

WHAT IS CLAIMED IS:

1. A synthetic peptide consisting of 7 consecutive amino acid residues set forth as $X_1X_2X_3X_4X_5X_6X_7$ (SEQ ID NO: 1), wherein,

X_1 is alanine (A), aspartic acid (D), asparagine (N), leucine (L), phenylalanine (F), or valine (V)

X_2 is alanine (A), isoleucine (I), leucine (L), or valine (V);

X_3 is phenylalanine (F), tyrosine (Y), or tryptophan (W);

X_4 is arginine (R), or lysine (K);

X_5 is valine (V), methionine (M), isoleucine (I), leucine (L), or glutamine (Q);

X_6 is arginine (R), glutamine (Q), lysine (K), or proline (P);

X_7 is serine (S) or threonine (T); and

each X_2 , X_3 , X_4 , X_6 and X_7 are independently L-form amino acid residues; and

the synthetic peptide has the amino acid sequence that is any of SEQ ID NOs:

3, 4, 10, 11, 12, 13, 14, 16, 18, 19, 20 or 21.

2. The synthetic peptide of claim 1, wherein at least one of X_1 and X_5 is a D-form amino acid residue.

3. The synthetic peptide of claim 2, wherein X_1 is in D-form.

4. The synthetic peptide of claim 2, wherein X_5 is in D-form.

5. Use of a synthetic peptide for measuring a medicament for treating a disease or a condition related to angiogenesis, wherein the synthetic peptide consists of 7 consecutive amino acid residues set forth as $X_1X_2X_3X_4X_5X_6X_7$ (SEQ ID NO: 1), wherein,

X_1 is alanine (A), aspartic acid (D), asparagine (N), leucine (L), phenylalanine (F), or valine (V)

X_2 is alanine (A), isoleucine (I), leucine (L), or valine (V);

X_3 is phenylalanine (F), tyrosine (Y), or tryptophan (W);

X₄ is arginine (R), or lysine (K);

X₅ is valine (V), methionine (M), isoleucine (I), leucine (L), or glutamine (Q);

X₆ is arginine (R), glutamine (Q), lysine (K), or proline (P);

X₇ is serine (S) or threonine (T); and

each X₂, X₃, X₄, X₆ and X₇ are independently L-form amino acid residues;

the disease or a condition related to angiogenesis is cancer, ocular disease, vascular anomaly, infection, cardiovascular disease or injury; and

the ocular disease is corneal neovascularization, choroidal neovascularization (CNV), diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration (AMD), juvenile macular degeneration, diabetic macular edema, retinitis pigmentosa, trachoma, glaucoma, dry eye syndrome, neuro-ophthalmic disease, retinal artery occlusion, uveitis, choroiditis, central serous chorioretinopathy (CSC), central exudative chorioretinopathy (CEC), polypoidal choroidal vasculopathy (PCV), neovascular glaucoma, neovascular maculopathy, or post-laser complications.

6. The use of claim 5, wherein at one of X₁ and X₅ is a D-form amino acid residue.

7. The use of claim 5, wherein the synthetic peptide has the amino acid sequence of SEQ ID NO: 2.

8. The use of claim 7, wherein X₁ is in D-form.

9. The use of claim 7, wherein X₅ is in D-form.

10. The use of claim 5, wherein the synthetic peptide has the amino acid sequence that is any of SEQ ID Nos: 3, 4, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 or 21.

11. The use of claim 5, wherein the ocular disease is age-related macular degeneration (AMD).

12. The use of claim 5, wherein the ocular disease is diabetic retinopathy.

13. The use of claim 5, wherein the cancer is selected from the group consisting of, breast cancer, cervical cancer, ovary cancer, endometrial cancer, melanoma, bladder cancer, lung cancer, pancreatic cancer, colon cancer, prostate cancer, hematopoietic tumors of lymphoid lineage, myeloid leukemia, thyroid cancer, thyroid follicular cancer, myelodysplastic syndrome (MDS), tumor of mesenchymal origin, melanoma, uveal melanoma, teratocarcinoma, neuroblastoma, glioma, glioblastoma, keratoacanthomas, renal cancer, anaplastic large cell lymphoma, esophageal squamous cell carcinoma, hepatocellular carcinoma, follicular dendritic cell carcinoma, intestinal cancer, muscle invasive cancer, seminal vesicle tumor, epidermal carcinoma, spleen cancer, bladder cancer, head and neck cancer, stomach cancer, bone cancer, brain cancer, cancer of retina, biliary cancer, small bowel cancer, salivary gland cancer, uterine sarcoma, cancer of testicles, cancer of connective tissue, prostatic hypertrophy, myelodysplasia, Waldenstrom's macroglobulinemia, nasopharyngeal, neuroendocrine cancer, mesothelioma, angiosarcoma, Kaposi's sarcoma, oesophagogastric, fallopian tube cancer, peritoneal cancer, papillary serous mullerian cancer, malignant ascites, gastrointestinal stromal tumor (GIST), Li-Fraumeni syndrome and Von Hippel-Lindau syndrome (VHL).

14. The use of claim 13, wherein the hematopoietic tumors of lymphoid lineage is any of leukemia, acute lymphocytic leukemia, chronic lymphocytic leukemia, B-cell lymphoma, Burkitt's lymphoma, multiple myeloma, Hodgkin's lymphoma, or Non-Hodgkin's lymphoma.

15. The use of claim 13, wherein the myeloid leukemia is acute myelogenous leukemia (AML) or chronic myelogenous leukemia (CML).

16. The use of claim 13, wherein the tumor of mesenchymal origin is fibrosarcomas or rhabdomyosarcomas.

17. The use of claim 13, wherein the cancer is metastatic.

18. The use of claim 17, wherein the cancer is metastatic lung cancer.

19. The use of claim 13, wherein the cancer is uterine sarcoma.

20. The use of claim 5, wherein the vascular anomaly is selected from the group consisting of, vascular permeability, plasma leakage, venous malformation (VM), hemangioblastoma, hemangiomas, brain arteriovenous malformations (BAVM), arteriosclerosis, thrombosis, choroidal neovascularization (CNV), and Osler-Weber syndrome.

21. The use of claim 20, wherein the vascular anomaly is choroidal neovascularization (CNV).

22. The use of claim 5, wherein the infection is a bacterial infection, virus infection, fungal infection, or protozoan infection.

23. The use of claim 5, wherein the cardiovascular disease is selected from the group consisting of, atherosclerosis, myocardial angiogenesis, hyperviscosity syndromes, vein occlusion, artery occlusion, carotid obstructive disease, Osler-Weber-Rendu disease, myocarditis, cerebrovascular accident, mitral valve regurgitation, hypotension, arterial or post-transplantational arteriosclerosis, fibrosis, thrombosis, and platelet aggregation.