CLAIMS

What is claimed is:

1. A composition ~~that comprises~~comprising 1) about 0.1% or more w/w of secretome and 2) a pharmaceutically or cosmetically acceptable excipient~~;~~, wherein the secretome comprises MCP-1 and CXCL2 (GRO), and wherein the composition is free from a cell.

2. The composition of claim 1, wherein the secretome further comprises one or more of ~~CXCL2 (GRO),~~ IL-6, IL-8, and VEGF proteins.

3. The composition of claim 1, wherein the secretome further comprises two of CXCL2 (GRO), IL-6, IL-8, and VEGF proteins.

4. The composition of claim 1, wherein the secretome further comprises three of CXCL2 (GRO), IL-6, IL-8, and VEGF proteins.

5. The composition of claim 1, wherein the secretome further comprises all of CXCL2 (GRO), IL-6, IL-8, and VEGF proteins.

6. The composition of any one of claims 1-5, wherein the secretome is present in the composition in an amount of at least 0.6%, 1%, 1.25%, 1.5%, 2%, 2.5%, 3%, 4%, 5%, 6%, 7%, 8%, 9%, 10%, 11%, 12%, 13%, 14%, 15%, 16%, 17%, 18%, 19%, or 20% by weight.

7. The composition of any one of claims 1-6, wherein the secretome is present in the composition in an amount of from about 2.5% to about 10% by weight.

~~8. The composition of any one of claims 1-7, wherein the composition is a fluid or gel that comprises from about 100 ng/ml to about 200 ng/ml of MCP-1.~~

~~9. A composition that comprises (a) MCP-1, (b) one or more additional proteins of IL-6, VEGF, PDGF-AA, IL-8, or CXCL2 (GRO); and (c) a pharmaceutically or cosmetically acceptable excipient, wherein a ratio of MCP-1 and the one or more additional proteins is in a range of from about 30:1 to about 60:1.~~

~~10. A composition that comprises (a) MCP-1, CXCL2 (GRO), and one or more additional proteins of IL-8, MCP-3, IL-6, G-CSF, or VEGF; and (b) a pharmaceutically or cosmetically acceptable excipient, wherein: a ratio of MCP-1 and IL-8 is in a range from about 10:1 to about 7:1, a ratio of MCP-1 and MCP-3 is in a range from about 10:1 to about 30:1, a ratio of MCP-1 and IL-6 is in a range from about 30:1 to about 50:1, a ratio of MCP-1 and G-CSF is in a range from about 30:1 to about 50:1, a ratio of MCP-1 and VEGF is in a range from about 30:1 to about 50:1, a ratio of CXCL2 and IL-8 is in a range from about 3:1 to about 4:1, a ratio of CXCL2 and MCP-3 is in a range from about 5:1 to about 15:1, a ratio of CXCL2~~

~~and IL-6 is in a range from about 10:1 to about 20:1, a ratio of CXCL2 and G-CSF is in a range from about 10:1 to about 20:1, a ratio of CXCL2 and VEGF is in a range from about 10:1 to about 20:1, or any combination thereof.~~

~~11.~~8. ~~A~~ The composition of any one of claims 1-7, wherein the composition comprises a liposome that comprises a phospholipid and secretome, and a pharmaceutically or cosmetically acceptable excipient, and wherein the composition is free from a cell.

~~12.~~9. The composition of claim ~~11~~8, wherein the secretome is encapsulated in the liposome.

~~13.~~10. The composition of claim ~~11~~ 8 or ~~12~~9, wherein the liposome is in a form of nanoparticles.

~~14.~~11. The composition of claim ~~13~~10, wherein the nanoparticles have an average particle size of from about 10 to about 400 nanometers in diameter.

~~15.~~12. The composition of claim ~~13~~10, wherein the nanoparticles have an average particle size of from about 50 to about 300 nanometers in diameter.

~~16.~~13. The composition of claim ~~13~~10, wherein the nanoparticles have an average particle size of from about 100 to about 200 nanometers in diameter.

~~17. The composition of any one of claims 11-16, wherein the secretome comprises a chemokine, an interleukin, a growth factor, or any combination thereof.~~

~~18.~~14. The composition of any one of claims ~~11~~8-~~17~~13, wherein the secretome comprises micro-vesicles, exosomes, or a combination thereof.

~~19. The composition of claim 18, wherein the wherein the secretome comprises the exosome, and wherein the exosome comprises a chemokine, wherein the chemokine comprises CXCL2 (GRO), MCP-1, Fractalkine, IP-10, MCP-3, Eotaxin, MIP-1β, or any combination thereof.~~

~~20. The composition of claim 18 or 19, wherein the wherein the secretome comprises the exosome, and wherein the exosome comprises an interleukin that comprises IL-6, IL-8, IL-4, IL-1RA, IL-10, IL-12P40, IL-15, IL-1α, IL-17A, or any combination thereof.~~

~~21. The composition of any one of claims 18-20, wherein the wherein the secretome comprises the exosome, and wherein the exosome comprises a growth factor that comprises PDGF-AA, VEGF, bFGF, G-CSF, Flt-3L, GM-CSF, or any combination thereof.~~

~~22. The composition of any one of claims 11-21, wherein the secretome comprises MCP-1 and one, two, three, or all of CXCL2 (GRO), IL-6, IL-8, and VEGF proteins.~~

~~23. The composition of claim 22, wherein the secretome comprises MCP-1 and CXCL2 in a weight ratio of from about 1:1 to about 2:1.~~

~~24. The composition of claim 22, wherein the secretome comprises MCP-1 and CXCL2 in a weight ratio of from about 3:1 to about 4:1.~~

~~25. The composition of claim 22, wherein the secretome comprises MCP-1 and IL-6 in a weight ratio of from about 2:1 to about 3:1.~~

~~26. The composition of claim 22, wherein the secretome comprises MCP-1 and IL-6 in a weight ratio of from about 3:1 to about 4:1.~~

~~27. The composition of claim 22, wherein the secretome comprises MCP-1 and IL-8 in a weight ratio of from about 4:1 to about 6:1.~~

~~28. The composition of claim 22, wherein the secretome comprises MCP-1 and VEGF in a weight ratio of from about 4:1 to about 6:1.~~

~~29. The composition of claim 22, wherein the secretome comprises MCP-1 and VEGF in a weight ratio of from about 7:1 to about 9:1.~~

~~30. The composition of claim 22, wherein the secretome further comprises PDGF-AA, and wherein MCP-1 and PDGF-AA are present in a weight ratio of from about 3:1 to about 5:1.~~

~~31. The composition of claim 22, wherein the secretome further comprises PDGF-AA, and wherein MCP-1 and PDGF-AA are present in a weight ratio of from about 6:1 to about 9:1.~~

~~32. The composition of claim 22, wherein the secretome further comprises PDGF-AA, and wherein MCP-1 and PDGF-AA are present in a weight ratio of from about 30:1 to about 60:1.~~

~~33. The composition of claim 22, wherein the ratio of the MCP-1 and any one of the CXCL2, IL-6, IL-8, and VEGF proteins is in a range of from about 30: 1 to from 60:1.~~

~~34. The composition of claim 22, wherein the secretome comprises MCP-1, CXCL2, IL-6, IL-8, and VEGF proteins.~~

~~35. The composition of any one of claims 11-21, wherein the secretome comprises MCP-1, CXCL2 (GRO), and one, two, three, four or all proteins of IL-8, MCP-3, IL-6, G-CSF, and VEGF.~~

~~36. The composition of claim 35, wherein the secretome comprises MCP-1 and CXCL2 in a weight ratio of from about 2:1 to about 3:1.~~

~~37. The composition of claim 35, wherein the secretome further comprises IL-8, and wherein a ratio of MCP-1 and IL-8 is in a range of from about 10:1 to about 6:1 and/or a ratio of CXCL2 and IL-8 is in a range of from about 3:1 to about 4:1.~~

~~38. The composition of claim 35, wherein the secretome further comprise MCP-3,~~

~~and wherein a ratio of MCP-1 and MCP-3 is in a range of from about 10:1 to about 30:1 and/or a ratio of CXCL2 and MCP-3 is in a range of from about 5:1 to about 15:1.~~

~~39. The composition of claim 35, wherein the secretome further comprises IL-6, and wherein a ratio of MCP-1 and IL-6 is in a range of from about 30:1 to about 50:1 and/or a ratio of CXCL2 and IL-6 is in a range of from about 10:1 to about 20:1.~~

~~40. The composition of claim 35, wherein the secretome further comprises G-CSF, and wherein a ratio of MCP-1 and G-CSF is in a range of from about 30:1 to about 50:1 and/or a ratio of CXCL2 and G-CSF is in a range of from about 10:1 to about 20:1.~~

~~41. The composition of claim 35, wherein the secretome further comprises VEGF, a ratio of MCP-1 and VEGF is in a range of from about 30:1 to about 50:1, and a ratio of CXCL2 and VEGF is in a range of from about 10:1 to about 20:1.~~

~~42.~~15. The composition of any preceding claim, wherein the composition further comprises one or more proteins of IP-10, Eotaxin, Flt-3L, GM-CSF, MIP-1a, MIP-1b, IL-1a, IL-1RA, IL-4, IL-7, IL-10, IL-12P40, IL-13, IL-15, IL-17A, CCL5 (RANTES), MDC, MCP-3, IL-12P70, IFN-alpha, IFN-receptor, PDGF-AB/BB, or EGF.

