

Title (en)

ADENOVIRUS E1-COMPLEMENTING CELL LINES

Title (de)

ADENOVIRUS E1-KOMPLEMENTIERENDE ZELLINIEN

Title (fr)

LIGNEES CELLULAIRES DE COMPLEMENTATION DE LA REGION E1 D'UN ADENOVIRUS

Publication

**EP 0973866 A4 20000419 (EN)**

Application

**EP 98908661 A 19980223**

Priority

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- US 81003997 A 19970304

Abstract (en)

[origin: WO9839411A1] A new series of helper cell lines for the complementation, amplification, and controlled attenuation of E1-deleted adenovirus are disclosed in the present invention. These cell lines are advantageous because they can complement adenovirus E1 gene deletions without production of replication competent adenovirus (RCA), thus making them safer for the large-scale production of adenovirus stock for use in human gene therapy trials. A preferred embodiment is an A549E1 cell line that contains only the Ad5 E1 DNA sequences sufficient for complementation of E1-deleted adenoviral vectors without sequences that overlap with the adenovirus vector. In another aspect, the present invention embodies methods for the production of second generation A549-E1 complementing cell lines that, in addition to producing E1, also produce proteins required for further manipulation of adenoviral vectors. A preferred embodiment is an A549E1 cell line with DNA sequences that encode a polypeptide sufficient for packaging attenuation of E1-deleted helper virus, in order to enrich for packaging of mini-adenovirus.

IPC 1-7

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Citation (search report)

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- [PX] RITTNER K ET AL.: "Conditional repression of the E2 transcription unit in E1-E3-deleted adenovirus vectors is correlated with a strong reduction in viral DNA replication and late gene expression in vitro.", JOURNAL OF VIROLOGY, vol. 71, no. 4, April 1997 (1997-04-01), pages 3307-3311, XP002130911
- [PX] DATABASE WPI Section Ch Week 199821, Derwent World Patents Index; Class B04, AN 1998-231229, XP002130856
- See references of WO 9839411A1

Designated contracting state (EPC)

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