

Title (en)  
TYPE III SECRETION SYSTEM ANTIGENS FROM BORDETELLA PERTUSSIS

Title (de)  
TYPE III SEKRETIONSSYSTEM-ANTIGENE AUS BORDETELLA PERTUSSIS

Title (fr)  
VACCIN

Publication  
**EP 1140996 A2 20011010 (EN)**

Application  
**EP 99969578 A 19991221**

Priority  
• EP 9910297 W 19991221  
• GB 9828217 A 19981221

Abstract (en)  
[origin: WO0037493A2] This invention relates to a general method for detecting pathogenic strains of bacteria which harbour a type III secretion system. More particularly, this invention relates to the methods as applied to the pathogen Bordetella pertussis. Furthermore, the invention relates to newly identified polynucleotides within these regions, virulent polypeptides encoded by them and to the use of such polynucleotides and polypeptides, and to their production. More particularly the polynucleotides and polypeptides of the present invention relate to the virulent effector proteins associated with the type III secretion system of Bordetella pertussis, which are particularly suitable for vaccine purposes.

IPC 1-7  
**C07K 14/235**; **C12N 15/31**; **C12N 5/10**; **A61K 39/10**; **C07K 16/12**; **G01N 33/569**; **C12Q 1/68**

IPC 8 full level  
**G01N 33/50** (2006.01); **A61K 39/00** (2006.01); **A61K 39/10** (2006.01); **A61K 39/395** (2006.01); **A61K 48/00** (2006.01); **A61P 37/04** (2006.01); **C07K 14/235** (2006.01); **C07K 16/12** (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); **C12N 15/31** (2006.01); **C12P 21/02** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/689** (2018.01); **G01N 33/15** (2006.01); **G01N 33/53** (2006.01); **G01N 33/566** (2006.01); **G01N 33/569** (2006.01)

CPC (source: EP)  
**A61P 37/04** (2018.01); **C07K 14/235** (2013.01); **C12Q 1/689** (2013.01); **A61K 39/00** (2013.01)

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 0037493 A2 20000629**; **WO 0037493 A3 20010201**; AU 2903700 A 20000712; CA 2356764 A1 20000629; CN 1371389 A 20020925; EP 1140996 A2 20011010; GB 9828217 D0 19990217; HK 1041490 A1 20020712; JP 2002534960 A 20021022

DOCDB simple family (application)  
**EP 9910297 W 19991221**; AU 2903700 A 19991221; CA 2356764 A 19991221; CN 99816279 A 19991221; EP 99969578 A 19991221; GB 9828217 A 19981221; HK 02101214 A 20020219; JP 2000589562 A 19991221