

Title (en)
ENGINEERING INTRACELLULAR SIALYLATION PATHWAYS

Title (de)
TECHNOLOGISCHE MANIPULATION INTRAZELLULÄRER SIALIERUNGSWEGE

Title (fr)
MISE AU POINT DE VOIES DE SIALYLATION INTRACELLULAIRES

Publication
EP 1399538 A4 20040324 (EN)

Application
EP 00913684 A 20000301

Priority
• US 0005313 W 20000301
• US 12258299 P 19990302
• US 16962499 P 19991208

Abstract (en)
[origin: WO0052135A2] Methods for manipulating carbohydrate processing pathways in cells of interest are provided. Methods are directed at manipulating multiple pathways involved with the sialylation reaction by using recombinant DNA technology and substrate feeding approaches to enable the production of sialylated glycoproteins in cells of interest. These carbohydrate engineering efforts encompass the implementation of new carbohydrate bioassays, the examination of a selection of insect cell lines and the use of bioinformatics to identify gene sequences for critical processing enzymes. The compositions comprise cells of interest producing sialylated glycoproteins. The methods and compositions are useful for heterologous expression of glycoproteins.

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Citation (search report)
• [DX] GU XUEJUN ET AL: "Improvement of interferon-gamma sialylation in Chinese hamster ovary cell culture by feeding of N-acetylmannosamine", BIOTECHNOLOGY AND BIOENGINEERING, INTERSCIENCE PUBLISHERS, LONDON, GB, vol. 58, no. 6, 20 June 1998 (1998-06-20), pages 642 - 648, XP002171407, ISSN: 0006-3592
• [A] OGONAH O W ET AL: "ISOLATION AND CHARACTERIZATION OF AN INSECT CELL LINE ABLE TO PERFORM COMPLEX N-LINKED GLYCOSYLATION ON RECOMBINANT PROTEINS", BIOTECHNOLOGY, BUTTERWORTHS, LONDON, GB, vol. 14, February 1996 (1996-02-01), pages 197 - 202, XP000961423, ISSN: 0740-7378
• See references of WO 0052135A2

Designated contracting state (EPC)
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