~~43.~~16. The composition of any one of claims 1-~~42~~15, wherein the composition comprises a hydrophilic active agent.

~~44.~~17. The composition of any one of claims 1-~~43~~16, wherein the composition comprises a vitamin.

~~45.~~18. The composition of any one of claims 1-~~44~~17, wherein the composition comprises a hydrophobic active agent.

~~46.~~19. The composition of any one of claims 1-~~45~~18, wherein the composition comprises a fatty acid molecule.

~~47.~~20. The composition of any one of claims 1-~~46~~19, wherein the composition comprises linoleic acid.

~~48.~~21. The composition of any one of claims 1-~~47~~20, wherein the composition comprises collagen.

~~49.~~22. The composition of any one of claims 1-~~48~~21, wherein the composition comprises hyaluronic acid.

~~50.~~23. The composition of any one of claims 1-~~49~~22, wherein the composition is free from a serum, antibiotic, or a combination thereof.

~~51.~~24. The composition of any one of claims 1-~~50~~23, wherein the composition is free from a steroid, cholesterol, choline chloride, hypoxanthine-sodium salt, thymidine, putrescine dihydrochloride, ferric nitrate, L-glutamine, or any combination thereof.

~~52.~~25. The composition of any one of claims 1-~~51~~24, wherein the composition is free from a color additive.

~~53.~~26. The composition of any one of claims 1-~~52~~25, wherein the composition is a dosage form of a lotion, cream, liquid, gel, emulsion, suspension, paste, stick, aerosol, foam, patch, powder, ointment, bead, mask, pad, sheet, wound dressing, bandage, or any combination thereof.

~~54.~~27. The composition of any one of claims 1-~~53~~26, wherein the pharmaceutically or cosmetically acceptable excipient comprises water, glycerol, a seed oil, a fruit oil, a flower extract, a mineral oil, a synthetic oil, a saccharide, a silicate, a calcium salt, a magnesium salt, sodium chloride, sodium hydroxide, potassium chloride, lactose, lactic acid, a starch, a sugar alcohol, a cellulose, an activated charcoal, an amino acid, a paraffin, honey, a wax, beeswax, an agar, calcium carbonate, a citric acid, tartaric acid, a steric acid, xanthan gum, benzoic acid or salt thereof, a polyethylene glycol, a silicon, or any combination thereof.

~~55.~~28. ~~A method of treating a disease or condition in a subject in need thereof, comprising contacting a~~Use of the composition of any one of claims 1-~~54~~27~~,~~ in the manufacture of a medicament for treating a skin condition in~~with~~ a subject in need thereof.

~~56.~~29. The composition of any one of claims 1-27 for use in treating a skin condition in a subject in need thereof.~~The method of claim 55, wherein the method treats a disease or condition in the subject.~~

~~57. The method of claim 55, wherein the method provides a regenerative medicine.~~

~~58. The method of claim 55, wherein the method treats a stroke, a myocardial infarction, a hindlimb ischemia, a spinal cord injury, a liver failure, or a graft versus host disease (GVHD).~~

~~59. The method of claim 55, wherein the method treats or ameliorates a condition of the subject's skin.~~

~~60. The method of claim 59, wherein the condition is eczema, rash, psoriasis, acne, rosacea, ichthyosis, vitiligo, hive, seborrheic dermatitis, shingles, burn, sunburn, contact dermatitis, wrinkled skin, scarred skin, sagging skin, loss of skin elasticity, skin dryness, skin dullness, or any combination thereof.~~

~~61. The method of any one of claims 55-60, wherein the subject is a human.~~

~~62. Use of a composition of any one of claims 1-54, for the treatment of a subject in need thereof.~~

~~63. Use of a composition of any one of claims 1-54, for the formulation of a medicament for the treatment of a subject in need thereof.~~

64. The use of claim 62 or 63, for treating a disease or condition in the subject.

65. The use of any one of claims 62-64, for regenerative medicine.

66. The use of any one of claims 62-64, for treating a stroke, a myocardial infarction, a hindlimb ischemia, a spinal cord injury, a liver failure, or a graft versus host disease (GVHD).

67. The use of any one of claims 62-64, for treating or ameliorating a condition of the subject's skin.

68. The use of claim 67, wherein the condition is eczema, rash, psoriasis, acne, rosacea, ichthyosis, vitiligo, hive, seborrheic dermatitis, shingles, burn, sunburn, contact dermatitis, wrinkled skin, scarred skin, sagging skin, loss of skin elasticity, skin dryness, skin dullness, or any combination thereof.

69. The use of any one of claims 62-68, wherein the subject is a human.

70. A method of producing one or more proteins of interest from a trophoblastic cell line, the method comprising:

a) culturing human trophoblastic stem cells with a nutritional media until confluency is reached;

b) inducing hypoxia; and

c) isolating the one or more proteins of interest from the media.

71. The method of claim 70, wherein hypoxia is induced for approximately 24 hours in a 2% 0_2 gas mixture.

72. The method of claim 70 or 71, wherein the confluency comprises from about 3,000 cells/cm^2 to about 9,000 cells/cm^2.

73. The method of any one of claims 70-72, wherein the isolated one or more proteins are further mixed with one or more pharmaceutically acceptable excipients.

74. The method of any one of claims 70-73, wherein the one or more proteins comprise CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL15, Pf4, or any combination thereof.

75. The method of any one of claims 70-73, wherein the one or more proteins comprise SPP1, DKK1, SERPINE1, FLT1, FSTL3, MATN3, PAPPA, GDF15, HGF, IGFBP3, or any combination thereof.

76. The method of any one of claims 70-73, wherein the one or more proteins comprise FST, NID1, MET, TGFBI, FSTL1, NID2, CRIM1, PDGFB, or any combination thereof.

77. The method of any one of claims 70-73, wherein the one or more proteins

~~comprise CXCL12, LGALS1, ADAMTSL1, or any combination thereof.~~

~~78. The method of any one of claims 70-73, wherein the one or more proteins comprise FAP, IGFBP3, or a combination thereof.~~

~~79. The method of any one of claims 70-73, wherein the one or more proteins comprise CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, PF4, or a combination thereof.~~

~~80. The method of any one of claims 70-73, wherein the one or more proteins comprise CSF1, GDF15, IFNL1, IFNL2, IL21, IL6, MIF, NAMPT, SPP1, TGFB1, TIMP1, or a combination thereof.~~

~~81. The method of any one of claims 70-73, wherein the one or more proteins comprise CSF1, CXCL12, DKK1, GDF15, HGF, IL6, PDGFB, TGFB1, TIMP1, or a combination thereof.~~

~~82. The method of any one of claims 70-73, wherein the one or more proteins comprise ANG, CSTB, NAP1L4, TLR3, or a combination thereof.~~

~~83. The method of any one of claims 70-73, wherein the one or more proteins comprise ADAMTSL1, DCN, FURIN, LUM, MATN3, MMP1, NID1, NID2, PDGFB, POSTN, PTX3, SERPINE, SPP1, TGFβI, THBS1, TIMP1, TIMP2, CCN1, LUM, MATN3, NID1, NID2, POSTN, or a combination thereof.~~

~~84. The method of any one of claims 70-73, wherein the one or more proteins comprise ANG, B2M, BCL10, CCL13, CCL20, CCL25, CCL28, CCL4, CD99, CLU, CSF1, CXCL1, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, F11R, FAS, IFNL1, IFNL2, IL21, IL6, IL7R, LGALS3, MIF, OSCAR, PF4, PTX3, SERPINE1, SIGLEC9, THBS1, TLR3, TNFRSF21, or a combination thereof.~~

