

Title (en)  
METHOD FOR PR-39 PEPTIDE REGULATED STIMULATION OF ANGIOGENESIS

Title (de)  
VERFAHREN ZUR STIMULATION DER ANGIOGENESE DURCH REGULATION MITTELS PR-39 PEPTID

Title (fr)  
METHODE DE STIMULATION DE L'ANGIOGENESE REGULEE PAR PEPTIDES PR-39

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Application  
**EP 00919442 A 20000316**

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Abstract (en)  
[origin: WO0057895A1] The present invention provides both a method and means for regulating angiogenesis within living cells, tissues, and organs in-situ. The regulation is performed using native PR-39 peptide or one of its shorter-length homolog, for interaction with such proteasomes as one present in the cytoplasm of viable cells. The result of PR-39 peptide interaction with proteasomes is a decrease in the intracellular degradation of active peptides such as HIF-1 alpha and a consequential stimulation of angiogenesis in-situ.

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Citation (search report)  
• [X] WO 9609322 A2 19960328 - CHILDRENS MEDICAL CENTER [US]  
• [X] WO 9632129 A1 19961017 - UNIV KANSAS STATE [US], et al  
• [X] LI J ET AL: "CARDIAC-SPECIFIC OVEREXPRESSION OF PR-39 INDUCES ANGIOGENESIS, MYOCARDIAL HYPERTROPHY AND INCREASED MICROVASCULAR REACTIVITY", CIRCULATION, AMERICAN HEART ASSOCIATION, DALLAS, TX, US, vol. 98, no. 17, October 1998 (1998-10-01), pages 1794, XP002929855, ISSN: 0009-7322  
• [X] GAO Y ET AL: "PR39 INTERACTS WITH PROTEASOME AND MODULATES HIF-1ALPHA LEVEL IN ECV CELLS", MOLECULAR BIOLOGY OF THE CELL, BETHESDA, MD, US, vol. 9, no. SUPPL, November 1998 (1998-11-01), pages 123A, XP008033931, ISSN: 1059-1524  
• [X] LI J ET AL: "MACROPHAGE-DEPENDENT REGULATION OF SYNDECAN GENE EXPRESSION", CIRCULATION RESEARCH, GRUNE AND STRATTON, BALTIMORE, US, vol. 81, no. 5, November 1997 (1997-11-01), pages 785 - 796, XP008033955, ISSN: 0009-7330  
• [PX] LI J ET AL: "PR39, a peptide regulator of angiogenesis", NATURE MEDICINE, NATURE AMERICA, NEW YORK, US, vol. 6, no. 1, January 2000 (2000-01-01), pages 49 - 55, XP002968105, ISSN: 1078-8956  
• [T] GAO Y ET AL: "Inhibition of ubiquitin-proteasome pathway-mediated I-kappaBalpha degradation by a naturally occurring antibacterial peptide", JOURNAL OF CLINICAL INVESTIGATION, NEW YORK, NY, US, vol. 106, no. 3, August 2000 (2000-08-01), pages 439 - 448, XP002180614, ISSN: 0021-9738  
• See references of WO 0057895A1

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