

Title (en)  
RECOMBINANT ALTERNARIA ALTERNATA ALLERGENS

Title (de)  
REKOMBINANTE ALTERNARIA ALTERNATA ALLERGENE

Title (fr)  
ALLERGENES D'ALTERNARIA ALTERNATA RECOMBINES

Publication  
**EP 0787184 A1 19970806 (DE)**

Application  
**EP 95935287 A 19951031**

Priority  
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• AT 203894 A 19941102

Abstract (en)  
[origin: WO9614407A1] The invention relates to the complete cDNA sequences of the Alternaria alternata allergenes Alt a 45 and Alt a 12. It has been possible in the course of molecular biological analysis of the allergens to identify Alt a 45 as a protein-disulphide isomerase. This protein is a 45 kD large protein to which 47 % of patients react and is thus an important primary allergen. Alt a 12 (to which 8 % of patients react) was identified as a ribosomal protein which is of interest because auto-antibodies for ribosomal proteins are found in patients suffering from lupus. It remains to be seen whether there is any connection between allergy to mould fungus and autoimmune diseases. Using this recombinant sequence and computer analysis, it has been possible to identify highly potent B- and T-cell epitopes and to use the peptides derived from the recombinant proteins for diagnosis of an allergy to Alternaria alternata mould fungus. The peptides has also proved suitable for both in vitro and in vivo allergen-specific stimulation of T-cells (proliferation, interleukin production), and for blocking the T-cells resulting in a tolerance of the allergen-specific T-lymphocytes. [origin: WO9614407A1] The invention relates to the complete cDNA sequences of the Alternaria alternata allergenes Alt a 45 and Alt a 12. It has been possible in the course of molecular biological analysis of the allergens to identify Alt a 45 as a protein-disulphide isomerase. This protein is a 45 kD large protein to which 47 % of patients react and is thus an important primary allergen. Alt a 12 (to which 8 % of patients react) was identified as a ribosomal protein which is of interest because auto-antibodies for ribosomal proteins are found in patients suffering from lupus. It remains to be seen whether there is any connection between allergy to mould fungus and autoimmune diseases. Using this recombinant sequence and computer analysis, it has been possible to identify highly potent B- and T-cell epitopes and to use the peptides derived from the recombinant proteins for diagnosis of an allergy to Alternaria alternata mould fungus. The peptides has also proved suitable for both in vitro and in vivo allergen-specific stimulation of T-cells (proliferation, interleukin production), and for blocking the T-cells resulting in a tolerance of the allergen-specific T-lymphocytes.

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