~~85. The method of any one of claims 70-73, wherein the one or more proteins comprise CCL13, CCL13, CCL20, CCL25, CCL4, CCL5, CCL7, CCL8, CSF1, CXCL1, CXCL12, F11R, IGFBP4, IL6, MIF, NUP85, PF4, PTX3, SEMA7A, SPP1, THBS1, TNFRSF1A, or a combination thereof.~~

~~86. The method of any one of claims 70-73, wherein the one or more proteins comprise ANG, CCL13, CCL20, CCL25, CCL26, CCL8, CLU, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, LGALS3, PF4, ANG, B2M, CCL20, KLK3, TLR3, TNFRSF1A, CCL4, IFNL1, IFNL2, IL21, IL6, TLR3, or a combination thereof.~~

~~87. The method of any one of claims 70-73, wherein the one or more proteins comprise ANG, B2M, CCL20, KLK3, TLR3, TNFRSF1A, or any combination thereof.~~

~~88. The method of any one of claims 70-73, wherein the one or more proteins~~

~~comprise CCL4, IFNL1, IFNL2, IL21, IL6, TLR3, or any combination thereof.~~

~~89. The method of any one of claims 70-73, wherein the one or more proteins comprise DCN, POSTN, SDC4, GRN, PAPPA, TIMP1, or a combination thereof.~~

~~90. The method of any one of claims 70-73, wherein the one or more proteins comprise ANGPT1, FLT1, MET, CST3, DKK3, RBP4, BSG, or a combination thereof.~~

~~91. The method of any one of claims 70-73, wherein the one or more proteins comprise ANG, DCN, BIRC2, PDGFB, or a combination thereof.~~

~~92. The method of any one of claims 70-73, wherein the one or more proteins comprise TIMP4, CRIM1, UNC5C, TIMP2, or a combination thereof.~~

~~93. The method of any one of claims 70-73, wherein the one or more proteins comprise DKK1, FST, TGFB1, FLT1, DKK3, CCN1, or a combination thereof.~~

~~94. The method of any one of claims 70-73, wherein the one or more proteins comprise NAP1L4, SPP1, ANGPT1, FST, MET, CTSB, FSTL1, LGALS1, TPP1, OSCAR, CCN1, IGFBP3, TGFB1, B2M, IL7R, CES1, CSF1, or any combination thereof.~~

~~95. The method of any one of claims 70-73, wherein the one or more proteins comprise SPP1, OSCAR, CCN1, IGFBP3, or any combination thereof.~~

~~96. The method of any one of claims 70-73, wherein the one or more proteins comprise CSF1, MET, CCN1, TGFβ1, or LGALS1.~~

~~97. The method of any one of claims 70-73, wherein the one or more proteins comprise B2M, IL7R, or a combination thereof.~~

~~98. The method of any one of claims 70-73, wherein the one or more proteins comprise CTSB, TPP1, CES1, or any combination thereof.~~

~~99. The method of any one of claims 70-73, wherein the one or more proteins comprise SIGLEC9, POSTN, TGFβI, or a combination thereof.~~

~~100. The method of any one of claims 70-73, wherein the one or more proteins comprise OSCAR, B2M, or a combination thereof.~~

~~101. The method of any one of claims 70-73, wherein the one or more proteins comprise LGALS3, LGALS1, or a combination thereof.~~

~~102. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, TGFβ1, CCL5, CCL20, CCL28, CCL4, CXCL5, ANGPTL4, PDGFB, CCL13, CCL8, ANGPTI, CCL25, CXCL11, CCL7, PF4, GDF15, CCL26, SEMA7A, SPP1, CXCL1, or a combination thereof.~~

~~103. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL28, CCL4, CXCL5, CCL13, CCL8, CCL25, CXCL11,~~

~~CCL7, PF4, CCL26, SPP1, CXCL1, or a combination thereof.~~

~~104. The method of any one of claims 70-73, wherein the one or more proteins comprise TGFβI, PDGFB, GDF15, or a combination thereof.~~

~~105. The method of any one of claims 70-73, wherein the one or more proteins comprise SEMA7A.~~

~~106. The method of any one of claims 70-73, wherein the one or more proteins comprise CES1, FAS, MIF, NAMPT, SPP1, or a combination thereof.~~

~~107. The method of any one of claims 70-73, wherein the one or more proteins comprise FAP, LGMN, HGF, CTSB, TPP1, KLK3, FURIN, MMP1, or a combination thereof.~~

~~108. The method of any one of claims 70-73, wherein the one or more proteins comprise IGFBP3, TIMP4, FSTL1, BIRC2, FST, SERPINE1, TIMP1, IGFBP2, FSTL3, IGFBP4, TIMP2, or a combination thereof.~~

~~109. The method of any one of claims 70-73, wherein the one or more proteins comprise BSG, NUP85, or LDLR.~~

~~110. The method of any one of claims 70-73, wherein the one or more proteins comprise ALB, TPP1, LDLR, RBP4, TF, or a combination thereof.~~

~~111. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, TLR3, PLAUR, GP1BA, SDC4, THBD, IL7R, TF, or a combination thereof.~~

~~112. The method of any one of claims 70-73, wherein the one or more proteins comprise SIGLEC9, CD99, TNFRSF21, GP1BA, BSG, POSTN, TGFβI, or a combination thereof.~~

~~113. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, CD99, LGALS3, CXCL5, TNFRSF21, FST, SERPINE1, GP1BA, PDGFB, F11R, CCL13, TIMP1, NID1, CCL8, NUP85, IGFBP6, THBS1, CCL25, IGFBP2, FSTL3, IGFBP4, KLK3, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, TIMP2, SEMA7A, FURIN, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~114. The method of any one of claims 70-73, wherein the one or more proteins comprise TGFβ1, TNFRSF21, PDGFB, or a combination thereof.~~

~~115. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, MMP1, or a combination thereof.~~

~~116. The method of any one of claims 70-73, wherein the one or more proteins~~

~~comprise TNFRSF21, GP1BA, or a combination thereof.~~

~~117. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~118. The method of any one of claims 70-73, wherein the one or more proteins comprise BIRC2, BCL10, LGALS3, TNFRSF21, INFRSF10C, or a combination thereof.~~

~~119. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, MMP1, or a combination thereof.~~

~~120. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, FSTL1, FST, MET, F11R, BSG, FLT1, FSTL3, SEMA7A, or a combination thereof.~~

~~121. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, BSG, SEMA7A, or a combination thereof.~~

~~122. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25, FSTL3, CCL7, GDF15, CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof.~~

~~123. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~124. The method of any one of claims 70-73, wherein the one or more proteins comprise TNFRSF21.~~

~~125. The method of any one of claims 70-73, wherein the one or more proteins comprise TNFRSF21, GP1BA, or a combination thereof.~~

~~126. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~127. The method of any one of claims 70-73, wherein the one or more proteins comprise BIRC2, BCL10, LGALS3, TNFRSF21, INFRSF10C, or a combination thereof.~~

~~128. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, MMP1, or a combination thereof.~~

~~129. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, FSTL1, FST, MET, F11R, BSG, FLT1, FSTL3, SEMA7A, or a combination thereof.~~

~~130. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, BSG, SEMA7A, or a combination thereof.~~

~~131. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25, FSTL3, CCL7, GDF15, CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof.~~

~~132. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~133. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, CD99, LGALS3, CXCL5, MET, PDGFB, CCL13, SDC4, CCL8, CCL25, CXCL11, GPC1, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~134. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, BSG, SEMA7A, or a combination thereof.~~

~~135. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~136. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, FSTL1, PTX3, TNFRSF21, FST, MET, FUR, BSG, THBS1, FLT1, FSTL3, SEMA7A, or a combination thereof.~~

~~137. The method of any one of claims 70-73, wherein the one or more proteins~~

~~comprise THBS1.~~

~~138. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, PTX3, BSG, THBS1, SEMA7A, or a combination thereof.~~

~~139. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, FSTL1, FST, MET, F11R, BSG, FLT1, FSTL3, SEMA7A, or a combination thereof.~~

~~140. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, BCL10, CD99, LGALS3, CXCL5, TNFRSF21, PTX3, CCL13, IFNL1, CCL8, FLT1, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~141. The method of any one of claims 70-73, wherein the one or more proteins comprise IFNL1, SEMA7A, or a combination thereof.~~

~~142. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, BCL10, CXCL5, TNFRSF21, PTX3, CCL13, IFNL1, CCL8, FLT1, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~143. The method of any one of claims 70-73, wherein the one or more proteins comprise FLT1.~~

