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(71) Applicant *(for all designated States except US)*: **F. HOFFMANN-LA ROCHE AG** [CH/CH]; Grenzacherstrasse 124, CH-4070 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BERNTENIS, Nikolaos** [GR/FR]; 3 Croisee des Lys, F-68300 St. Louis (FR). **BUURMAN, Gerrit** [DE/DE]; Domhofstrasse 10, 79576 Weil am Rhein (DE). **KROPSHOFER, Harald** [DE/DE]; Hangstrasse 4, 79539 Loerrach (DE). **MUELLER, Bernd, Christian** [DE/DE]; Obere Schanzstrasse 28, 79576 Weil am Rhein (DE). **SPINDELDREHER, Sebastian, Thomas** [DE/DE]; Schwarzwaldstrasse 39, 79539 Loerrach (DE). **VOGT, Anne** [DE/DE]; Hangstrasse 4, 79539 Loerrach (DE). **ZOLG, Werner** [DE/DE]; Sportplatzweg 4A, 82362 Weilheim (DE).

(74) Agent: **WITTE, Hubert**; Grenzacherstrasse 124, CH-4070 Basel (CH).

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(54) Title: RA ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides novel naturally-processed MHC class II antigenic peptides; which originate from interferon-γ-inducible lysosomal thiol reductase, integrin beta-2, phosphatitylinositol-4,5-bisphosphate 3-kinase, urokinase-type plasminogen activator, immunoglobulin heavy chain V-III region (V_H26), DJ-1 protein, apolipoprotein B-100, 26S proteasome non-ATPase regulatory subunit 8, interleukin-1 receptor, fibromodulin, GM-CSF/IL-3/IL-5 receptor, sorting nexin 3, inter-α-trypsin inhibitor heavy chain H4, complement C4, complement C3 (α-chain), complement C3 (β-chain), SH3 domain-binding glutamic acid-rich-like protein 3, interleukin-4-induced protein 1, hemopexin, Hsc70-interacting protein,invariant chain (Ii), retinoic acid receptor responder protein 2, fibronectin, cathepsin B, tripeptidyl-peptidase II, legumain, platelet activating factor receptor, poly- alpha-2.8-sialyltransferase, and ras-leated protein Rab-11B. Also provided are these antigenic peptides and the proteins they are derived from as markers for erosive and/or non-erosive RA. Moreover, these antigenic peptides linked to MHC class II molecules, antibodies reactive with said antigenic peptides, nucleic acids encoding said antigenic peptides, and nucleic acid constructs, host cells and methods for expressing said antigenic peptides are provided. The antigenic peptides of the invention can be used as markers in diagnosis of RA and in therapy as anti-RA vaccines.