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(54) Title: TEAR LIPOCALIN MUTEINS BINDING IL-4 R ALPHA

(57) Abstract: The present invention relates to novel muteins derived from human tear lipocalin, which bind to IL 4 receptor alpha. The sequences of the muteins comprise particular combinations of amino acids. In particular a mutated amino acid residue is present at any one or more of the sequence positions 27, 28, 30, 31, 33, 53, 57, 61, 64, 66, 80, 83, 104-106 and 108 of the linear polypeptide sequence of the mature human tear lipocalin. A mutated amino acid residue is also present at any 2 or more of the sequence positions 26, 32, 34, 55, 56, 58 and 63 of the linear polypeptide sequence of the mature human tear lipocalin. The invention also provides a corresponding nucleic acid molecule encoding such a mutein and a method for producing such a mutein and its encoding nucleic acid molecule.