CLAIMS

1. A multispecific antibody comprising:
   a) one or two binding domains, which specifically bind to IL-4R (IL4R-BD), and
   b) one or two binding domains, which specifically bind to IL-31 (IL31-BD),
   wherein
   - the multispecific antibody comprises an immunoglobulin Fc region;
   - each of said IL4R-BDs comprise
     the HCDR1 sequence of SEQ ID NO: 1,
     the HCDR2 sequences of SEQ ID NO: 2,
     the HCDR3 sequence of SEQ ID NO: 3,
     the LCDR1 sequence of SEQ ID NO: 7,
     the LCDR2 sequence of SEQ ID NO: 8, and
     the LCDR3 sequences of SEQ ID NO: 9; and
   - each of said IL31-BDs comprises
     the HCDR1 sequence of SEQ ID NO: 12,
     the HCDR2 sequence of SEQ ID NO: 13,
     the HCDR3 sequences of SEQ ID NO: 14,
     the LCDR1 sequence of SEQ ID NO: 17 or 18,
     the LCDR2 sequence of SEQ ID NO: 19, and
     the LCDR3 sequences of SEQ ID NOs: 20.

2. The multispecific antibody of claim 1, wherein the immunoglobulin Fc region is selected from an IgG subclass, particularly from IgG subclasses IgG1 and IgG4, particularly from IgG4.

3. The multispecific antibody of claim 2, wherein the format of said multispecific antibody is selected from bivalent bispecific IgG formats, trivalent bispecific IgG formats and tetravalent bispecific IgG formats;
   more particularly wherein the format of said multispecific antibody is selected from KiH-based IgGs; DVD-Ig; CODV-IgG and Morrison (IgG CH_3-scFv fusion (Morrison-H) or IgG CL-scFv fusion (Morrison-L)), even more particularly from DVD-Ig and Morrison (IgG CH_3-scFv fusion (Morrison-H) or IgG CL-scFv fusion (Morrison-L)).

4. The multispecific antibody of claim 3, wherein the format of said multispecific antibody is selected from Morrison formats.

5. The multispecific antibody of any one of the preceding claims, wherein said multispecific antibody comprises two IL4R-BDs and/or two IL31-BDs.

6. The multispecific antibody of claims 5, wherein the IL4R-BDs are located in the Fab arms, and the IL31-BDs are located in the scFv part of the Morrison format.

7. The multispecific antibody of any one of claim 4 to 6, wherein the format of the multispecific antibody is selected from a Morrison-L and a Morrison-H format, in particular is the Morrison-H format.

8. The multispecific antibody of any one of the preceding claims, wherein said IL4R-BDs and said IL31-BDs further comprise VH3 or VH4 domain framework sequences FR1 to FR4; particularly VH3 domain framework sequences FR1 to FR4.

9. The multispecific antibody of claim 8, wherein said IL4R-BDs and said IL31-BDs, when being in scFv-format, comprise
   (i) VL domains comprising a VL framework comprising framework regions FR1, FR2 and FR3, which are selected from Vκ subtypes, particularly from the Vκ1 and Vκ3 subtypes, particularly are of the Vκ1 subtype, and a framework FR4, which is selected from a Vκ FR4 and a Vλ FR4, particularly is a Vλ FR4 comprising an amino acid sequence having at least 70, 80, 90 percent identity to an amino acid sequence selected from SEQ ID NO: 26 to SEQ ID NO: 33, more particularly a Vλ FR4 selected from any of SEQ ID NO: 26 to SEQ ID NO: 33, particularly a Vλ FR4 according to SEQ ID NO: 26 or 33.

10. The multispecific antibody of any one of the preceding claims, wherein said IL4R-BDs comprise
    a) a VH sequence at least 90, 91, 92, 93, 94, 95, 96, 97, 98 or 99 percent identical to any one of the amino acid sequences selected from SEQ ID NO: 4, 5 and 6; and
    b) a VL sequence at least 90, 91, 92, 93, 94, 95, 96, 97, 98 or 99 percent identical to any one of the amino acid sequences selected from SEQ ID NO: 10 and 11,

    in particular wherein said IL4R-BDs comprise
    a) a VH sequence of SEQ ID NO: 4 and a VL sequence of SEQ ID NO: 11; or

b) a VH sequence of SEQ ID NO: 5 and a VL sequence of SEQ ID NO: 10; or
c) a VH sequence of SEQ ID NO: 6 and a VL sequence of SEQ ID NO: 10.

11. The multispecific antibody of any one of the preceding claims, wherein said IL31-BDs comprise
a) a VH sequence at least 90, 91, 92, 93, 94, 95, 96, 97, 98 or 99 percent identical to any one of the amino acid sequences selected from SEQ ID NOs: 15 and 16; and
b) a VL sequence at least 90, 91, 92, 93, 94, 95, 96, 97, 98 or 99 percent identical to any one of the amino acid sequences selected from SEQ ID NOs: 21 and 22,
in particular wherein said IL31-BD comprises
a) a VH sequence of SEQ ID NO: 15 and a VL sequence of SEQ ID NO: 22; or
b) a VH sequence of SEQ ID NO: 16 and a VL sequence of SEQ ID NO: 21.

12. The multispecific antibody of any one of the preceding claims, wherein at least one of the two IL4R-BDs and at least one of the two IL31-BDs are capable of binding simultaneously to their respective antigens.

13. A nucleic acid or two nucleic acids encoding the multispecific antibody of any one of claims 1 to 12.

14. A vector or two vectors comprising the nucleic acid or the two nucleic acids of claim 13.

15. A host cell or host cells comprising the vector or the two vectors of claim 14.

16. A method for producing the multispecific antibody of any one of claims 1 to 12, comprising (i) providing the nucleic acid or the two nucleic acids of claim 13, or the vector or the two vectors of claim 14, expressing said nucleic acid or said two nucleic acids, or said vector or vectors, and collecting said multispecific antibody from the expression system, or (ii) providing a host cell or host cells according to claim 15, culturing said host cell or said host cells; and collecting said multispecific antibody from the cell culture.

17. A pharmaceutical composition comprising the multispecific antibody of any one of claims 1 to 12 and a pharmaceutically acceptable carrier.

18. Use of the multispecific antibody of any one of claims 1 to 12 in the manufacture of a medicament for treating a disease selected from allergic, inflammatory and autoimmune

diseases, particularly from pruritus-causing allergic diseases, pruritus-causing inflammatory diseases and pruritus-causing autoimmune diseases, particularly from atopic dermatitis, acute allergic contact dermatitis, chronic spontaneous urticaria, bullous pemphigoid, alopecia areata, dermatomyositis, prurigo nodularis, psoriasis and atopic asthma; particularly wherein said disease is atopic dermatitis.