

Title (en)  
POLYMERIC HEMOGLOBIN MUTANTS

Title (de)  
POLYMERISCHE HÄMOGLOBINMUTANTEN

Title (fr)  
MUTANTS POLYMERES DE L'HEMOGLOBINE

Publication  
**EP 1117690 A4 20041027 (EN)**

Application  
**EP 99953002 A 19990930**

Priority  
• US 9922756 W 19990930  
• US 10264098 P 19981001

Abstract (en)  
[origin: WO0018802A1] Human beta -globin mutant polypeptides comprise the amino acid sequence of normal human beta -globin modified by (i) the substitution or deletion of Cys at positions (93) and (112), and (ii) the substitution of a Cys for a non-Cys amino acid at one other position in the polypeptide, preferably Ser at position (9). Modified human hemoglobins containing this or other beta -globin mutations, and/or an alpha -globin mutation, are provided, as well as polymers of such modified hemoglobins. Nucleic acids, vectors and transformed host cells for producing the beta -globin mutants are provided.

IPC 1-7  
**C07K 14/805**; C07H 17/00; C12P 21/06

IPC 8 full level  
**C07K 14/805** (2006.01); **A61K 38/00** (2006.01)

CPC (source: EP)  
**C07K 14/805** (2013.01); **A61K 38/00** (2013.01)

Citation (search report)  
• [XY] WO 9504744 A1 19950216 - DNX CORP [US]  
• [Y] US 5739011 A 19980414 - ANDERSON DAVID C [US], et al  
• [A] WO 9503820 A1 19950209 - UAB RESEARCH FOUNDATION [US]  
• [A] US 5599907 A 19970204 - ANDERSON DAVID C [US], et al  
• [X] MORLÉ F ET AL: "A new alpha chain variant Hb Sallanches [alpha 2 104(G11) Cys-->Tyr] associated with HbH disease in one homozygous patient.", BRITISH JOURNAL OF HAEMATOLOGY. NOV 1995, vol. 91, no. 3, November 1995 (1995-11-01), pages 608 - 611, XP008034641, ISSN: 0007-1048  
• [T] FRONTICELLI CLARA ET AL: "Molecular engineering of a polymer of tetrameric hemoglobins", PROTEINS, vol. 44, no. 3, 15 August 2001 (2001-08-15), pages 212 - 222, XP002294066, ISSN: 0887-3585  
• See references of WO 0018802A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0018802 A1 20000406**; AU 6504199 A 20000417; CA 2344604 A1 20000406; EP 1117690 A1 20010725; EP 1117690 A4 20041027

DOCDB simple family (application)  
**US 9922756 W 19990930**; AU 6504199 A 19990930; CA 2344604 A 19990930; EP 99953002 A 19990930