selectin of human IgGl subclass mentioned in WO 93/21956 is in pre-clinical development (www.mrctechnology.org).

SUMMARY

[006] The disclosure relates to antibodies characterized in that said antibodies bind P-selectin and do not bind human complement factor Clq and do not also bind to human Fcγ receptor on NK cells. The antibodies according to the disclosure contain a Fc part derived from human origin. Preferably these antibodies are humanized or human antibodies. The antibodies have new and inventive properties causing a benefit for a patient suffering from inflammatory and thrombotic disorders, especially from peripheral arterial occlusive disease (PAOD) and critical limb ischemia (CLI).

[006a] In a first aspect, there is provided a hybridoma cell line DSM ACC2641.

[006b] In a second aspect, there is provided an anti-P selectin antibody obtainable from hybridoma cell line DSM ACC2641.

[006c] In a third aspect, there is provided a nucleic acid molecule encoding an antibody molecule as defined herein.

[006d] In a fourth aspect, there is provided a vector comprising the nucleic acid molecule as defined herein.

[006e] In a fifth aspect, there is provided a host cell comprising the vector as defined herein.

[006f] In a sixth aspect, there is provided a method for the preparation of an antibody molecule as defined herein comprising culturing the host cell as defined herein under conditions that allow synthesis of said antibody molecule and recovering said antibody molecule from said culture.

[006g] In a seventh aspect, there is provided a composition comprising an antibody molecule as defined herein or an antibody molecule produced by the method as defined herein.

[006h] In an eighth aspect, there is provided a pharmaceutical composition comprising an antibody as defined herein and at least one pharmaceutically acceptable excipient.

[006i] In a ninth aspect, there is provided the antibody as defined herein for use in therapy.

[006j] In a tenth aspect, there is provided the use of an antibody as defined herein for the preparation of a medicament for the prophylaxis and treatment of inflammatory and thrombotic disorders.

[006k] In an eleventh aspect, there is provided a kit comprising an antibody molecule as defined herein, a nucleic acid molecule as defined herein, a vector as defined herein or a host cell as defined herein.

BRIEF DESCRIPTION OF THE DRAWINGS

[007] Fig. 1 shows that the antibodies of the invention inhibit the adhesion of leukocyte-like HL60 cells to purified P-selectin coated onto microtiter plates. The mutated antibodies are more potent than the non-mutated parent antibody.

[008] Fig. 2 shows the inhibitory activity of the antibodies of the invention in the rosetting assay measuring the adhesion of thrombin-activated platelets to HL60 cells.

[009] Fig. 3a and 3b depicts the cross-reactivity of the antibodies of the invention with rat and cynomologus P-selectin, Fig.3a: The anti-P-selectin antibodies do not affect the adhesion of thrombin-activated rat platelets to HL60 cells, whereas the commercially available polyclonal anti-P-selectin antibody (Pharmingen 09361A) inhibits this interaction. Fig. 3b: The antibodies of the invention inhibit the adhesion of activated cynomologus platelets to HL60 cells.

[0010] Fig. 4a - c demonstrates the selectivity of the antibodies for P-selectin vs. E-and L-selectin by representative binding curves on P-, E- and L-selectin transfectants. The antibodies according to the invention bind to P-selectin CHO