

Title (en)  
METHOD FOR SELECTING HLA-DP4 LIGANDS

Title (de)  
VERFAHREN ZUR SELEKTION VON HLA-DP4-LIGANDEN

Title (fr)  
PROCEDE DE SELECTION DE LIGANDS D'HLA-DP4

Publication  
**EP 1436626 A2 20040714 (FR)**

Application  
**EP 02795325 A 20021017**

Priority  
• FR 0203555 W 20021017  
• FR 0113352 A 20011017

Abstract (en)  
[origin: FR2830940A1] Process for selecting ligands (A) of HLA (human leukocyte antigen)-DP4, is new. Process for selecting ligands (A) of HLA (human leukocyte antigen)-DP4 comprising: (a) incubating purified DP4 with a labeled peptide (I) in presence of different concentrations of test compounds; (b) separating complexes formed; (c) determining DP4-(I) complexes by measuring a signal from the label; and (d) selecting compounds having binding IC50 less than 1000 nM, corresponding to the concentration required to inhibit 50 % binding of (I). (I) has signal-to-noise ratio over 5, at 10 nM, in a direct binding test to DP4. Independent claims are also included for the following; (1) (A), natural or synthetic, organic or inorganic, identified by the novel process; (2) nucleic acid (II) that encodes (A) when these are peptides; (3) expression cassette (EC) containing at least one (II) and regulatory sequences; (4) vector containing (II) or EC; (5) cell transformed with at least one (II) or vector of (4); (6) diagnosing the immune state of an individual by in vitro contact between test sample and (A), then detecting CD4+ T cells specific for an antigen; (7) kit comprising at least one (A) and system for detecting antigen-specific CD4+ T cells; and (8) selecting antigen-specific CD4+ T cells by contacting cells with a fluorescently labeled tetramer, prepared from complexes between (A) and soluble DP4, then recovering cells that bind to the tetramer by flow cytometry.

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**G01N 33/68**; **C12N 15/00**

IPC 8 full level  
**A61P 37/02** (2006.01); **C07K 14/47** (2006.01); **C12N 15/12** (2006.01); **G01N 33/68** (2006.01)

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Citation (search report)  
See references of WO 03040299A2

Citation (examination)  
• LEE ET AL, J. IMMUNOL., vol. 140, no. 4, 1988, pages 1063 - 1068  
• SETTE ET AL, J. IMMUNOL., vol. 143, no. 4, 1989, pages 1265 - 1267  
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