

Claims

1. A citrullinated T cell antigen which comprises, consists essentially of, or consists of
 - i) the amino acid sequence AKFINYVKNCFRMTD, wherein the arginine (R) residue
 5 is replaced with citrulline, or
 - ii) the amino acid sequence of i), with the exception of 1, 2 or 3 amino acid substitutions, and/or 1, 2 or 3 amino acid insertions, and/or 1, 2 or 3 amino acid deletions in a non-arginine position.
- 10 2. The antigen of claim 1, which comprises, consists essentially of, or consists of
 - i) one or more of the following amino acid sequences:
 AKFINYVKNCFRMTDQEAIQ
 LPKVEAKFINYVKNCFRMTD
 wherein the arginine (R) residue is replaced with citrulline, or
 15 ii) one or more of the amino acid sequences of i), with the exception of 1, 2 or 3 amino acid substitutions, and/or 1, 2 or 3 amino acid insertions, and/or 1, 2 or 3 amino acid deletions in a non-citrulline position.
- 20 3. A complex of the antigen of claim 1 or claim 2 and an MHC molecule, optionally wherein the MHC molecule is MHC class II, optionally selected from HLA-DR4 and DP4.
4. A binding moiety that binds the polypeptide of claim 1 or claim 2.
5. The binding moiety of claim 4, which binds the polypeptide when it is in complex with
 25 MHC.
6. The binding moiety of claim 4 or claim 5, wherein the binding moiety is a T cell receptor (TCR) or an antibody.
- 30 7. The binding moiety of claim 6, wherein the TCR is on the surface of a cell.
8. An antigen as defined in claim 1 or claim 2, a complex as defined in claim 3, or a binding moiety as defined in any one of claims 4-7 for use in medicine.
- 35 9. The antigen, complex, and/or binding moiety for use as defined in claim 8 for use in treating or preventing cancer.

10. The antigen, complex, and/or binding moiety for use as defined in claim 9, wherein the cancer is AML, lung, colorectal, renal, breast, ovary and liver tumours.
11. A pharmaceutical composition comprising an antigen as defined in claim 1 or claim 2, a complex as defined in claim 3, and/or a binding moiety as defined in any one of claims 4-7, together with a pharmaceutically acceptable carrier.
12. A method of identifying a binding moiety that binds a complex as claimed in claim 3, the method comprising contacting a candidate binding moiety with the complex and determining whether the candidate binding moiety binds the complex.