CLAIMS

1. A peptide ligand specific for human Kallikrein comprising a polypeptide comprising at least three reactive groups, separated by at least two loop sequences, and a molecular scaffold which forms covalent bonds with the reactive groups of the polypeptide such that at least two polypeptide loops are formed on the molecular scaffold, in which the loops of the peptide ligand comprises five amino acids and one loop comprises the motif $G_rA(\Psi CH_2NH)H^{Q}/_{T}xLG_r$, in which G_r is a reactive group and in which X represents any amino acid.

2. A peptide ligand according to Claim 1, in which the polypeptide comprises a first loop which comprises the motif $G_rxWPARG_r$ or $G_rxFPYRG_r$ and a second loop comprising the motif $G_rA(\Psi CH_2NH)H^{Q}/_{T}xLG_r$.

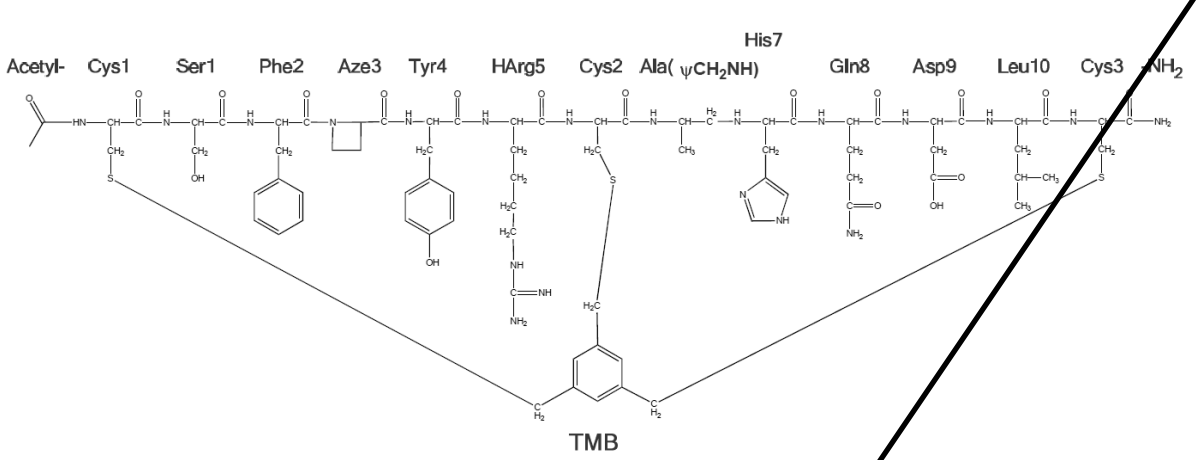
3. A peptide ligand according to Claim 2, in which in the first loop P is replaced with azetidine carboxylic acid; and/or in the first loop R is replaced with N-methyl arginine or homoarginine or guanidylphenylalanine.

4. A peptide ligand according to Claim 3, in which the polypeptide comprises a first loop which comprises the motif $G_rxFPYRG_r$, in which P is replaced with azetidine carboxylic acid and/or R is replaced with N-methyl arginine or homoarginine or guanidylphenylalanine.

5. A peptide ligand according to any preceding claim, in which G_r is cysteine.

6. A peptide ligand according to any preceding claim, which comprises: Cys Ser1 Phe2 Aze3 Tyr4 HArg5 Cys Ala(ψCH_2NH)6 His7 Gln8 Asp9 Leu10 Cys.

7. A peptide ligand according to any preceding claim, which comprises:



8. A peptide ligand according to any preceding claim, which is attached to an antibody or a fragment thereof.

9. A composition comprising a peptide ligand according to any preceding claim together with a pharmacologically appropriate carrier.

10. A peptide ligand according to any of Claims 1 to 8 for use in preventing, suppressing or treating inflammatory states, allergic hypersensitivity, cancer, bacterial or viral infection, ophthalmic disorders and autoimmune disorders.

11. A peptide ligand for use according to Claim 10 which is for use in preventing, suppressing or treating ophthalmic disorders.

