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(54) Title: NOVEL TOLEROGENIC DENDRITIC CELLS AND THERAPEUTIC USES THEREFOR

(57) Abstract: The present invention relates to tolerogenic dendritic cells (DCs) and methods for enriching for these cells in tissue preparations and using the cells for preventing or minimizing transplant rejection or for treating or preventing an autoimmune disease.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/17777

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 63/00; C12N 5/00, 5/02, 5/08  
US CL : 435/325, 372, 386; 424/93.71; 514/866

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/325, 372, 386; 424/93.71; 514/866

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WEST, Biosis, Embase, Promt, Biobusiness, Scisearch, Caplus

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                         | Relevant to claim No. |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y          | NIKOLIC, T. et al. A subfraction of B220+ cells in murine bone marrow and spleen does not belong to the B cell lineage but has dendritic cell characteristics. Eur. J. Immunol. March 2002, Vol. 32, pages 686-692, see entire document.                   | 1-26                  |
| Y          | LU, L., et al. Genetic engineering of dendritic cells to express immunosuppressive molecules (viral IL-10, TGF-beta, and CTLA4Ig). J. Leuk. Biol. August 1999, Vol. 66, pages 293-296, see entire document.                                                | 1-26                  |
| Y          | THOMSON, A.W., et al. Identification of Donor-Derived Dendritic Cell Progenitors in Bone Marrow of Spontaneously Tolerant Liver Allograft Recipients. Transplantation. 27 December 1995, Vol. 60, No. 12, pages 1555-1559, see entire document.            | 1-26                  |
| Y          | LEE, W.-C., et al., Phenotype, Function, and In Vivo Migration and Survival of Allogeneic Dendritic Cell Progenitors Genetically Engineered to Express TGF-beta. Transplantation. 27 December 1998, Vol. 66, No. 12, pages 1810-1817, see entire document. | 1-26                  |
| Y          | LU, L., et al. Liver-Derived DEC205+B220+CD19- Dendritic Cells Regulate T Cell Responses. J. Immunol. 2001, Vol. 166, pages 7042-7052, see entire document.                                                                                                | 1-26                  |



Further documents are listed in the continuation of Box C.



See patent family annex.

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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                             | Relevant to claim No. |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y          | LI, W., et al. IL-12 Antagonism Enhances Apoptotic Death of T Cells Within Hepatic Allografts from Flt3 Ligand-Treated Donors and Promotes Graft Acceptance. J. Immunol. 2001, Vol. 166, pages 5619-5628, see entire document. | 1-26                  |