

Title (en)
USING LECTINS FOR CONTRACEPTION, PROPHYLAXIS AND THERAPY

Title (de)
VERWENDUNG VON LEKTINEN ZUR KONTRAZEPTION, PROPHYLAXE UND BEHANDLUNG

Title (fr)
UTILISATION DE LECTINES POUR LA CONTRACEPTION, LA PROPHYLAXIE ET LA THERAPIE

Publication
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Application
EP 94930003 A 19941003

Priority
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• US 13019093 A 19931001

Abstract (en)
[origin: WO9509641A1] In order to prevent conception and/or the spread of sexually transmitted diseases (STD's) one or more lectins capable of binding sperm and/or the pathogenic microorganisms responsible for STD's are administered to the vagina prior to sexual intercourse. The lectins immobilize the sperm to render them incapable of fertilization and also bind to the microorganisms to render them non-pathogenic or to the cells to prevent infection by the microorganisms. Lectins can also be administered to treat sexually transmitted vaginal infections. The invention also encompasses a device to be placed in the vault of the vagina which comprises a ring which surrounds the cervix and a membrane spanning the central aperture of the ring to prevent the direct contact of ejaculate with the cervical tissues. The device is impregnated or coated with lectins and releases them into the vaginal environment over a period of time.

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IPC 8 full level
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A61F 6/08 (2013.01); **A61K 38/168** (2013.01); **A61K 38/17** (2013.01); **A61K 38/1709** (2013.01)

Citation (search report)
• [XA] US 4786592 A 19881122 - DEAL CAROLYN D [US], et al
• [XA] WO 9222574 A1 19921223 - INST NAT SANTE RECH MED [FR]
• [Y] US 4526578 A 19850702 - WONG PATRICK S L [US]
• [X] BALZARINI, JAN ET AL: "The mannose-specific plant lectins from Cymbidium hybrid and Epipactis helleborine and the (N-acetylglucosamine)n-specific plant lectin from Urtica dioica are potent and selective inhibitors of human immunodeficiency virus and cytomegalovirus replication in vitro", ANTIVIRAL RES. (1992), 18(2), 191-207, XP000995503
• [X] HANSEN J E ET AL: "Inhibition of human immunodeficiency virus 1 (HIV -1) and herpes simplex virus 1 (HSV-1) infectivity with a broad range of lectins.", SCANDINAVIAN JOURNAL OF INFECTIOUS DISEASES, (1991) 23 (4) 425-30., XP000995529
• [A] ALLEN PZ, CONNELLY MC, APICELLA MA: "Interaction of lectins with Neisseria-Gonorrhoeae", CANADIAN JOURNAL OF MICROBIOLOGY, vol. 26, no. 4, 1980, pages 468 - 474, XP000995584
• [A] SWANSON AF, KUO C-C: "Identification of lectin-binding proteins in Chlamydia species", INFECTION AND IMMUNITY, vol. 58, no. 2, 1990, pages 502 - 507, XP000199277
• [PX] SIRIDEWA K, FROMAN G, HAMMAR L, MARDH PA: "Characterization of glycoproteins from Chlamydia trachomatis using lectins", APMIS, vol. 101, no. 11, November 1993 (1993-11-01), pages 851 - 817, XP000995570
• [XY] OIKAWA T ET AL: "Wheat germ agglutinin blocks mammalian fertilization.", NATURE, (1973 JAN 26) 241 (5387) 256-9., XP001008204
• [XY] SNYDER M G ET AL: "Treatment of cervical mucus with lectins: effect on sperm migration.", FERTILITY AND STERILITY, (1985 NOV) 44 (5) 633-7., XP001008173
• [XY] SRETARUGSA P, SPBHON P, BUBPANIROJ P, YODYINGYUAD V.: "Inhibition of implantation of hamster embryos by lectins", CONTRACEPTION, vol. 35, no. 5, May 1987 (1987-05-01), pages 507 - 515, XP001008114
• [X] HICKS J J ET AL: "Inhibition of implantation by intraluminal administration of concanavalin A in mice.", CONTRACEPTION, (1979 AUG) 20 (2) 129-36., XP001008174
• [XY] DATABASE WPI Section Ch Week 199028, Derwent World Patents Index; Class B04, AN 1990-210248, XP002220703
• See references of WO 9509641A1

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