

Title (en)  
UBIQUITIN CONJUGATING ENZYMES HAVING TRANSCRIPTIONAL REPRESSOR ACTIVITY

Title (de)  
UBIQUITIN-KONJUGIERENDES ENZYM MIT TRANSKRIPTIONELLER REPRESSORAKTIVITÄT

Title (fr)  
ENZYMES DE CONJUGAISON D'UBIQUITINE PRESENTANT UNE ACTIVITE DE REPRESSION DE TRANSCRIPTION

Publication  
**EP 0850250 A1 19980701 (EN)**

Application  
**EP 96929829 A 19960830**

Priority  
• US 9614013 W 19960830  
• US 299595 P 19950830  
• US 1804096 P 19960521

Abstract (en)  
[origin: WO9708195A1] A human ubiquitin conjugating enzyme, designated hUBC-9, its full amino acid sequence, and nucleic acid polymers which encode hUBC-9 are disclosed. In addition to having functional ubiquitin conjugating activity, this enzyme has transcriptional repressor activity which is independent of the conjugating activity. The conjugating activity of hUBC-9 enhances transcription through degradation of transcription suppressor proteins such as WT1, and possibly, of hUBC-9 itself. The repressor activity of hUBC-9 suppress gene transcription, probably by disrupting the transcriptional initiation complex through specific interactions with the DNA binding region of the TATA binding protein (TBP). In use, hUBC-9, yUBC-9 and other ubiquitin conjugating enzymes having repressor activity can be fused to proteins having a DNA binding domain, such as Ga14, or used in conjunction with repressors such as Wilm's tumor suppressor gene product, WT1. Such enzymes and the nucleic acid polymers encoding them can be used for regulating transcription of a target gene in both pharmaceutical and non-pharmaceutical applications.

IPC 1-7  
**C07K 14/00**; **C12N 15/00**; **C12N 15/11**; **C12N 15/63**; **C12N 15/85**; **A61K 38/43**; **A61K 48/00**

IPC 8 full level  
**A61K 38/00** (2006.01); **A61K 38/43** (2006.01); **A61K 48/00** (2006.01); **A61P 35/00** (2006.01); **A61P 43/00** (2006.01); **C07K 14/47** (2006.01); **C07K 19/00** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 9/00** (2006.01); **C12N 15/09** (2006.01); **C12N 15/63** (2006.01)

CPC (source: EP)  
**A61P 35/00** (2017.12); **A61P 43/00** (2017.12); **C07K 14/4702** (2013.01); **C12N 9/93** (2013.01); **C12N 15/635** (2013.01); **A61K 38/00** (2013.01); **A61K 48/00** (2013.01); **C07K 2319/00** (2013.01)

Citation (search report)  
See references of WO 9708195A1

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

DOCDB simple family (publication)  
**WO 9708195 A1 19970306**; AU 720755 B2 20000608; AU 7695196 A 19970319; CA 2230689 A1 19970306; EP 0850250 A1 19980701; JP 2000516081 A 20001205

DOCDB simple family (application)  
**US 9614013 W 19960830**; AU 7695196 A 19960830; CA 2230689 A 19960830; EP 96929829 A 19960830; JP 53520896 A 19960830