

Recombinant AAV2 VP1 Protein, Strep/SUMO/His-tagged

Cat. No. VP1-04A **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant AAV-2 VP1 Protein with a Strep/SUMO/His tag was expressed in E. coli.
Species	AAV2
Source	E.coli
Description	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 three size variants of the capsid protein VP1, VP2 and VP3 which differ in their N-terminus. The capsid encapsulates the genomic ssDNA. Binds to host cell heparan sulfate and uses host ITGA5-ITGB1 as coreceptor on the cell surface to provide virion attachment to target cell. This attachment induces virion internalization predominantly through clathrin-dependent endocytosis. Binding to the host receptor also induces capsid rearrangements leading to surface exposure of VP1 N-terminus, specifically its phospholipase A2-like region and putative nuclear localization signal(s). VP1 N-terminus might serve as a lipolytic enzyme to breach the endosomal membrane during entry into host cell and might contribute to virus transport to the nucleus.
Molecular Mass	96.81 kDa
AA Sequence	MNWSHPQFEKSSGSSGGHHHHHHGGSGGSGSDSEVNQEAKPEVKPEVKPETHIN LKVSDGSSEIFFKIKKTTPLRRLMEAFKRQGKEMDSLRFlyDGIRIQADQAPEDLDM EDNDIIEAHREQIGGLNSSSVDMAADGYLPDWLEDTLSEGIRQWWKLKPGPPPPKP

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AERHKDDSRGLVLPGYKYLGPFGNLDKGEPVNEADAAALEHDKAYDRQLDSGDNP
 YLKYNHADAQERLKEDETSFGGNLGRAVFQAKKRVLEPLGLVEEPVKTAPGKKRP
 VEHSPEPDSSSGTGKAGQQPARKRLNFGQTGDADSVDPQPLGQPPAAPSGLGT
 NTMATGSGAPMADNNEGADGVGNSSGNWHCDSTWMGDRVITSTRTWALPTYNN
 HLYKQISSQSGASNDNHYFGYSTPWGYFDFNRFHCHFSPRDWQRLINNNWGFRPK
 RLNFKLFNIQVKEVTQNDGTTTIANNLTSTVQVFTDSEYQLPYVLGSAHQGCLPPFP
 ADVFMVPQYGYLTLNNGSQAVGRSSFYCLEYFPSQMLRTGNNFTFSYTFEDVPFHS
 SYAHSQSLDRLMNPLIDQYLYLSRTNTPSGTTTQSRLQFSQAGASDIRDQSRNWL
 PGPCYRQQRVSKTSADNNNSEYSWTGATKYHLNGRDSLVPNPGPAMASHKDDEEK
 FFPQSGVLIFGKQGSEKTNVDIEKVMITDEEEIRTTNPVATEQYGSVSTNLQRGNRQ
 AATADVNTQGVLPGMVWQDRDVYLQGPIWAKIPHTDGHFHPSPMLGGFGLKHPPP
 QILIKNTPVPANPSTTFSAAKFASFITQYSTGQVSVEIEWELQKENSKRWNPEIQYTS
 NYNKSVMVDFTVDTNGVYSEPRPIGTRYLTRNL

Purity > 85% by SDS-PAGE

Storage Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Concentration 0.5 mg/mL

Storage Buffer PBS, pH 7.4

GENE INFORMATION

Gene Name AAV2gp05 major coat protein VP1 [Adeno-associated virus - 2]

Official Symbol AAV2gp05

Synonyms AAV2gp05; major coat protein VP1; major coat protein VP1

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	4192017
Protein Refseq	YP_680426
UniProt ID	P03135

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA