

Title (en)  
HUMAN GENE CRITICAL TO FERTILITY

Title (de)  
HUMANES GEN, DAS FÜR DIE FERTILITÄT ENTSCHEIDEND IST

Title (fr)  
GENE HUMAIN ESSENTIEL POUR LA FERTILITE

Publication  
**EP 1490381 A4 20050615 (EN)**

Application  
**EP 02723673 A 20020329**

Priority  
• US 0209776 W 20020329  
• US 0110981 W 20010404

Abstract (en)  
[origin: WO02081492A1] Disclosed herein are novel nucleic acid and protein sequences that are essential to fertility. In particular, human Mater genomic, cDNA and protein sequences are provided, as are fragments and variants thereof. Functional MATER is required for female fertility; zygotes that arise from Mater null oocytes do not progress beyond the two-cell stage. Methods are described for using Mater molecules in diagnoses, prognosis, and treatment of infertility and reduced fertility, and kits related to such methods. Also provided are methods for using Mater as a contraceptive agent. The disclosure also describes compounds involved in such methods, and the identification of such compounds.

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

IPC 8 full level  
**G01N 33/50** (2006.01); **C07K 14/47** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01); **C12Q 1/68** (2006.01); **G01N 33/15** (2006.01); **G01N 33/53** (2006.01); **G01N 33/566** (2006.01)

CPC (source: EP)  
**C07K 14/47** (2013.01); **G01N 2800/367** (2013.01)

Citation (search report)  
• [E] WO 0232955 A1 20020425 - US GOV HEALTH & HUMAN SERV [US], et al  
• [E] WO 0248362 A2 20020620 - INCYTE GENOMICS INC [US], et al  
• See references of WO 02081492A1

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

DOCDB simple family (publication)  
**WO 02081492 A1 20021017**; CA 2443341 A1 20021017; EP 1490381 A1 20041229; EP 1490381 A4 20050615; JP 2004533229 A 20041104

DOCDB simple family (application)  
**US 0209776 W 20020329**; CA 2443341 A 20020329; EP 02723673 A 20020329; JP 2002579478 A 20020329