~~144. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, BCL10, CD99, LGALS3, CXCL5, CCL13, CCL8, CXCL11, CCL7, PF4, CCL26, CXCL1, or a combination thereof.~~

~~145. The method of any one of claims 70-73, wherein the one or more proteins comprise NUP85, GPC1, or a combination thereof.~~

~~146. The method of any one of claims 70-73, wherein the one or more proteins comprise ALB, LGALS3, TNFRSF21, MET, F11R, NUP85, or a combination thereof.~~

~~147. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, CD99, LGALS3, CXCL5, MET, PDGFB, CCL13, SDC4, CCL8, CCL25, CXCL11, GPC1, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~148. The method of any one of claims 70-73, wherein the one or more proteins comprise TNFRSF21, NUP85, GPC1, or a combination thereof.~~

~~149. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, CD99, LGALS3, CXCL5, MET, PDGFB, CCL13, SDC4, CCL8, or a combination thereof.~~

~~150. The method of any one of claims 70-73, wherein the one or more proteins comprise CCL25, CXCL11, GPC1, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~151. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, UNC5C, CCL5, CCL20, CCL4, LGALS3, CXCL5,, CCL13, BSG, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~152. The method of any one of claims 70-73, wherein the one or more proteins comprise TGFβ1, FSTL1, BCL10, FST, NUP85, FSTL3, GDF15, or a combination thereof.~~

~~153. The method of any one of claims 70-73, wherein the one or more proteins comprise TIMP4, LGMN, CED1, TIMP1, CTSB, TIMP2, MMP1, or a combination thereof.~~

~~154. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25, FSTL3, CCL7, GDF15, CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof.~~

~~155. The method of any one of claims 70-73, wherein the one or more proteins comprise FURIN.~~

~~156. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25, FSTL3, CCL7, GDF15, or a combination thereof.~~

~~157. The method of any one of claims 70-73, wherein the one or more proteins comprise CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof.~~

~~158. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, CXCL5, PTX3, CCL13, IFNL1, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, CXCL1, or a combination thereof.~~

~~159. The method of any one of claims 70-73, wherein the one or more proteins comprise GP1BA.~~

~~160. The method of any one of claims 70-73, wherein the one or more proteins comprise TNFRSF21, SEMA7A, or a combination thereof.~~

~~161. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C, FSTL1, TNFRSF21, FST, MET, BSG, THBS1, FLT1, FSTL3, SEMA7A, or a combination thereof.~~

~~162. The method of any one of claims 70-73, wherein the one or more proteins comprise TNFRSF21, FUR, KLK3, or a combination thereof.~~

~~163. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~164. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, CCL5, CCL20, CCL4, BCL10, CXCL5, TNFRSF21, PTX3, CCL13, IFNL1, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof.~~

~~165. The method of any one of claims 70-73, wherein the one or more proteins comprise NID1, DKK1, DKK3, or a combination thereof.~~

~~166. The method of any one of claims 70-73, wherein the one or more proteins comprise XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof.~~

~~167. The method of any one of claims 70-73, wherein the one or more proteins comprise FSTL1, FURIN, MMP1, or a combination thereof.~~

~~168. The method of any one of claims 70-73, wherein the one or more proteins comprise PDGFB, ANGPT1, TF, or a combination thereof.~~

~~169. The method of any one of claims 70-73, wherein the one or more proteins comprise BIRC2, FAS, TNFRSF1A, INFRSF10C, or a combination thereof.~~

~~170. The method of any one of claims 70-73, wherein the one or more proteins comprise CXCL12.~~

~~171. The method of any one of claims 70-73, wherein the one or more proteins comprise UNC5C.~~

~~172. The method of any one of claims 70-73, wherein the one or more proteins comprise SERPINE1, PLAUR, GP1BA, THBD, KLK3, TF, or a combination thereof.~~

~~173. The method of any one of claims 70-73, wherein the one or more proteins comprise BIRC2, SERPINE1, CLU, CXCL1, or a combination thereof.~~

~~174. The method of any one of claims 70-73, wherein the one or more proteins comprise FSTL1.~~

~~175. The method of any one of claims 70-73, wherein the one or more proteins comprise FAS.~~

~~176. The method of any one of claims 70-73, wherein the one or more proteins~~

~~comprise TGFβ1, Macrophage Migration Inhibitory Factor (MIF), Follistatin (FST), insulin (INS), or a combination thereof.~~

~~177. The method of any one of claims 70-73, wherein the one or more proteins comprise IL6, CCL5, CCL20, CCL4, CCL13, CCL8, CCL7, PF4, CCL26, or a combination thereof.~~

~~178. The method of any one of claims 70-73, wherein the one or more proteins comprise insulin (INS).~~

~~179. The method of any one of claims 70-73, wherein the one or more proteins comprise IL6, IL21, or a combination thereof.~~

~~180. The method of any one of claims 70-73, wherein the one or more proteins comprise platelet derived growth factor beta (PDGFβ).~~

~~181. The method of any one of claims 70-73, wherein the one or more proteins comprise SEREPIN1, PLAUR, MMP1, or a combination thereof.~~

~~182. The method of any one of claims 70-73, wherein the one or more proteins comprise β2 microglobulin (B2M).~~

~~183. The method of any one of claims 70-73, wherein the one or more proteins comprise TGFβ1, GDF15, or a combination thereof.~~

~~184. The method of any one of claims 70-73, wherein the one or more proteins comprise toll-like receptor 3 (TLR3).~~

~~185. The method of any one of claims 70-73, wherein the one or more proteins comprise Follistatin Like 1 (FSTL1).~~

~~186. The method of any one of claims 70-73, wherein the one or more proteins comprise IGFBP3, SEREPINE1, FAS, THBS1, or a combination thereof.~~

~~187. The method of any one of claims 70-73, wherein the one or more proteins comprise F11R.~~

~~188. The method of any one of claims 70-187, wherein the one or more proteins comprise cytokine, a growth factor, a membrane-bound signaling molecule, a cell adhesion molecule, a defense protein, an immunity protein, and extracellular matrix protein, an intracellular signal molecule, a metabolite interconversion enzyme, a protein modifying enzyme /protease, a protein-binding modulator / protease inhibitor, a scaffold/adaptor protein, a structural protein, a transfer protein or a carrier protein, a transmembrane signal receptor, or any combination thereof.~~

~~189. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of~~

~~CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL15, PF4, or any combination thereof.~~

~~190. The composition of claim 189, wherein the composition is substantially free from a cell or is free of cells.~~

~~191. The composition of claim 189 or 190, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, or fourteen of CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL15, and PF4.~~

~~192. The composition of claim 189 or 190, wherein the secretome comprises CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL15, and PF4.~~

~~193. The composition of any one of claims 189-192, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~194. A method inducing chemokine activity in a subject, comprising administering to a subject in need thereof a composition of any one of claims 189-193, wherein the composition induces chemokine activity in the subject.~~

~~195. Use of a composition of any one of claims 189-193, for treating a subject in need thereof, wherein the composition induces chemokine activity in the subject.~~

~~196. Use of a composition of any one of claims 189-193, for the manufacture of a medicament for treating a subject in need thereof, wherein the composition induces chemokine activity in the subject.~~

~~197. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of SPP1, DKK1, SERPINE1, FLT1, FSTL3, MATN3, PAPPA, GDF15, HGF, IGFBP3, or any combination thereof.~~

~~198. The composition of claim 197, wherein the composition is substantially free from a cell or is free of cells.~~

~~199. The composition of claim 197 or 198, wherein the secretome comprises one, two, three, four, five, six, seven, eight, or nine of SPP1, DKK1, SERPINE1, FLT1, FSTL3, MATN3, PAPPA, GDF15, HGF, and IGFBP3.~~

200. The composition of claim 197 or 198, wherein the secretome comprises SPP1, DKK1, SERPINE1, FLT1, FSTL3, MATN3, PAPPA, GDF15, HGF, and IGFBP3.

201. The composition of any one of claims 197-200, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

202. The composition of any one of claims 197-201, wherein the secretome exhibits a biased expression in placenta.

203. A method, comprising administering to a subject in need thereof a composition of any one of claims 197-202, wherein the composition induces chemokine activity in the subject.

204. Use of a composition of any one of claims 197-202, for treating a subject in need thereof.

205. Use of a composition of any one of claims 197-202, for the manufacture of a medicament for treating a subject in need thereof.

206. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of FST, NID1, MET, TGFBI, FSTL1, NID2, CRIM1, PDGFB, or any combination thereof.

207. The composition of claim 206, wherein the composition is substantially free from a cell or is free of cells.

208. The composition of claim 206 or 207, wherein the secretome comprises one, two, three, four, five, six, or seven of FST, NID1, MET, TGFBI, FSTL1, NID2, CRIM1, and PDGFB.

209. The composition of claim 206 or 207, wherein the secretome comprises FST, NID1, MET, TGFBI, FSTL1, NID2, CRIM1, and PDGFB.

210. The composition of any one of claims 206-209, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

211. The composition of any one of claims 206-210, wherein the secretome exhibits

~~a broad expression in placenta.~~

~~212. A method, comprising administering to a subject in need thereof a composition of any one of claims 206-211.~~

~~213. Use of a composition of any one of claims 206-211, for treating a subject in need thereof.~~

~~214. Use of a composition of any one of claims 206-211, for the manufacture of a medicament for treating a subject in need thereof.~~

~~215. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of CXCL12, LGALS1, ADAMTSL1, or any combination thereof.~~

~~216. The composition of claim 215, wherein the composition is substantially free from a cell or is free of cells.~~

~~217. The composition of claim 215or 216, wherein the secretome comprises one or two of CXCL12, LGALS1, and ADAMTSL1.~~

~~218. The composition of claim 217, wherein the secretome comprises CXCL12, LGALS1, and ADAMTSL1.~~

~~219. The composition of any one of claims 215-218, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~220. The composition of any one of claims 215-219, wherein the secretome exhibits a broad endometrium expression.~~

~~221. A method, comprising administering to a subject in need thereof a composition of any one of claims 217-220.~~

~~222. Use of a composition of any one of claims 217-220, for treating a subject in need thereof.~~

~~223. Use of a composition of any one of claims 217-220, for the manufacture of a medicament for treating a subject in need thereof.~~

~~224. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of FAP, IGFBP3, or a combination thereof.~~

~~225. The composition of claim 224, wherein the composition is substantially free~~

~~from a cell or is free of cells.~~

~~226. The composition of claim 224 or 225, wherein the secretome comprises FAP or IGFBP3.~~

~~227. The composition of claim 224 or 225, wherein the secretome comprises FAP and IGFBP3.~~

~~228. The composition of any one of claims 224-227, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~229. The composition of any one of claims 224-228, wherein the secretome exhibits a biased endometrium expression.~~

~~230. A method, comprising administering to a subject in need thereof a composition of any one of claims 224-229.~~

~~231. Use of a composition of any one of claims 224-229, for treating a subject in need thereof.~~

~~232. Use of a composition of any one of claims 224-229, for the manufacture of a medicament for treating a subject in need thereof.~~

~~233. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, PF4, or a combination thereof.~~

~~234. The composition of claim 233, wherein the composition is substantially free from a cell or is free of cells.~~

~~235. The composition of claim 233 or 234, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, or fourteen of CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, and PF4.~~

~~236. The composition of claim 235, wherein the secretome comprises CCL13, CCL20, CCL25, CCL26, CCL28, CCL4, CCL5, CCL7, CCL8, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, and PF4.~~

~~237. The composition of any one of claims 233-236, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from~~

about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

238. The composition of any one of claims 233-237, that exhibits chemokine activity.

239. A method, comprising administering to a subject in need thereof a composition of any one of claims 233-238.

240. Use of a composition of any one of claims 233-238, for treating a subject in need thereof that has a disease or condition that is treatable with chemokines.

241. Use of a composition of any one of claims 233-238, for the manufacture of a medicament for treating a subject in need thereof that has a disease or condition that is treatable with chemokines.

242. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of CSF1, GDF15, IFNL1, IFNL2, IL21, IL6, MIF, NAMPT, SPP1, TGFB1, TIMP1, or a combination thereof.

243. The composition of claim 22, wherein the composition is substantially free from a cell or is free of cells.

244. The composition of claim 242 or 243, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, or ten of CSF1, GDF15, IFNL1, IFNL2, IL21, IL6, MIF, NAMPT, SPP1, TGFB1, and TIMP1.

245. The composition of claim 242 or 243, wherein the secretome comprises CSF1, GDF15, IFNL1, IFNL2, IL21, IL6, MIF, NAMPT, SPP1, TGFB1, and TIMP1.

246. The composition of any one of claims 242-245, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

247. The composition of any one of claims 242-246, that exhibits cytokine activity.

248. A method, comprising administering to a subject in need thereof a composition of any one of claims 242-246.

249. Use of a composition of any one of claims 242-246, for treating a subject in

need thereof that has a disease or condition that is treatable with cytokines.

250. Use of a composition of any one of claims 242-246, for the manufacture of a medicament for treating a subject in need thereof that has a disease or condition that is treatable with cytokines.

251. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of CSF1, CXCL12, DKK1, GDF15, HGF, IL6, PDGFB, TGFB1, TIMP1, or a combination thereof.

252. The composition of claim 251, wherein the composition is substantially free from a cell or is free of cells.

253. The composition of claim 251 or 252, wherein the secretome comprises one, two, three, four, five, six, seven, or eight of CSF1, CXCL12, DKK1, GDF15, HGF, IL6, PDGFB, TGFB1, and TIMP1.

254. The composition of claim 251 or 252, wherein the secretome comprises CSF1, CXCL12, DKK1, GDF15, HGF, IL6, PDGFB, TGFB1, and TIMP1.

255. The composition of any one of claims 251-254, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

256. The composition of any one of claims 251-255, that comprises a growth factor secretome.

257. A method, comprising administering to a subject in need thereof a composition of any one of claims 251-256.

258. Use of a composition of any one of claims 251-256, for treating a subject in need thereof that has a disease or condition that is treatable with growth factors.

259. Use of a composition of any one of claims 251-256, for the manufacture of a medicament for treating a subject in need thereof that has a disease or condition that is treatable with growth factors.

260. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of ANG, CSTB, NAP1L4, TLR3, or a combination thereof.

261. The composition of claim 260, wherein the composition is substantially free

from a cell or is free of cells.

262. The composition of claim 260 or 261, wherein the secretome comprises one, two, or three of ANG, CSTB, NAP1L4, and TLR3.

263. The composition of claim 262 or 261, wherein the secretome comprises ANG, CSTB, NAP1L4, and TLR3.

264. The composition of any one of claims 260-263, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

265. The composition of any one of claims 260-264, that induces RNA binding activity.

266. A method of inducing RNA binding activity in a subject in need thereof, comprising administering to the subject a composition of any one of claims 260-265.

267. Use of a composition of any one of claims 260-265, for inducing RNA binding activity in a subject in need thereof.

268. Use of a composition of any one of claims 260-265, for the manufacture of a medicament for inducing RNA binding activity in a subject in need thereof.

269. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of ADAMTSL1, DCN, FURIN, LUM, MATN3, MMP1, NID1, NID2, PDGFB, POSTN, PTX3, SERPINE, SPP1, TGFβI, THBS1, TIMP1, TIMP2, CCN1, LUM, MATN3, NID1, NID2, POSTN, or a combination thereof.

270. The composition of claim 269, wherein the composition is substantially free from a cell or is free of cells.

271. The composition of claim 269 or 270, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, or twenty, of ADAMTSL1, DCN, FURIN, LUM, MATN3, MMP1, NID1, NID2, PDGFB, POSTN, PTX3, SERPINE, SPP1, TGFβI, THBS1, TIMP1, TIMP2, CCN1, LUM, MATN3, and POSTN.

272. The composition of claim 269 or 270, wherein the secretome comprises ADAMTSL1, DCN, FURIN, LUM, MATN3, MMP1, NID1, NID2, PDGFB, POSTN, PTX3, SERPINE, SPP1, TGFβI, THBS1, TIMP1, TIMP2, CCN1, LUM, MATN3, and POSTN.

~~273. The composition of any one of claims 269-272, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~274. The composition of any one of claims 269-273, that induces extracellular matrix organization.~~

~~275. A method of inducing extracellular matrix organization in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 269-274.~~

~~276. Use of a composition of any one of claims 269-274, for inducing extracellular matrix organization in a subject in need thereof.~~

~~277. Use of a composition of any one of claims 269-274, for the manufacture of a medicament for inducing extracellular matrix organization in a subject in need thereof.~~

~~278. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of ANG, B2M, BCL10, CCL13, CCL20, CCL25, CCL28, CCL4, CD99, CLU, CSF1, CXCL1, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, F11R, FAS, IFNL1, IFNL2, IL21, IL6, IL7R, LGALS3, MIF, OSCAR, PF4, PTX3, SERPINE1, SIGLEC9, THBS1, TLR3, TNFRSF21, or a combination thereof.~~

~~279. The composition of claim 278, wherein the composition is substantially free from a cell or is free of cells.~~

~~280. The composition of claim 278 or 279, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, or 33 of ANG, B2M, BCL10, CCL13, CCL20, CCL25, CCL28, CCL4, CD99, CLU, CSF1, CXCL1, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, F11R, FAS, IFNL1, IFNL2, IL21, IL6, IL7R, LGALS3, MIF, OSCAR, PF4, PTX3, SERPINE1, SIGLEC9, THBS1, TLR3, and TNFRSF21.~~

~~281. The composition of claim 280, wherein the secretome comprises ANG, B2M, BCL10, CCL13, CCL20, CCL25, CCL28, CCL4, CD99, CLU, CSF1, CXCL1, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, F11R, FAS, IFNL1, IFNL2, IL21, IL6, IL7R, LGALS3, MIF, OSCAR, PF4, PTX3, SERPINE1, SIGLEC9, THBS1, TLR3, and TNFRSF21.~~

~~282. The composition of any one of claims 278-281, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~283. The composition of any one of claims 268-282, that induces an immune response.~~

~~284. A method of inducing an immune response in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 278-283.~~

~~285. Use of a composition of any one of claims 278-283, for inducing an immune response in a subject in need thereof.~~

~~286. Use of a composition of any one of claims 278-283, for the manufacture of a medicament for inducing an immune response in a subject in need thereof.~~

~~287. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of CCL13, CCL13, CCL20, CCL25, CCL4, CCL5, CCL7, CCL8, CSF1, CXCL1, CXCL12, F11R, IGFBP4, IL6, MIF, NUP85, PF4, PTX3, SEMA7A, SPP1, THBS1, TNFRSF1A, or a combination thereof.~~

~~288. The composition of claim 287, wherein the composition is substantially free from a cell or is free of cells.~~

~~289. The composition of claim 278 or 288, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, or twenty-one, of CCL13, CCL13, CCL20, CCL25, CCL4, CCL5, CCL7, CCL8, CSF1, CXCL1, CXCL12, F11R, IGFBP4, IL6, MIF, NUP85, PF4, PTX3, SEMA7A, SPP1, THBS1, and TNFRSF1A.~~

~~290. The composition of claim 287 or 288, wherein the secretome comprises CCL13, CCL13, CCL20, CCL25, CCL4, CCL5, CCL7, CCL8, CSF1, CXCL1, CXCL12, F11R, IGFBP4, IL6, MIF, NUP85, PF4, PTX3, SEMA7A, SPP1, THBS1, and TNFRSF1A.~~

~~291. The composition of any one of claims 287-290, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to~~

about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

292. The composition of any one of claims 287-291, for use in treating inflammation.

293. A method of treating inflammation in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 287-292.

294. Use of a composition of any one of claims 287-292, for treating inflammation in a subject in need thereof.

295. Use of a composition of any one of claims 287-292, for the manufacture of a medicament for treating inflammation in a subject in need thereof.

296. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of ANG, CCL13, CCL20, CCL25, CCL26, CCL8, CLU, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, LGALS3, PF4, ANG, B2M, CCL20, KLK3, TLR3, TNFRSF1A, CCL4, IFNL1, IFNL2, IL21, IL6, TLR3, or a combination thereof.

297. The composition of claim 296, wherein the composition is substantially free from a cell or is free of cells.

298. The composition of claim 296 or 297, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, 21, 22, 23, 24, or 25 of ANG, CCL13, CCL20, CCL25, CCL26, CCL8, CLU, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, LGALS3, PF4, ANG, B2M, CCL20, KLK3, TLR3, TNFRSF1A, CCL4, IFNL1, IFNL2, IL21, IL6, and TLR3.

299. The composition of claim 296 or 297, wherein the secretome comprises ANG, CCL13, CCL20, CCL25, CCL26, CCL8, CLU, CXCL1, CXCL11, CXCL12, CXCL14, CXCL5, LGALS3, PF4, ANG, B2M, CCL20, KLK3, TLR3, TNFRSF1A, CCL4, IFNL1, IFNL2, IL21, IL6, and TLR3.

300. The composition of any one of claims 296-299, that is anti-microbial.

301. The composition of claim 296 or 297, wherein the secretome comprises one or more of ANG, B2M, CCL20, KLK3, TLR3, TNFRSF1A, or any combination thereof.

302. The composition of claim 296 or 297, wherein the secretome comprises ANG, B2M, CCL20, KLK3, TLR3, and TNFRSF1A.

303. The composition of claim 301 or 302, that is anti-bacterial.

304. The composition of claim 296 or 297, wherein the secretome comprises one or

more of CCL4, IFNL1, IFNL2, IL21, IL6, TLR3, or any combination thereof.

305. The composition of claim 296 or 297, wherein the secretome comprises CCL4, IFNL1, IFNL2, IL21, IL6, and TLR3.

306. The composition of claim 304 or 305, that is anti-viral.

307. The composition of any one of claims 296-306, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

308. The composition of any one of claims 296-307, for use in treating a microbial infection.

309. A method of treating a microbial infection in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 296-308.

310. Use of a composition of any one of claims 296-308, for treating a microbial infection in a subject in need thereof.

311. Use of a composition of any one of claims 296-308, for the manufacture of a medicament for treating a microbial infection in a subject in need thereof.

312. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of DCN, POSTN, SDC4, GRN, PAPPA, TIMP1, or a combination thereof.

313. The composition of claim 312, wherein the composition is substantially free from a cell or is free of cells.

314. The composition of claim 312 or 313, wherein the secretome comprises one, two, three, four, or five of DCN, POSTN, SDC4, GRN, PAPPA, and TIMP1.

315. The composition of claim 312 or 313, wherein the secretome comprises DCN, POSTN, SDC4, GRN, PAPPA, and TIMP1.

316. The composition of any one of claims 312-315, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

317. The composition of any one of claims 312-315, that is useful for wound healing.

318. A method of wound healing in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 312-317.

319. Use of a composition of any one of claims 312-317, for wound healing in a subject in need thereof.

320. Use of a composition of any one of claims 312-317, for the manufacture of a medicament for wound healing in a subject in need thereof.

321. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of ANGPT1, FLT1, MET, CST3, DKK3, RBP4, BSG, or a combination thereof.

322. The composition of claim 321, wherein the composition is substantially free from a cell or is free of cells.

323. The composition of claim 321 or 322, wherein the secretome comprises one, two, three, four, five, or six of ANGPT1, FLT1, MET, CST3, DKK3, RBP4, and BSG.

324. The composition of claim 321or 322, wherein the secretome comprises ANGPT1, FLT1, MET, CST3, DKK3, RBP4, and BSG.

325. The composition of any one of claims 321-324, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

326. The composition of any one of claims 321-325, that is useful for inducing embryonic development.

327. A method of inducing embryonic development in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 321-326.

328. Use of a composition of any one of claims 321-326, for inducing embryonic development in a subject in need thereof.

329. Use of a composition of any one of claims 321-326, for the manufacture of a medicament for inducing embryonic development in a subject in need thereof.

330. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of

~~ANG, DCN, BIRC2, PDGFB, or a combination thereof.~~

~~331. The composition of claim 330, wherein the composition is substantially free from a cell or is free of cells.~~

~~332. The composition of claim 330 or 331, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, or fourteen of ANG, DCN, BIRC2, and PDGFB.~~

~~333. The composition of claim 330 or 331, wherein the secretome comprises ANG, DCN, BIRC2, and PDGFB.~~

~~334. The composition of any one of claims 330-333, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~335. The composition of any one of claims 330-334, that is useful for inducing placental development.~~

~~336. A method of inducing placental development in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 330-335.~~

~~337. Use of a composition of any one of claims 330-335, for inducing placental development in a subject in need thereof.~~

~~338. Use of a composition of any one of claims 330-335, for the manufacture of a medicament for inducing placental development in a subject in need thereof.~~

~~339. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of TIMP4, CRIM1, UNC5C, TIMP2, or a combination thereof.~~

~~340. The composition of claim 339, wherein the composition is substantially free from a cell or is free of cells.~~

~~341. The composition of claim 339 or 340, wherein the secretome comprises one, two, or three of TIMP4, CRIM1, UNC5C, and TIMP2.~~

~~342. The composition of claim 339 or 340, wherein the secretome comprises TIMP4, CRIM1, UNC5C, and TIMP2.~~

~~343. The composition of any one of claims 339-342, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from~~

about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

344. The composition of any one of claims 339-343, that is useful for inducing central nervous system (CNS) development.

345. A method of inducing CNS development in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 339-344.

346. Use of a composition of any one of claims 339-344, for inducing CNS development in a subject in need thereof.

347. Use of a composition of any one of claims 339-344, for the manufacture of a medicament for inducing CNS development in a subject in need thereof.

348. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of DKK1, FST, TGFB1, FLT1, DKK3, CCN1, or a combination thereof.

349. The composition of claim 348, wherein the composition is substantially free from a cell or is free of cells.

350. The composition of claim 348 or 349, wherein the secretome comprises one, two, three, four, or five of DKK1, FST, TGFB1, FLT1, DKK3, and CCN1.

351. The composition of claim 348 or 349, wherein the secretome comprises DKK1, FST, TGFB1, FLT1, DKK3, and CCN1.

352. The composition of any one of claims 348-351, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

353. The composition of any one of claims 348-352, that is useful for inducing morphogenesis.

354. A method of inducing morphogenesis in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 348-353.

355. Use of a composition of any one of claims 348-353, for inducing morphogenesis in a subject in need thereof.

356. Use of a composition of any one of claims 348-353, for the manufacture of a medicament for inducing morphogenesis in a subject in need thereof.

357. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of NAP1L4, SPP1, ANGPT1, FST, MET, CTSB, FSTL1, LGALS1, TPP1, OSCAR, CCN1, IGFBP3, TGFB1, B2M, IL7R, CES1, CSF1, or any combination thereof.

358. The composition of claim 357, wherein the composition is substantially free from a cell or is free of cells.

359. The composition of claim 357 or 358, wherein the secretome comprises one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, or sixteen of NAP1L4, SPP1, ANGPT1, FST, MET, CTSB, FSTL1, LGALS1, TPP1, OSCAR, CCN1, IGFBP3, TGFB1, B2M, IL7R, CES1, and CSF1.

360. The composition of claim 357 or 358, wherein the secretome comprises NAP1L4, SPP1, ANGPT1, FST, MET, CTSB, FSTL1, LGALS1, TPP1, OSCAR, CCN1, IGFBP3, TGFB1, B2M, IL7R, CES1, and CSF1.

361. The composition of any one of claims 357-360, wherein the secretome induces differentiation of a stem cell.

362. The composition of any one of claims 357 or 358, wherein the secretome comprises one or more of SPP1, OSCAR, CCN1, IGFBP3, or any combination thereof.

363. The composition of claim 362, wherein the secretome comprises SPP1, OSCAR, CCN1, and IGFBP3.

364. The composition of claim 362 or 363, that induces differentiation of a stem cell into an osteoblast.

365. The composition of claim 357 or 358, wherein the secretome comprises CSF1.

366. The composition of claim 364, that induces differentiation of a stem cell into an osteoclast or a macrophage.

367. The composition of claim 357 or 358, wherein the secretome comprises B2M, IL7R, or a combination thereof.

368. The composition of claim 357 or 358, wherein the secretome comprises B2M and IL7R.

369. The composition of claim 367 or 368, that induces differentiation of a stem cell into a T cell.

370. The composition of claim 357 or 358, wherein the secretome comprises one or more of CTSB, TPP1, CES1, or any combination thereof.

371. The composition of claim 370, wherein the secretome comprises CTSB, TPP1, and CES1.

372. The composition of claim 370 or 371, that induces differentiation of a stem cell into an epithelial cell.

373. The composition of claim 357 or 358, wherein the secretome comprises MET.

374. The composition of claim 373, that induces differentiation of a stem cell into a neuron.

375. The composition of claim 357 or 358, wherein the secretome comprises CCN1.

376. The composition of claim 375, that induces differentiation of a stem cell into a chondroblast.

377. The composition of claim 357 or 358, wherein the secretome comprises TGFβ1.

378. The composition of claim 377, that induces differentiation of a stem cell into a chondrocyte.

379. The composition of claim 357 or 358, wherein the secretome comprises LGALS1.

380. The composition of claim 379, that induces differentiation of a stem cell into a myoblast.

381. The composition of any one of claims 357-380, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

382. A method of inducing cellular differentiation *in vitro*, *ex vivo*, or *in vivo* in a subject in need thereof, comprising administering a composition of any one of claims 357-381.

383. Use of a composition of any one of claims 357-381, for inducing cellular differentiation *in vitro*, *ex vivo*, or *in vivo* in a subject in need thereof.

384. Use of a composition of any one of claims 357-381, for the manufacture of a medicament for inducing cellular differentiation *in vitro*, *ex vivo*, or *in vivo* in a subject in need thereof.

385. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of SIGLEC9, POSTN, TGFβI, or a combination thereof.

386. The composition of claim 385, wherein the composition is substantially free from a cell or is free of cells.

387. The composition of claim 385 or 386, wherein the secretome comprises one or two of SIGLEC9, POSTN, and TGFβI.

388. The composition of claim 385 or 386, wherein the secretome comprises SIGLEC9, POSTN, and TGFβI.

389. The composition of any one of claims 385-388, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

390. A method of inducing or promoting cell adhesion in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 385-389.

391. Use of a composition of any one of claims 385-389, for inducing or promoting cell adhesion in a subject in need thereof, or for the manufacture of a medicament for inducing or promoting cell adhesion in a subject in need thereof.

392. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of OSCAR, B2M, or a combination thereof.

393. The composition of claim 392, wherein the composition is substantially free from a cell or is free of cells.

394. The composition of claim 392 or 393, wherein the secretome comprises OSCAR or B2M.

395. The composition of claim 392 or 393, wherein the secretome comprises OSCAR and B2M.

396. The composition of any one of claims 392-395, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

397. A method of improving or enhancing immunity in a subject in need thereof,

~~comprising administering to a subject in need thereof a composition of any one of claims 392-396.~~

~~398. Use of a composition of any one of claims 392-396, for improving or enhancing in a subject in need thereof, or for the manufacture of a medicament for improving or enhancing in a subject in need thereof.~~

~~399. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of LGALS3, LGALS1, or a combination thereof.~~

~~400. The composition of claim 399, wherein the composition is substantially free from a cell or is free of cells.~~

~~401. The composition of claim 399 or 400, wherein the secretome comprises LGALS3 or LGALS1.~~

~~402. The composition of claim 399 or 400, wherein the secretome comprises LGALS3 and LGALS1.~~

~~403. The composition of any one of claims 399-402, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~404. A method of inducing or enhancing extracellular matrix in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 399-403.~~

~~405. Use of a composition of any one of claims 399-403, for inducing or enhancing extracellular matrix in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing extracellular matrix in a subject in need thereof.~~

~~406. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of XCL1, TGFβ1, CCL5, CCL20, CCL28, CCL4, CXCL5, ANGPTL4, PDGFB, CCL13, CCL8, ANGPTI, CCL25, CXCL11, CCL7, PF4, GDF15, CCL26, SEMA7A, SPP1, CXCL1, or a combination thereof.~~

~~407. The composition of claim 406, wherein the composition is substantially free from a cell or is free of cells.~~

~~408. The composition of claim 406 or 407, wherein the secretome comprises 1, 2, 3,~~

4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20 of XCL1, TGFβ1, CCL5, CCL20, CCL28, CCL4, CXCL5, ANGPTL4, PDGFB, CCL13, CCL8, ANGPTI, CCL25, CXCL11, CCL7, PF4, GDF15, CCL26, SEMA7A, SPP1, and CXCL1.

409. The composition of claim 406 or 407, wherein the secretome comprises XCL1, TGFβ1, CCL5, CCL20, CCL28, CCL4, CXCL5, ANGPTL4, PDGFB, CCL13, CCL8, ANGPTI, CCL25, CXCL11, CCL7, PF4, GDF15, CCL26, SEMA7A, SPP1, and CXCL1.

410. The composition of claim 406 or 407, wherein the secretome comprises cytokine activity, and the secretome comprises XCL1, CCL5, CCL20, CCL28, CCL4, CXCL5, CCL13, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, SPP1, CXCL1, or a combination thereof.

411. The composition of claim 406 or 407, wherein the secretome comprises cytokine activity, and the secretome comprises XCL1, CCL5, CCL20, CCL28, CCL4, CXCL5, CCL13, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, SPP1, and CXCL1.

