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(54) Title: DIAGNOSTIC AND THERAPEUTIC EPITOPE, AND TRANSGENIC PLANT

(57) Abstract: A method of diagnosing coeliac disease, or susceptibility to coeliac disease, in an individual comprising : (a) contacting a sample from the host with an agent selected from (i) the epitope comprising sequence which is : SEQ ID NO : 1 or 2, or an equivalent sequence from a naturally occurring homologue of the gliadin represented by SEQ ID NO : 3, (ii) an epitope comprising sequence comprising : SEQ ID NO : 1, or an equivalent sequence from a naturally occurring homologue of the gliadin represented by SEQ ID NO : 3, which epitope is an isolated oligopeptide derived from a gliadin protein, (iii) an analogue of (i) or (ii) which is capable of being recognised by a T cell receptor that recognises (i) or (ii), which in the case of a peptide analogue is not more than 50 amino acids in length, or (iv) a product comprising two or more agents as defined in (i), (ii) or (iii), and (b) determining *in vitro* whether T cells in the sample recognise the agent; recognition by the T cells indicating that the individual has, or is susceptible to, coeliac disease. Therapeutic compositions which comprise the epitope and gliadin proteins which do not cause coeliac disease are also provided.