

## Title (en)

MULTIMERIC FORMS OF HUMAN RHINOVIRUS RECEPTOR PROTEIN.

## Title (de)

MULTIMERE FORMEN VON REZEPTORPROTEIN DES HUMANEN RHINOVIRUS.

## Title (fr)

FORMES MULTIMERES DE LA PROTEINE PROPRE AU RECEPTEUR DU RHINOVIRUS HUMAIN.

## Publication

**EP 0604624 A4 19970312 (EN)**

## Application

**EP 93915452 A 19930622**

## Priority

- US 9305972 W 19930622
- US 90306992 A 19920622

## Abstract (en)

[origin: WO9400485A1] The present invention relates to novel forms and configurations of intercellular adhesion molecule (ICAM) including multimeric configurations that effectively bind to human rhinovirus and can effectively reduce HRV infectivity. When in a multimeric configuration, preferably as dimers, these proteins display enhanced binding of HRV and are able to reduce HRV infectivity as well as the infectivity of other viruses known to bind to the "major" group human rhinovirus receptor (HRR). The multimerized proteins may also be used to block tICAM interaction with lymphocyte function-associated antigen-1 (LFA-1).

## IPC 1-7

**C07K 7/00**; **C07K 9/00**; **C07K 17/00**; **A61K 37/02**; **A61K 47/30**

## IPC 8 full level

**A61K 38/00** (2006.01); **A61K 39/00** (2006.01); **A61K 39/395** (2006.01); **A61K 47/48** (2006.01); **A61P 43/00** (2006.01); **C07K 1/113** (2006.01); **C07K 5/08** (2006.01); **C07K 5/10** (2006.01); **C07K 14/705** (2006.01); **C07K 14/76** (2006.01); **C07K 16/00** (2006.01); **C07K 17/08** (2006.01); **C07K 17/12** (2006.01); **C12N 15/09** (2006.01); **C12P 21/02** (2006.01)

## CPC (source: EP KR)

**A61K 38/00** (2013.01 - KR); **A61K 47/30** (2013.01 - KR); **A61K 47/56** (2017.07 - EP); **A61P 43/00** (2017.12 - EP); **C07K 14/095** (2013.01 - KR); **C07K 14/70525** (2013.01 - EP); **C07K 17/08** (2013.01 - KR); **A61K 38/00** (2013.01 - EP)

## Citation (search report)

- [X] EP 0468257 A1 19920129 - MOLECULAR THERAPEUTICS INC [US]
- [X] EP 0365837 A2 19900502 - DANA FARBER CANCER INST INC [US]
- [X] EP 0387701 A1 19900919 - BOEHRINGER INGELHEIM PHARMA [US]
- [X] GREVE J. M. ET AL.,: "Mechanism of receptor-mediated rhinovirus neutralization defined by two soluble forms of ICAM-1", J. VIROLOGY, vol. 65, November 1991 (1991-11-01), pages 6015 - 6023, XP000615280
- [PX] MARTIN S. ET AL.,: "Erfolgreiche Blockade von Rhinovirusinfektionen durch ICAM-1-Immunglobulinchimäre in vitro", MEDIZINISCHE KLINIK, vol. 88, no. 4, 15 April 1993 (1993-04-15), pages 193 - 197, XP000615274
- See references of WO 9400485A1

## Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

## DOCDB simple family (publication)

**WO 9400485 A1 19940106**; AU 4543293 A 19940124; AU 675441 B2 19970206; CA 2116109 A1 19940106; EP 0604624 A1 19940706; EP 0604624 A4 19970312; FI 946006 A0 19941221; FI 946006 A 19941221; HU 9403720 D0 19950228; HU T75827 A 19970528; JP H06510208 A 19941117; KR 950702576 A 19950729; NO 944966 D0 19941221; NO 944966 L 19941221; RU 94046450 A 19961010

## DOCDB simple family (application)

**US 9305972 W 19930622**; AU 4543293 A 19930622; CA 2116109 A 19930622; EP 93915452 A 19930622; FI 946006 A 19941221; HU 9403720 A 19930622; JP 50254194 A 19930622; KR 19940704732 A 19941222; NO 944966 A 19941221; RU 94046450 A 19941221