

Title (en)  
PREPARATION OF RECOMBINANT BORRELIA PROTEINS.

Publication  
**EP 0620860 A4 19970502 (EN)**

Application  
**EP 92922390 A 19921016**

Priority  
• US 9208697 W 19921016  
• US 77904891 A 19911018  
• US 88876592 A 19920527

Abstract (en)  
[origin: WO9308299A1] Highly-purified immunologically-effected recombinant protein encoded by a gene of a full-length wild-type Borrelia lipoprotein, particularly the OspA encoded by the OspA gene of B.burgdorferi, useful in vaccines and test kits for Lyme disease, is prepared by inducing protein production from a host organism transformed by a plasmid vector containing the cloned gene and subsequently recovering and purifying the protein. The grown organism is lysed and contacted with a surfactant, particularly Triton X-114, which selectively extracts the desired protein from the lysed cells. Upon heating the resulting mixture to mildly-elevated temperature, a detergent phase separates out and is recovered separate from the other phases. The detergent phase is further purified from residual protein by column chromatography.

IPC 1-7  
**C12P 21/06**; **C12Q 1/00**; **C07K 3/00**; **A61K 39/00**

IPC 8 full level  
**A61K 39/00** (2006.01); **A61P 31/04** (2006.01); **C07K 1/14** (2006.01); **C07K 1/16** (2006.01); **C07K 14/00** (2006.01); **C07K 14/20** (2006.01); **C07K 16/00** (2006.01); **C12N 15/09** (2006.01); **C12P 21/02** (2006.01); **C12P 21/06** (2006.01); **C12Q 1/00** (2006.01); **G01N 33/53** (2006.01); **G01N 33/569** (2006.01); **C12R 1/01** (2006.01); **C12R 1/19** (2006.01)

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**A61P 31/04** (2018.01); **C07K 14/20** (2013.01); **A61K 39/00** (2013.01); **Y02A 50/30** (2018.01)

Citation (search report)  
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• [X] WO 9109870 A1 19910711 - MIKROGEN MOLEKULARBIOL ENTW [DE]  
• [E] WO 9304175 A1 19930304 - SMITHKLINE BEECHAM BIOLOG [BE], et al  
• [X] SCHAIBLE UE ET AL.: "Monoclonal antibodies specific for the outer surface protein A (OspA) of Borrelia burgdorferi prevent Lyme borreliosis in severe combined immunodeficiency (scid) mice", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 87, May 1990 (1990-05-01), WASHINGTON US, pages 3768 - 3772, XP002025454  
• See also references of WO 9308299A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 9308299 A1 19930429**; AU 2801192 A 19930521; AU 676140 B2 19970306; CA 2121121 A1 19930429; CA 2121121 C 20030610; EP 0620860 A1 19941026; EP 0620860 A4 19970502; FI 941749 A0 19940415; FI 941749 A 19940525; IL 103462 A0 19930315; JP H06511154 A 19941215; NO 310417 B1 20010702; NO 941376 D0 19940415; NO 941376 L 19940617; PT 100980 A 19940131; PT 100980 B 19990730

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