12. A peptide ligand for use according to Claim 11, in which the ophthalmic disorders include exudative and/or inflammatory ophthalmic disorders, disorders related to impaired retinal vessel permeability and/or integrity, disorders related to retinal microvessel rupture leading to focal hemorrhages, back of the eye diseases, retinal diseases and front of the eye diseases and are selected from: age related macular degeneration (ARMD), exudative macular degeneration (also known as “wet” or neovascular age-related macular degeneration (wet-AMD), macular oedema, aged disciform macular degeneration, cystoid macular oedema, palpebral oedema, retinal oedema, diabetic retinopathy, acute macular neuroretinopathy, central serous chorioretinopathy, chorioretinopathy, choroidal neovascularization, neovascular maculopathy, neovascular glaucoma, obstructive arterial and venous retinopathies (e.g. retinal venous occlusion or retinal arterial occlusion), central retinal vein occlusion, disseminated intravascular coagulopathy, branch retinal vein occlusion, hypertensive fundus changes,

ocular ischemic syndrome, retinal arterial microaneurysms, Coat's disease, parafoveal telangiectasis, hemi-retinal vein occlusion, papillophlebitis, central retinal artery occlusion, branch retinal artery occlusion, carotid artery disease (CAD), frosted branch angitis, sickle cell retinopathy and other hemoglobinopathies, angioid streaks, macular oedema occurring as a result of aetiologies such as disease (e.g. diabetic macular oedema), eye injury or eye surgery; retinal ischemia or degeneration produced for example by injury, trauma or tumours, uveitis, iritis, retinal vasculitis, endophthalmitis, panophthalmitis, metastatic ophthalmia, choroiditis, retinal pigment epithelitis, conjunctivitis, cyclitis, scleritis, episcleritis, optic neuritis, retrobulbar optic neuritis, keratitis, blepharitis, exudative retinal detachment, corneal ulcer, conjunctival ulcer, chronic nummular keratitis, thygeson keratitis, progressive mooren's ulcer, an ocular inflammatory disease caused by bacterial or viral infection, and by an ophthalmic operation, an ocular inflammatory disease caused by a physical injury to the eye, a symptom caused by an ocular inflammatory disease including itching, flare, oedema and ulcer, erythema, erythema exsudativum multiforme, erythema nodosum, erythema annulare, scleroedema, dermatitis, angioneurotic oedema, laryngeal oedema, glottic oedema, subglottic laryngitis, bronchitis, rhinitis, pharyngitis, sinusitis, laryngitis or otitis media.

13. A peptide ligand for use according to Claim 12, in which the ophthalmic disorder is diabetic macular edema.

14. Use of a peptide ligand according to any of Claims 1 to 8 in the preparation of a medicament for the treatment, suppression or prevention of inflammatory states, allergic hypersensitivity, cancer, bacterial or viral infection, ophthalmic disorders or autoimmune disorders.

15. Use of a peptide ligand according to any of Claims 1 to 8 in the preparation of a medicament for the treatment, suppression or prevention of ophthalmic disorders.

16. Use according to Claim 15, in which the ophthalmic disorders are as set out in Claim 12.

17. Use according to Claim 16, in which the ophthalmic disorder is diabetic macular edema.

CLAIMS

1. A peptide ligand specific for human Kallikrein comprising a polypeptide comprising at least three reactive groups, separated by at least two loop sequences, and a molecular scaffold which forms covalent bonds with the reactive groups of the polypeptide such that at least two polypeptide loops are formed on the molecular scaffold, in which the loops of the peptide ligand comprises five amino acids and one loop comprises the motif $G_rA(\Psi CH_2NH)H^{Q}/_{T}xLG_r$, in which G_r is a reactive group and in which X represents any amino acid.

2. A peptide ligand according to Claim 1, in which the polypeptide comprises a first loop which comprises the motif $G_rxWPARG_r$ or $G_rxFPYRG_r$ and a second loop comprising the motif $G_rA(\Psi CH_2NH)H^{Q}/_{T}xLG_r$.

3. A peptide ligand according to Claim 2, in which in the first loop P is replaced with azetidine carboxylic acid; and/or in the first loop R is replaced with N-methyl arginine or homoarginine or guanidylphenylalanine.

