

HSV-1-induced corneal lymphangiogenesis, proliferative diabetic retinopathy, retinopathy of prematurity, retinal vein occlusion, corneal graft rejection, neovascular glaucoma, and rubeosis.

5 In one aspect, the present disclosure refers to use of a MASP-2 inhibitory monoclonal antibody, or fragment thereof that specifically binds to a portion of SEQ ID NO:6 in the manufacture of a medicament for preventing, treating, reverting and/or delaying angiogenesis in a mammalian subject suffering from an ocular angiogenic disease or condition selected from the group consisting of uveitis, ocular melanoma, corneal neovascularization, primary pterygium, HSV stromal keratitis, HSV-1-induced
10 corneal lymphangiogenesis, proliferative diabetic retinopathy, retinopathy of prematurity, retinal vein occlusion, corneal graft rejection, neovascular glaucoma, and rubeosis, wherein the MASP-2 inhibitory monoclonal antibody or antigen-binding fragment thereof comprises a heavy chain variable region comprising SEQ ID NO:67 and a light chain variable region comprising SEQ ID NO:69.

15 In another example, the present disclosure provides methods of treating a subject suffering from an ocular angiogenic disease or condition selected from the group consisting of AMD, uveitis, ocular melanoma, corneal neovascularization, primary pterygium, HSV stromal keratitis, HSV-1-induced corneal lymphangiogenesis, proliferative diabetic retinopathy, diabetic macular edema, retinopathy of prematurity,
20 retinal vein occlusion, corneal graft rejection, neovascular glaucoma, vitreous hemorrhage secondary to proliferative diabetic retinopathy, neuromyelitis optica and rubeosis, comprising administering to the subject an amount of a MASP-2 inhibitory agent effective to inhibit angiogenesis.

25 In another example, the present disclosure provides methods of inhibiting tumor angiogenesis comprising administering to a subject with cancer an amount of a MASP-2 inhibitory agent effective to inhibit angiogenesis.

DESCRIPTION OF THE DRAWINGS

30 The foregoing aspects and many of the attendant advantages of this invention will become more readily appreciated as the same become better understood by reference to the following detailed description, when taken in conjunction with the accompanying drawings, wherein:

FIGURE 1 is a diagram illustrating the genomic structure of human MASP-2;

35 FIGURE 2A is a schematic diagram illustrating the domain structure of human MASP-2 protein;

FIGURE 2B is a schematic diagram illustrating the domain structure of human MAP19 protein;

FIGURE 3 is a diagram illustrating the murine MASP-2 knockout strategy;

FIGURE 4 is a diagram illustrating the human MASP-2 minigene construct;

40 FIGURE 5A presents results demonstrating that MASP-2-deficiency leads to the loss of lectin-pathway-mediated C4 activation as measured by lack of C4b deposition on mannan, as described in Example 2;

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. Use of a MASP-2 inhibitory monoclonal antibody, or fragment thereof
5 that specifically binds to a portion of SEQ ID NO:6 in the manufacture of a medicament for preventing, treating, reverting and/or delaying angiogenesis in a mammalian subject suffering from an ocular angiogenic disease or condition selected from the group consisting of uveitis, ocular melanoma, corneal neovascularization, primary pterygium, HSV stromal keratitis, HSV-1-induced corneal lymphangiogenesis, proliferative diabetic
10 retinopathy, retinopathy of prematurity, retinal vein occlusion, corneal graft rejection, neovascular glaucoma, and rubeosis, wherein the MASP-2 inhibitory monoclonal antibody or antigen-binding fragment thereof comprises a heavy chain variable region comprising SEQ ID NO:67 and a light chain variable region comprising SEQ ID NO:69.
2. The use of Claim 1, wherein the antibody or fragment thereof is selected
15 from the group consisting of a recombinant antibody, an antibody having reduced effector function, a chimeric antibody, a humanized antibody and a human antibody.
3. The use of Claim 1, wherein the medicament is formulated for delivery subcutaneously, intraperitoneally, intra-muscularly, intra-arterially, intravenously, or as an inhalant.

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