

We claim

1. An isolated antibody or antibody fragment ~~specific for human C5aR, wherein said antibody or antibody fragment comprises~~comprising:
 - a) the HCDR1 region of SEQ ID NO: 27, the HCDR2 region of SEQ ID NO: 28, the HCDR3 region of SEQ ID NO: 29, the LCDR1 region of SEQ ID NO: 32, the LCDR2 region of SEQ ID NO: 33 and the LCDR3 region of SEQ ID NO: 34, or
 - b) the HCDR1 region of SEQ ID NO: 27, the HCDR2 region of SEQ ID NO: 39, the HCDR3 region of SEQ ID NO: 40, the LCDR1 region of SEQ ID NO: 32, the LCDR2 region of SEQ ID NO: 33 and the LCDR3 region of SEQ ID NO: 34.

wherein the isolated antibody or antibody fragment is specific for human C5aR.
2. The isolated antibody or antibody fragment according to claim 1 or claim 2, wherein said antibody or antibody fragment comprises
 - a) the VH of SEQ ID NO: 35 and the VL of SEQ ID NO 36, or
 - b) the VH of SEQ ID NO: 42 and the VL of SEQ ID NO 43.
3. The isolated antibody or antibody fragment according to claim 1 or claim 2, wherein said antibody or antibody fragment comprises
 - a) the HC of SEQ ID NO: 37 and the LC of SEQ ID NO 38, or
 - b) the HC of SEQ ID NO: 44 and the LC of SEQ ID NO 45.
4. The isolated antibody or antibody fragment according to any one of the preceding claims, wherein said antibody is of the human IgG1 class.
5. The isolated antibody or antibody fragment according to any one of the preceding claims, wherein said antibody does not substantially induce effector function in vitro.
6. The isolated antibody or antibody fragment according to any one of the preceding claims, wherein said antibody comprises one or more amino acid substitution selected from the group of: L234A, L235E, G237A, A330S and P331S, with numbering according to EU index.
7. The isolated antibody or antibody fragment according to any one of the preceding claims, wherein said isolated antibody or antibody fragment is specific for human C5aR and cynomolgus C5aR.

8. The isolated antibody or antibody fragment according to any one of the preceding claims wherein said isolated antibody or antibody fragment inhibits human C5a induced CD11b expression in human granulocytes with an IC₅₀ concentration of 42 nM in the presence of 150 nM human C5a in vitro.
9. The isolated antibody or antibody fragment according to any of the preceding claims, wherein said isolated antibody or antibody fragment is a monoclonal antibody or antibody fragment.
10. The isolated antibody or antibody fragment according to any of the preceding claims, wherein said isolated antibody or antibody fragment is a human, humanized or chimeric antibody or antibody fragment.
11. The isolated antibody or antibody fragment according to any one of the preceding claims for use in medicine.
12. A nucleic acid composition comprising a nucleic acid sequence or a plurality of nucleic acid sequences encoding the isolated antibody or antibody fragment according to any one of claims 1 to 10.
13. A vector composition comprising a vector or a plurality of vectors comprising the nucleic acid composition of claim 12.
14. A host cell comprising the vector composition of claim 13 or the nucleic acid composition of claim 12.
15. A pharmaceutical composition comprising the isolated antibody or antibody fragment according to claims 1 to 10 and a pharmaceutically acceptable carrier or excipient.