

Title (en)

METHODS AND COMPOSITIONS FOR MODIFYING ASSEMBLY-ACTIVATING PROTEIN (APP)-DEPENDENCE OF VIRUSES

Title (de)

VERFAHREN UND ZUSAMMENSETZUNGEN ZUR MODIFIZIERUNG DER ASSEMBLY-ACTIVATING-PROTEIN (APP)-ABHÄNGIGKEIT VON VIREN

Title (fr)

PROCÉDÉS ET COMPOSITIONS POUR MODIFIER LA DÉPENDANCE À UNE PROTÉINE ACTIVANT L'ASSEMBLAGE (APP) DE VIRUS

Publication

EP 3634450 A4 20210331 (EN)

Application

EP 18799088 A 20180510

Priority

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Abstract (en)

[origin: CN110831611A] This disclosure describes and demonstrates the utility of a particular sequence motif within an Adeno-associated virus (AAV) capsid protein that enables the assembly-activating protein (AAP)-dependence of the AAV to be modified. Thus, this sequence motif can be used to address and alleviate at least one of the bottlenecks encountered in the production of virus vectors. In particular, this disclosure describes a minimal motif defined through a novel phenotype-to-phylogeny mapping method that can be used to modify the AAP dependence of a virus.

IPC 8 full level

A61K 35/761 (2015.01); **C07K 14/005** (2006.01); **C07K 14/075** (2006.01); **C12N 15/00** (2006.01); **C12N 15/09** (2006.01); **C12N 15/86** (2006.01)

CPC (source: EP)

C07K 14/005 (2013.01); **C12N 15/86** (2013.01); **C12N 2750/14122** (2013.01); **C12N 2750/14143** (2013.01); **C12N 2750/14151** (2013.01)

Citation (search report)

- [I] ERIC ZINN ET AL: "In Silico Reconstruction of the Viral Evolutionary Lineage Yields a Potent Gene Therapy Vector", CELL REPORTS, vol. 12, no. 6, 1 August 2015 (2015-08-01), US, pages 1056 - 1068, XP055524241, ISSN: 2211-1247, DOI: 10.1016/j.celrep.2015.07.019 & DATABASE EMBL [online] 23 June 2016 (2016-06-23), ZINN ERIC: "Adeno-associated virus capsid protein", XP055774598, Database accession no. AKU89600
- [A] M. NAUMER ET AL: "Properties of the Adeno-Associated Virus Assembly-Activating Protein", JOURNAL OF VIROLOGY, vol. 86, no. 23, 1 December 2012 (2012-12-01), US, pages 13038 - 13048, XP055372879, ISSN: 0022-538X, DOI: 10.1128/JVI.01675-12
- [XP] MAURER ANNA C. ET AL: "The Assembly-Activating Protein Promotes Stability and Interactions between AAV's Viral Proteins to Nucleate Capsid Assembly", CELL REPORTS, vol. 23, no. 6, 8 May 2018 (2018-05-08), US, pages 1817 - 1830, XP055774488, ISSN: 2211-1247, DOI: 10.1016/j.celrep.2018.04.026
- See references of WO 2018209154A1

Designated contracting state (EPC)

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