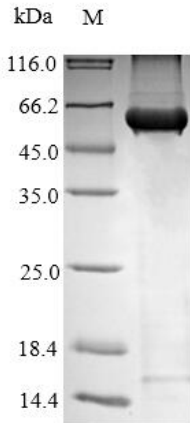


Recombinant BK polyomavirus Major capsid protein VP1

Catalog Number: RPC22755

Product Name	Recombinant BK polyomavirus Major capsid protein VP1
Catalog Number	RPC22755
Expression host	<i>E.coli</i>
Product Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
Storage Buffer	10 mM Tris-HCl, 1 mM EDTA, pH 8.0, 50% glycerol
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Relevance	Forms an icosahedral capsid with a T=7 symmetry and a 50 nm diameter. The capsid is composed of 72 pentamers linked to each other by disulfide bonds and associated with VP2 or VP3 proteins. Interacts with gangliosides GT1b and GD1b containing terminal alpha(2-8)-linked sialic acids on the cell surface to provide virion attachment to target cell. This attachment induces virion internalization predominantly through caveolin-mediated endocytosis and traffics to the endoplasmic reticulum. Inside the endoplasmic reticulum, the protein folding machinery isomerizes VP1 interpentamer disulfide bonds, thereby triggering initial uncoating. Next, the virion uses the endoplasmic reticulum-associated degradation machinery to probably translocate in the cytosol before reaching the nucleus. Nuclear entry of the viral DNA involves the selective exposure and importin recognition of VP2/Vp3 nuclear localization signal. In late phase of infection, neo-synthesized VP1 encapsulates replicated genomic DNA in the nucleus, and participates in rearranging nucleosomes around the viral DNA (By similarity).
AA sequence	MAPTKRKGECPGAAPKKPKPEVQVPKLLIKGGVEVLEVKTGVD AITEVECF LNP EMGDPDENLRGFS LKLSAENDFSSDSPERKMLPCYSTAR IPLPNLNEDLT CGNLL MWEAVTVQTEVIGIT SMLNLHAGSQKVHEHGGGKPIQGSNFHFFAVGGEP LEMQ GVL MNYSKYPDGTITPKNPTAQSQVMNTD HKAYLDKNNAYPVECWVPDPSR NENARYFGTFTGGENVPPVLHVTNTATTVLLDEQGVG PLCKADSLYVSAADICG LFTNSSGTQQWRGLARYFKIRLRKRSVKNPYPISFLLSDLINRRTQRVDGQPMYG MESQVEEVRVFDGTERLP GD PDMIRYIDKQGQLQTKML
References	"The genome of human papovavirus BKV." Seif I., Houry G., Dhar R. Cell 18:963-977(1979)

Certificate of Analysis

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Catalog Number	RPC22755	
Expression host	<i>E.coli</i>	
Product Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged	
Storage Buffer	10 mM Tris-HCl, 1 mM EDTA, pH 8.0, 50% glycerol	
Batch Number	03342	
Nature	BK polyomavirus Major capsid protein VP1 -(AA 1-362)- P03088 -Full Length	
Purification	Affinity purified using IMAC	
Recommended Storage	Short term	2 to 8 °C, one week from the date of receipt
	Long term	-20 to -80 °C, six months from the date of receipt
Form	Liquid	
Date of detection	2017.02.17	
Test Items	Specifications	Results
Appearance	Clear Solution	pass
Concentration	0.1-5 mg/ml, by the Bradford Method.	1.5 mg/ml
Purity	≥90%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.	
Molecular Weight	Predicted band size: 60.18kDa	

Electrophoretic parameters	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.		
Aseptic Processing	Not done		
Endotoxin Level	Untreated		
Activity	Not tested		
Conclusion	pass		
Analyst		Date	
Corrector		Date	