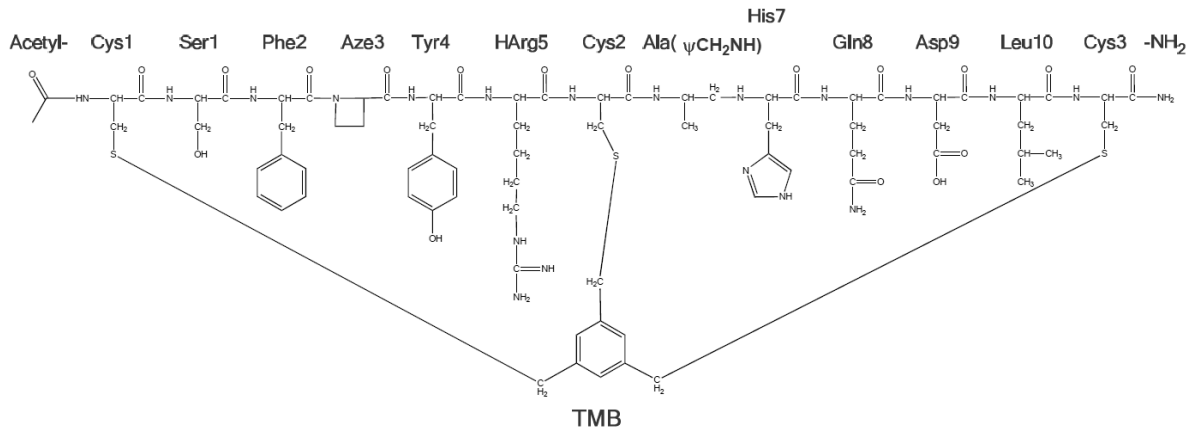
4. A peptide ligand according to Claim 3, in which the polypeptide comprises a first loop which comprises the motif $G_rxFPYRG_r$, in which P is replaced with azetidine carboxylic acid and/or R is replaced with N-methyl arginine or homoarginine or guanidylphenylalanine.

5. A composition comprising a peptide ligand according to any preceding claim together with a pharmacologically appropriate carrier.

6. A peptide ligand according to any of Claims 1 to 4 for use in suppressing or treating inflammatory states, allergic hypersensitivity, cancer, bacterial or viral infection, ophthalmic disorders and autoimmune disorders.

7. A peptide ligand for use according to Claim 6, in which the peptide ligand comprises: Cys Ser1 Phe2 Aze3 Tyr4 HArg5 Cys Ala(ψCH2NH)6 His7 Gln8 Asp9 Leu10 Cys.

8. A peptide ligand according to Claim 6 or 7, in which the peptide ligand comprises:



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9. A peptide ligand for use according to Claim 6, 7 or 8 which is for use in suppressing or treating ophthalmic disorders.

10. A peptide ligand for use according to Claim 9, in which the ophthalmic disorders include exudative and/or inflammatory ophthalmic disorders, disorders related to impaired retinal vessel permeability and/or integrity, disorders related to retinal microvessel rupture leading to focal hemorrhages, back of the eye diseases, retinal diseases and front of the eye diseases and are selected from: age related macular degeneration (ARMD), exudative macular degeneration (also known as “wet” or neovascular age-related macular degeneration (wet-AMD), macular oedema, aged disciform macular degeneration, cystoid macular oedema, palpebral oedema, retinal oedema, diabetic retinopathy, acute macular neuroretinopathy, central serous chorioretinopathy, chorioretinopathy, choroidal neovascularization, neovascular maculopathy, neovascular glaucoma, obstructive arterial and venous retinopathies (e.g. retinal venous occlusion or retinal arterial occlusion), central retinal vein occlusion, disseminated intravascular coagulopathy, branch retinal vein occlusion, hypertensive fundus changes, ocular ischemic syndrome, retinal arterial microaneurysms, Coat’s disease, parafoveal telangiectasis, hemi-retinal vein occlusion, papillophlebitis, central retinal artery occlusion, branch retinal artery occlusion, carotid artery disease (CAD), frosted branch angitis, sickle cell retinopathy and other hemoglobinopathies, angioid streaks, macular oedema occurring as a result of aetiologies such as disease (e.g. diabetic macular oedema), eye injury or eye surgery; retinal ischemia or degeneration produced for example by injury, trauma or tumours, uveitis, iritis, retinal vasculitis, endophthalmitis, panophthalmitis, metastatic ophthalmia, choroiditis, retinal pigment epithelitis, conjunctivitis, cyclitis, scleritis, episcleritis, optic neuritis,

