

Claims

1. A peptide of between 9 and 30 amino acids in length, comprising an amino acid sequence KLQEQLAQL according to SEQ ID NO: 266, or a pharmaceutically acceptable salt thereof.
2. The peptide according to claim 1, wherein said peptide is modified and/or includes non-peptide bonds.
3. A T-cell receptor that is reactive with an HLA ligand having at least 80% identity to an amino acid sequence according to SEQ ID NO: 266.
4. A fusion protein, comprising an amino acid sequence according to claim 1 fused to N-terminal amino acids 1-80 of HLA-DR antigen-associated invariant chain (Ii) or fused to or into the sequence of an antibody, such as, for example, an antibody that is specific for dendritic cells.
5. An antibody that specifically binds to a human major histocompatibility complex (MHC) class I being complexed with the peptide according to claim 1 or 2.
6. A nucleic acid, encoding for the peptide according to claim 1 or 2, the T cell receptor according to claim 3, the fusion protein according to claim 4, or the antibody according to claim 5.
7. An expression vector expressing a nucleic acid according to claim 6.
8. A host cell comprising the nucleic acid according to Claim 6, or the expression vector according to claim 7, wherein said host cell preferably is an antigen presenting cell, for example a dendritic cell.
9. A method for producing the peptide according to claim 1 or 2, the T cell receptor according to claim 3, the fusion protein according to claim 4, or the antibody according to claim 5, said method comprising culturing the host cell according to claim 8, and isolating said peptide, said T cell receptor, said fusion protein or said antibody from said host cell and/or its culture medium.

10. An *in vitro* method for producing activated cytotoxic T lymphocytes (CTL), the method comprising contacting *in vitro* a CTL with antigen loaded human class I MHC molecules expressed on the surface of a suitable antigen-presenting cell for a period of time sufficient to activate said CTL in an antigen specific manner, wherein said antigen is said peptide according to claim 1 or 2.

11. An activated cytotoxic T lymphocyte (CTL), produced by the method according to claim 10, and specific for the peptide of claim 1 or 2.

12. A pharmaceutical composition, comprising the peptide according to claim 1 or 2, the T cell receptor according to claim 3, the fusion protein according to claim 4, the antibody according to claim 5, the nucleic acid according to claim 6, or the expression vector according to claim 7, the host cell according to claim 8, or the activated cytotoxic T lymphocyte according to claim 11, and a pharmaceutically acceptable carrier, wherein said pharmaceutical composition preferably is a vaccine.

13. The peptide according to claim 1 or 2, the T cell receptor according to claim 3, the fusion protein according to claim 4, the antibody according to claim 5, the nucleic acid according to claim 6, the expression vector according to claim 7, the host cell according to claim 8, the activated cytotoxic T lymphocyte according to claim 11 or the pharmaceutical composition according to claim 12 for use in medicine.

14. Use of the peptide according to claim 1 or claim 2, the T cell receptor according to claim 3, the fusion protein according to claim 4, the antibody according to claim 5, the nucleic acid according to claim 6, the expression vector according to claim 7, the host cell according to claim 8, the activated cytotoxic T lymphocyte according to claim 11 or the pharmaceutical composition according to claim 12 in the manufacture of a medicament for the treatment of cancer.

15. The use according to claim 14, wherein said cancer is acute myeloid leukemia and/or chronic lymphatic leukemia, liver cancer or colon cancer.