

CLAIMS

1. A polypeptide which is an immunogenic fragment of human transforming growth factor 1 (TGFb1) and which comprises or consists of a sequence of at least 9 consecutive amino acids of SEQ ID NO: 1.
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2. The polypeptide of claim 1, which comprises or consists of up to 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45 or 50 consecutive amino acids of SEQ ID NO: 1.
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3. The polypeptide of claim 1 or 2, which comprises or consists of the amino acid sequence of any one of SEQ ID NOs: 66, 28-31, 67, 5-9, 42-45, 12-15, 55-58, 23-26, 49-52, 63, 64, 65 or 2.
- 15 4. The polypeptide of claim 3, which comprises or consists of the amino acid sequence of any one of SEQ ID NOs: 66, 28, 67, 5, 6, 42, 12, 55, 23, 49, , or 63.
5. The polypeptide of any one of claims 1-4, which has a maximum length of 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 35, 40, 45 or 50 amino acids and/or in which the C terminal amino acid is replaced with the corresponding amide.
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6. The polypeptide of any one of claims 1-5, which comprises a HLA-A2 restricted epitope, optionally wherein the HLA-A2-restricted epitope comprises or consists of the amino acid sequence of SEQ ID NO: 66 or 67.
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7. A polynucleotide encoding a polypeptide according to any one of claims 1-6, optionally comprised within a vector.
8. A composition comprising a polypeptide according to any one of claims 1-6 and/or a
30 polynucleotide according to claim 7; and optionally an adjuvant.

9. The composition of claim 8 further comprising at least one different polypeptide according to any one of claims 1-6; at least one different polynucleotide according to claim 7; and/or at least one pharmaceutically acceptable diluent, carrier or preservative.
- 5 10. The composition of claim 8 or 9, which comprises an adjuvant selected from the group consisting of bacterial DNA based adjuvants, oil/surfactant based adjuvants, viral dsRNA based adjuvants, imidazochinilines, and a Montanide ISA adjuvant.
11. A method of treating or preventing a disease or condition in a subject, the method
10 comprising administering to the subject the polypeptide of any one of claims 1-6, the polynucleotide of claim 7, and/or the composition of any one of claims 8-10.
12. The method of claim 11, wherein the disease or condition is:
- (i) a cancer optionally selected from the group consisting of a breast cancer, a
15 cervical cancer, a gastric cancer, a liver cancer, an ovarian cancer, a pancreatic cancer, a lung cancer (such as a non-small-cell lung carcinoma (NSCLC)), a melanoma, a leukemia (such as an acute myeloid leukemia), or a prostate cancer; and/or
- (ii) characterized at least in part by inappropriate or excessive immune
suppressive function of TGFb1-expressing cells and/or inappropriate or excessive expression
20 of IL-4 and/or IL-13.
13. The method of claim 11 or 12, wherein the disease or condition is cancer and the method further comprises the simultaneous or sequential administration of an additional cancer therapy, preferably an antibody.
- 25 14. A method of stimulating TGFb1-specific T cells, the method comprising contacting the T cells with: the polypeptide of any one of claims 1-6; and/or a composition of any one of claims 8-10, wherein the composition comprises at least one polypeptide as defined in any one of claims 1-6.
- 30 15. The method of claim 14, wherein the T cells are present in a sample taken from a healthy subject or from a cancer patient, optionally a tumour sample.