

Title (en)
ANTIVIRAL TRANSGENIC PLANTS, VECTORS, CELLS AND METHODS

Title (de)
ANTIVIVALE, TRANSGENE PFLANZEN, VEKTOREN, ZELLEN UND VERFAHREN

Title (fr)
PLANTES TRANSGENIQUES ANTIVIRALES, VECTEURS, CELLULES ET PROCEDES

Publication
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Application
EP 95911802 A 19950216

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Abstract (en)
[origin: WO9522245A1] Isolated 2-5A-dependent RNases, an interferon-induced enzyme which is activated by 5'-phosphorylated, 2',5'-linked oligoadenylates (2-5A) and implicated in both the molecular mechanisms of interferon action and in the fundamental control of RNA stability in mammalian cells, and encoding sequences therefor are disclosed. The expression cloning and analysis of murine and human 2-5A-dependent RNases is also disclosed. In addition, recombinant nucleotide sequences, recombinant vectors, recombinant cells and antiviral plants which express, for example, 2-5A-dependent RNase, 2-5A synthetase and/or double-stranded RNA dependent protein kinase (PKR), or other amino acid sequences which have activity that interferes with or inhibits viral replication are disclosed.

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A01H 1/00; **A01H 3/00**; **A01H 4/00**; **A01K 63/00**; **C12N 1/21**; **C12N 5/04**; **C12N 5/10**; **C12N 9/22**; **C12N 15/52**; **C12N 15/54**; **C12N 15/55**

IPC 8 full level
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C12N 9/22 (2013.01); **C12N 15/8283** (2013.01)

Citation (search report)
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• [X] WO 9319187 A1 19930930 - KEMIRA BIO HOLDING BV [NL]
• [PX] WO 9420605 A1 19940915 - CLEVELAND CLINIC FOUNDATION [US]
• [A] EP 0217102 A1 19870408 - YEDA RES & DEV [IL]
• [XY] TRUVE E ET AL: "TRANSGENIC POTATO PLANTS EXPRESSING MAMMALIAN 2'-5' OLIGOADENYLATE SYNTHETASE ARE PROTECTED FROM POTATO VIRUS X INFECTION UNDER FIELD CONDITIONS", BIO/TECHNOLOGY, September 1993 (1993-09-01), pages 1048 - 1052, XP000612063
• [X] BIOLOGICAL ABSTRACTS, vol. BA96, Philadelphia, PA, US; abstract no. 4791, SAICHENKO T A ET AL: "RESISTANCE OF TRANSGENIC TOBACCO PLANTS EXPRESSING THE GENE OF MURINE 2'-5' OLIGOADENYLATE SYNTHETASE TO THE TOBACCO MOSAIC VIRUS." XP002047620 & DOKL AKAD NAUK UKR 0 (9). 1992. 145-148. CODEN: DANUES
• [PX] LEE, C., ET AL.: "Double-stranded RNA-dependent protein kinase gene expression in tobacco plant", COMMONWEALTH AGRICULTURAL BUREAU, DN 961003974, XP002047619 & KOREAN JOURNAL OF PLANT PATHOLOGY, vol. 11, no. 2, 1995, pages 173 - 178
• See references of WO 9522245A1

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