

Title (en)  
COMPOSITIONS AND METHODS FOR MODULATING GENE EXPRESSION

Title (de)  
ZUSAMMENSETZUNGEN UND VERFAHREN ZUR MODULATION VON GENEXPRESSION

Title (fr)  
COMPOSITIONS ET PROCÉDÉS PERMETTANT DE MODULER L'EXPRESSION DES GÈNES

Publication  
**EP 2015782 A4 20100407 (EN)**

Application  
**EP 07760600 A 20070412**

Priority  
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Abstract (en)  
[origin: WO2007121326A2] A description of novel artificial transcription factors (ATFs) is provided having a non-peptidic DNA-binding domain, flexible linker, and an effector domain based on a small molecule compound. These ATFs are capable of modulating transcription from nucleic acids both in vitro and in vivo. Importantly, these novel ATFs are capable of targeting and modulating the transcription of native (endogenous) genes in vivo. Method for targeted regulation of gene expression and the development of new class of pharmaceuticals are also provided.

IPC 8 full level  
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CPC (source: EP)  
**A61K 47/64** (2017.07); **C12N 15/111** (2013.01); **C12N 15/1135** (2013.01); **C12N 2310/11** (2013.01); **C12N 2310/15** (2013.01); **C12N 2310/3513** (2013.01)

Citation (search report)  
• [XY] US 2003105045 A1 20030605 - STANOJEVIC DUSAN [US]  
• [Y] INGLES C J ET AL: "ALPHA AMANITIN RESISTANCE OF RNA POLYMERASE II IN MUTANT CHINESE HAMSTER OVARY CELL LINES", JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 251, no. 9, 1976, pages 2729 - 2734, XP007911801, ISSN: 0021-9258  
• [X] STANOJEVIC D ET AL: "A highly potent artificial transcription factor", BIOCHEMISTRY, AMERICAN CHEMICAL SOCIETY, EASTON, PA.; US, vol. 41, no. 23, 11 June 2002 (2002-06-11), pages 7209 - 7216, XP002222221, ISSN: 0006-2960  
• [XD] KUZNETSOVA S ET AL: "Gene activation by triplex-forming oligonucleotide coupled to the activating domain of protein VP16", NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 27, no. 20, 15 October 1999 (1999-10-15), pages 3995 - 4000, XP002222219, ISSN: 0305-1048  
• [XD] ANSARI A Z ET AL: "TOWARDS A MINIMAL MOTIF FOR ARTIFICIAL TRANSCRIPTIONAL ACTIVATORS", CHEMISTRY AND BIOLOGY, CURRENT BIOLOGY, LONDON, GB, vol. 8, no. 6, 1 January 2001 (2001-01-01), pages 583 - 592, XP001031162, ISSN: 1074-5521  
• [X] KWON YOUNGJOO ET AL: "Small molecule transcription factor mimic", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol. 126, no. 49, 15 December 2004 (2004-12-15), pages 15940 - 15941, XP007911804, ISSN: 0002-7863  
• [X] ARORA PARAMJIT S ET AL: "Design of artificial transcriptional activators with rigid poly-L-proline linkers.", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol. 124, no. 44, 6 November 2002 (2002-11-06), pages 13067 - 13071, XP007911805, ISSN: 0002-7863  
• See references of WO 2007121326A2

Designated contracting state (EPC)  
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