CLAIMS

1. An immunomodulatory polypeptide derived from the IL-2, which comprises several point mutations in respect to the sequence of the native IL-2 and has the property of inhibiting the activity of IL-2 *in vitro* preferentially on the regulatory T cells, wherein the polypeptide is selecting from the group consisting of (i) said polypeptide comprising mutations Q22V, Q126A, and S130G I129D; (ii) said polypeptide comprising mutations L18N, Q126Y and S130R; (iii) said polypeptide comprising mutations Q13Y, Q126Y, I129D and S130R; (iv) said polypeptide comprising mutations L18N, Q22V, T123A, and S130R I129D.

2. A fusion protein comprising any of the immunomodulatory polypeptides of claim 1 coupled to a carrier protein.

3. The fusion protein of claim 2 characterized in that the carrier protein is albumin.

4. The fusion protein of claim 2 characterized in that the carrier protein is the Fc region of human immunoglobulin.

5. Use of the polypeptide of claim 1 for the manufacture of a medicament for the treatment of cancer.

6. Use of the fusion proteins of any of the claims from 2 to 4 for the manufacture of a medicament for the treatment of cancer.

7. A pharmaceutical composition which comprises as active ingredient any of the polypeptides of claim 1.

8. A pharmaceutical composition which comprises as active ingredient the fusion protein of any one of claims from 2 to 4.

9. Any of the polypeptide of claim 1 in combination with a vaccine to modulate its therapeutic activity.

10. The fusion protein of any of claims 2 to 4 in combination with a vaccine to modulate its therapeutic activity.

CLAIMS

1. An immunomodulatory polypeptide derived from the IL-2, which comprises several point mutations in respect to the sequence of the native IL-2 and has the property of inhibiting the activity of IL-2 *in vitro* preferentially on the regulatory T cells, wherein the polypeptide is selecting from the group consisting of (i) said polypeptide comprising mutations Q22V, Q126A, and S130G I129D; (ii) said polypeptide comprising mutations L18N, Q126Y and S130R; (iii) said polypeptide comprising mutations Q13Y, Q126Y, I129D and S130R; (iv) said polypeptide comprising mutations L18N, Q22V, T123A, and S130R I129D.

2. A fusion protein comprising any of the immunomodulatory polypeptides of claim 1 coupled to a carrier protein.

3. The fusion protein of claim 2 characterized in that the carrier protein is albumin.

4. The fusion protein of claim 2 characterized in that the carrier protein is the Fc region of human immunoglobulin.

5. Use of the polypeptide of claim 1 for the manufacture of a medicament for the treatment of cancer.

6. Use of the fusion proteins of any of the claims from 2 to 4 for the manufacture of a medicament for the treatment of cancer.

7. A pharmaceutical composition which comprises as active ingredient any of the polypeptides of claim 1.

8. A pharmaceutical composition which comprises as active ingredient the fusion protein of any one of claims from 2 to 4.