retrobulbar optic neuritis, keratitis, blepharitis, exudative retinal detachment, corneal ulcer, conjunctival ulcer, chronic nummular keratitis, thygeson keratitis, progressive mooren's ulcer, an ocular inflammatory disease caused by bacterial or viral infection, and by an ophthalmic operation, an ocular inflammatory disease caused by a physical injury to the eye, a symptom caused by an ocular inflammatory disease including itching, flare, oedema and ulcer, erythema, erythema exsudativum multiforme, erythema nodosum, erythema annulare, scleroedema, dermatitis, angioneurotic oedema, laryngeal oedema, glottic oedema, subglottic laryngitis, bronchitis, rhinitis, pharyngitis, sinusitis, laryngitis or otitis media.

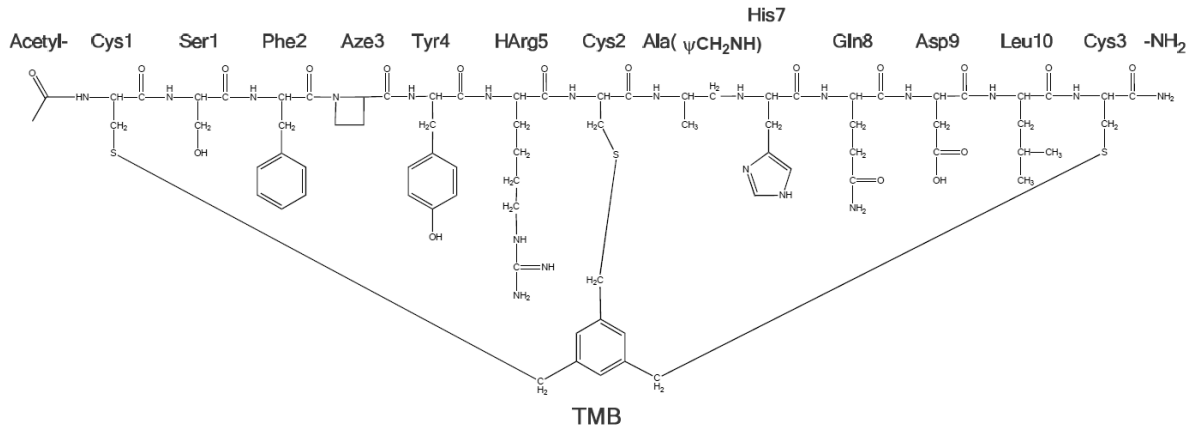
11. A peptide ligand for use according to Claim 10, in which the ophthalmic disorder is diabetic macular edema.

12. Use of a peptide ligand according to any of Claims 1 to 4 in the preparation of a medicament for the treatment or suppression of inflammatory states, allergic hypersensitivity, cancer, bacterial or viral infection, ophthalmic disorders or autoimmune disorders.

13. Use of a peptide ligand according to any of Claims 1 to 4 in the preparation of a medicament for the treatment or suppression of ophthalmic disorders.

14. Use of a peptide ligand according to Claim 12 or 13, in which the peptide ligand comprises: Cys Ser1 Phe2 Aze3 Tyr4 HArg5 Cys Ala(ψCH2NH)6 His7 Gln8 Asp9 Leu10 Cys.

15. Use of a peptide ligand according to Claim 12, 13 or 14, in which the peptide ligand comprises:



16. Use according to any of Claims 13 to 15, in which the ophthalmic disorders are as set out in Claim 10.

17. Use according to Claim 16, in which the ophthalmic disorder is diabetic macular edema.