CLAIMS

1. A peptide having a length of up to 30 amino acids and comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 1 to SEQ ID NO: 226 and SEQ ID NO: 252 to SEQ ID NO: 272 or a pharmaceutically acceptable salt thereof.

2. The peptide according to claim 1, wherein said peptide, when bound to said MHC, is capable of being recognized by CD4 and/or CD8 T cells.

3. The peptide according to any of claims 1 or 2, wherein said peptide has a length of 8 to 16 amino acids.

4. The peptide according to any one of claims 1 to 3, wherein said peptide is modified and/or includes non-peptide bonds.

5. An antibody or fragment thereof, that specifically recognizes the peptide according to any of claims 1 to 4, or the peptide according to any of claims 1 to 4 when bound to an MHC molecule.

6. A T-cell receptor or a fragment thereof, that is reactive with an HLA ligand, wherein said ligand is the peptide according to any of claims 1 to 4 or the peptide according to any of claims 1 to 4 when bound to an MHC molecule.

7. The T-cell receptor according to claim 6, wherein said ligand amino acid sequence comprises an amino acid sequence selected from SEQ ID NO: 1 to SEQ ID NO: 226 and SEQ ID NO: 252 to SEQ ID NO: 272.

8. The T-cell receptor according to claim 6, wherein said T-cell receptor is provided as a soluble molecule and optionally carries a further effector function optionally an immune stimulating domain or toxin.

9. A recombinant host cell comprising the peptide according to any one of claims 1 to 4, the antibody or fragment thereof according to claim 5, the T-cell receptor or fragment thereof according to any one of claims 6 to 8, wherein said host cell optionally is selected from an antigen presenting cell, optionally a dendritic cell, a T cell or an NK cell.

10. An *in vitro* method for producing activated T lymphocytes, the method comprising contacting in vitro T cells with antigen loaded human class I or II MHC molecules expressed on the surface of a suitable antigen-presenting cell or an artificial construct mimicking an antigen-presenting cell for a period of time sufficient to activate said T cells in an antigen specific manner, wherein said antigen is a peptide according to any one of claims 1 to 4.

11. An activated T lymphocyte, produced by the method according to claim 14, that selectively recognizes a cell which presents a polypeptide comprising an amino acid sequence given in any one of claims 1 to 4.

12. A pharmaceutical composition comprising at least one active ingredient selected from the group consisting of the peptide according to any one of claims 1 to 4, the antibody or fragment thereof according to claim 5, the T-cell receptor or fragment thereof according to any one of claims 6 to 8, the host cell according to claim 9, or the activated T lymphocyte according to claim 11, and a pharmaceutically acceptable carrier, and optionally, pharmaceutically acceptable excipients and/or stabilizers.

13. A method for producing the peptide according to any one of claims 1 to 4, the antibody or fragment thereof according to claim 5, or the T-cell receptor or fragment thereof according to any one of claims 6 to 8, the method comprising culturing the host cell according to claim 9, and isolating the peptide, the antibody or fragment thereof or the T cell receptor or fragment thereof from said host cell and/or its culture medium.

14. Use of the peptide according to any one of claims 1 to 4, the antibody or fragment thereof according to claim 5, the T-cell receptor or fragment thereof according to

claim 6 – 8, the host cell according to claim 9, or the activated T lymphocyte according to claim 11 in the manufacture of a medicament for treatment of cancer.

15. The use according to claim 14, wherein said cancer is selected from the group of melanoma, acute myelogenous leukemia, breast cancer, bile duct cancer, brain cancer, chronic lymphocytic leukemia, colorectal carcinoma, esophageal cancer, gallbladder cancer, gastric cancer, hepatocellular cancer, non-Hodgkin lymphoma, non-small cell lung cancer, ovarian cancer, pancreatic cancer, prostate cancer, renal cell cancer, small cell lung cancer, urinary bladder cancer and uterine cancer.

16. A kit comprising:
a) a container comprising the pharmaceutical composition according to claim 12, in solution or in lyophilized form;
b) optionally, a second container containing a diluent or reconstituting solution for the lyophilized formulation;
c) optionally, at least one more peptides selected from the group consisting of SEQ ID NO: 1 to SEQ ID NO: 226 and SEQ ID NO: 252 to SEQ ID NO: 272.

17. The kit according to claim 16, further comprising one or more of (iii) a buffer, (iv) a diluent, (v) a filter, (vi) a needle, or (vii) a syringe.