression Region** | 2-344aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | N-terminal 6xHis-tagged |
| **Mol. Weight** | 39.2kDa |
| **Protein Description** | Full Length of Mature Protein |

**Image**




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