Recombinant AAV-2 VP3 Protein, Strep/SUMO/His-tagged

Cat. No. VP3-04A **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant AAV-2 VP3 Protein with Strep/SUMO/His tag was expressed in E. coli.
Species	AAV2
Source	E.coli
ProteinLength	1-533 aa
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	75.17 kDa
AA Sequence	MNWSHPQFEKSSGSSGGHHHHHHGGSGGSGSDSEVNQEAKPEVKPEVKPETHIN LKVSDGSSEIFFKIKKTTPLRRLMEAFAKRQGKEMDSLRFLYDGIRIQADQAPEDLDM EDNDIIEAHREQIGGLNSSSVDMATGSGAPMADNNEGADGVGNSSGNWHCDSTW

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

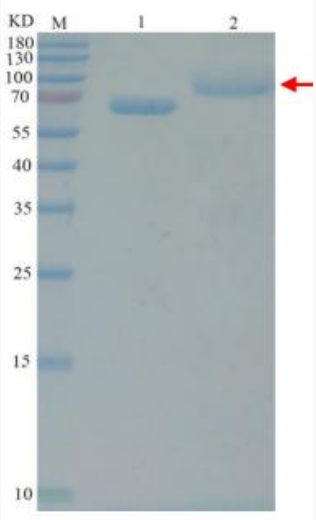
	MGDRVITTSTRTWALPTYNNHLYKQISSQSGASNDNHYFGYSTPWGYFDFNRFHC HFSPRDWQRLINNNWGFRPKRLNFKLFNIQVKEVTQNDGTTTIANNLTSTVQVFTDS EYQLPYVLGSAHQGCLPPFPADVFMVPQYGYLTLNNGSQAVGRSSFYCLEYFPSQ MLRTGNNFTFSYTFEDVPFHSSYAHSQSLDRLMNPLIDQYLYYLSRTNTPSGTTTQS RLQFSQAGASDIRDQSRNWLPGPCYRQQRVSKTSADNNNSEYSWTGATKYHLNG RDSLVNPGPAMASHKDDEEKFFPQSGVLIFGKQGSEKTNVDIEKVMITDEEEIRTTN PVATEQYGSVSTNLQRGNRQAATADVNTQGVLPGMVWQDRDVYLQGPIWAKIPHT DGHFHPSPLMGGFGLKHPPPQILIKNTPVPANPSTTFSAAKFASFITQYSTGQVSVEI EWELQKENSKRWNPEIQYTSNYNKSVNVDFTVDTNGVYSEPRPIGTRYLTRNLLE
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	AAV2gp07 major coat protein VP3 [Adeno-associated virus - 2]
Official Symbol	AAV2gp07
Synonyms	AAV2gp07; major coat protein VP3; major coat protein VP3
Gene ID	4192016
Protein Refseq	YP_680428

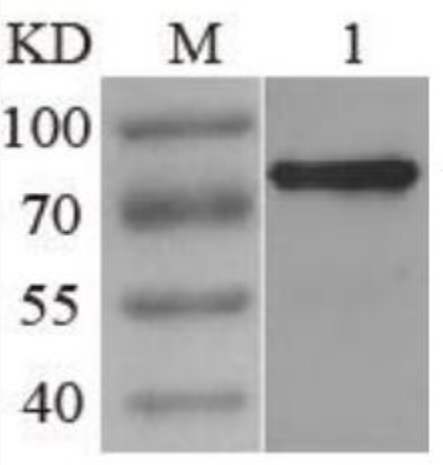
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UniProt ID	P03135



Lane 1: 0.5 mg/mL BSA

Lane 2: purified protein

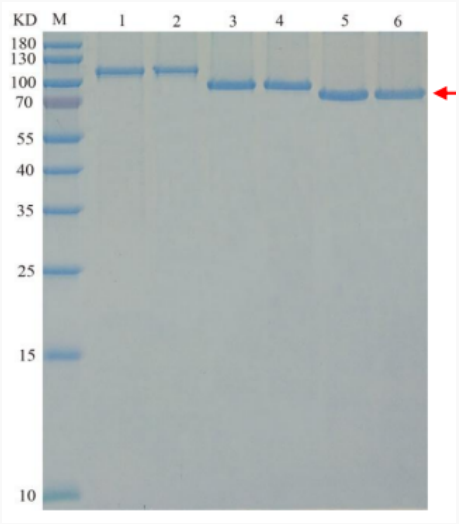


Lane1: purified protein

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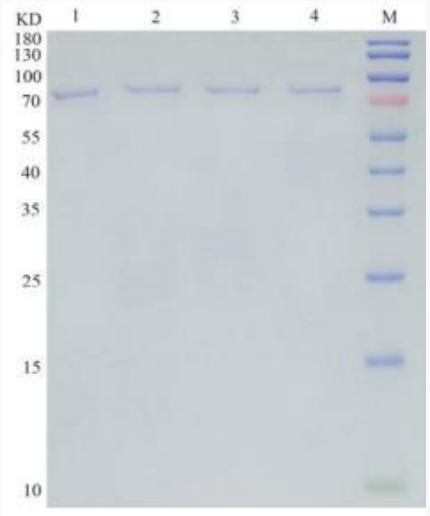


M: Protein ladder

5: Sample before digestion

6: Sample after digestion

The mass ratio of protein to enzyme is 100: 1, digested in water bath at 30 centigrade for 4h



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M: Protein ladder
The mass ratio of protein to enzyme is 400: 1, digested in water bath at 30 centigrade for 2 h
1: Sample before digestion
2: Sample after digestion
The mass ratio of protein to enzyme is 100: 1, digested in water bath at 30 centigrade overnight
3: Sample before digestion
4: Sample after digestion

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