412. The composition of claim 406 or 407, wherein the secretome comprises growth factor activity, and the secretome comprises TGFβI, PDGFB, GDF15, or a combination thereof.

413. The composition of claim 406 or 407, wherein the secretome comprises growth factor activity, and the secretome comprises TGFβI, PDGFB, and GDF15.

414. The composition of claim 406 or 407, wherein the secretome comprises signaling molecules, and the secretome comprises SEMA7A.

415. The composition of any one of claims 406-414, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

416. A method of inducing or enhancing intracellular signaling in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 406-415.

417. Use of a composition of any one of claims 406-415, for inducing or enhancing intracellular signaling in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing intracellular signaling in a subject in need thereof.

418. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of

~~CES1, FAS, MIF, NAMPT, SPP1, or a combination thereof.~~

~~419. The composition of claim 418, wherein the composition is substantially free from a cell or is free of cells.~~

~~420. The composition of claim 418 or 419, wherein the secretome comprises one, two, three, or four of CES1, FAS, MIF, NAMPT, and SPP1.~~

~~421. The composition of claim 418 or 419, wherein the secretome comprises CES1, FAS, MIF, NAMPT, and SPP1.~~

~~422. The composition of any one of claims 418-421, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~423. A method of inducing or enhancing the activity of metabolite interconversion enzymes in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 418-422.~~

~~424. Use of a composition of any one of claims 418-422, for inducing or enhancing the activity of metabolite interconversion enzymes in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of metabolite interconversion enzymes in a subject in need thereof.~~

~~425. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of FAP, LGMN, HGF, CTSB, TPP1, KLK3, FURIN, MMP1, or a combination thereof.~~

~~426. The composition of claim 425, wherein the composition is substantially free from a cell or is free of cells.~~

~~427. The composition of claim 425 or 426, wherein the secretome comprises 1, 2, 3, 4, 5, 6, or 7 of FAP, LGMN, HGF, CTSB, TPP1, KLK3, FURIN, and MMP1.~~

~~428. The composition of claim 425 or 426, wherein the secretome comprises FAP, LGMN, HGF, CTSB, TPP1, KLK3, FURIN, MMP1.~~

~~429. The composition of any one of claims 425-428, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about~~

10% by weight, or from about 0.1% to about 5% by weight.

430. A method of inducing or enhancing the activity of protein-modifying enzymes/proteases in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 425-429.

431. Use of a composition of any one of claims 425-429, for inducing or enhancing the activity of protein-modifying enzymes/proteases in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of protein-modifying enzymes/proteases in a subject in need thereof.

432. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of IGFBP3, TIMP4, FSTL1, BIRC2, FST, SERPINE1, TIMP1, IGFBP2, FSTL3, IGFBP4, TIMP2, or a combination thereof.

433. The composition of claim 432, wherein the composition is substantially free from a cell or is free of cells.

434. The composition of claim 432 or 433, wherein the secretome comprises 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 of IGFBP3, TIMP4, FSTL1, BIRC2, FST, SERPINE1, TIMP1, IGFBP2, FSTL3, IGFBP4, and TIMP2.

435. The composition of claim 432 or 433, wherein the secretome comprises IGFBP3, TIMP4, FSTL1, BIRC2, FST, SERPINE1, TIMP1, IGFBP2, FSTL3, IGFBP4, and TIMP2.

436. The composition of any one of claims 432-435, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

437. A method of inducing or enhancing the activity of protein-binding modulators/protease inhibitors in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 432-436.

438. Use of a composition of any one of claims 432-437, for inducing or enhancing the activity of protein-binding modulators/protease inhibitors in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of protein-binding modulators/protease inhibitors in a subject in need thereof.

439. A composition that comprises a) about 0.1% or more w/w of a secretome and b)

~~a pharmaceutically acceptable excipient, wherein the secretome comprises BSG.~~

~~440. The composition of claim 439, wherein the composition is substantially free from a cell or is free of cells.~~

~~441. The composition of claim 439 or 440, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~442. A method of inducing or enhancing the activity of scaffold/adaptor proteins in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 439-441.~~

~~443. Use of a composition of any one of claims 439-441, for inducing or enhancing the activity of scaffold/adaptor proteins in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of scaffold/adaptor proteins in a subject in need thereof.~~

~~444. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises NUP85.~~

~~445. The composition of claim 444, wherein the composition is substantially free from a cell or is free of cells.~~

~~446. The composition of claim 444 or 445, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~447. A method of inducing or enhancing the activity of structural proteins in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 444-446.~~

~~448. Use of a composition of any one of claims 444-446, for inducing or enhancing the activity of structural proteins in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of structural proteins in a subject in need thereof.~~

~~449. A composition that comprises a) about 0.1% or more w/w of a secretome and b)~~

~~a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of ALB, TPP1, LDLR, RBP4, TF, or a combination thereof.~~

~~450. The composition of claim 449, wherein the composition is substantially free from a cell or is free of cells.~~

~~451. The composition of claim 449 or 450, wherein the secretome comprises one, two, three, or four of ALB, TPP1, LDLR, RBP4, and TF.~~

~~452. The composition of any one of claims 449-451, wherein the secretome comprises LDLR.~~

~~453. The composition of claim 449 or 450, wherein the secretome comprises ALB, TPP1, LDLR, RBP4, and TF.~~

~~454. The composition of any one of claims 449-453, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~455. A method of inducing or enhancing the activity of transfer/carrier proteins in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 449-454.~~

~~456. Use of a composition of any one of claims 449-453, for inducing or enhancing the activity of transfer/carrier proteins in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of transfer/carrier proteins in a subject in need thereof.~~

~~457. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of UNC5C, TLR3, PLAUR, GP1BA, SDC4, THBD, IL7R, TF, or a combination thereof.~~

~~458. The composition of claim 457, wherein the composition is substantially free from a cell or is free of cells.~~

~~459. The composition of claim 457 or 458, wherein the secretome comprises one, two, three, four, five, six, or seven of UNC5C, TLR3, PLAUR, GP1BA, SDC4, THBD, IL7R, and TF.~~

~~460. The composition of claim 457 or 458, wherein the secretome comprises UNC5C, TLR3, PLAUR, GP1BA, SDC4, THBD, IL7R, and TF.~~

~~461. The composition of any one of claims 457-460, wherein the secretome is~~

present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

462. A method of inducing or enhancing the activity of transmembrane signal receptors in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 457-461.

463. Use of a composition of any one of claims 457-461, for inducing or enhancing the activity of transmembrane signal receptors in a subject in need thereof, or for the manufacture of a medicament for inducing or enhancing the activity of transmembrane signal receptors in a subject in need thereof.

464. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of SIGLEC9, CD99, TNFRSF21, GP1BA, BSG, POSTN, TGFβI, or a combination thereof.

465. The composition of claim 464, wherein the composition is substantially free from a cell or is free of cells.

466. The composition of claim 464 or 465, wherein the secretome comprises one, two, three, four, five, or six of SIGLEC9, CD99, TNFRSF21, GP1BA, BSG, POSTN, and TGFβI.

467. The composition of claim 464 or 465, wherein the secretome comprises SIGLEC9, CD99, TNFRSF21, GP1BA, BSG, POSTN, and TGFβI.

468. The composition of any one of claims 464-467, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

469. A method of inducing cell adhesion in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 464-468.

470. Use of a composition of any one of claims 464-468, for inducing cell adhesion in a subject in need thereof, or for the manufacture of a medicament for inducing cell adhesion in a subject in need thereof.

471. A composition that comprises a) about 0.1% or more w/w of a secretome and b)

a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of XCL1, IGFBP3, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, CD99, LGALS3, CXCL5, TNFRSF21, FST, SERPINE1, GP1BA, PDGFB, F11R, CCL13, TIMP1, NID1, CCL8, NUP85, IGFBP6, THBS1, CCL25, IGFBP2, FSTL3, IGFBP4, KLK3, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, TIMP2, SEMA7A, FURIN, DKK1, INFRSF10C, CXCL1, or a combination thereof.

472. The composition of claim 471, wherein the composition is substantially free from a cell or is free of cells.

473. The composition of claim 471 or 472, wherein the secretome comprises 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 431, 42, 43, or 44 of XCL1, IGFBP3, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, CD99, LGALS3, CXCL5, TNFRSF21, FST, SERPINE1, GP1BA, PDGFB, F11R, CCL13, TIMP1, NID1, CCL8, NUP85, IGFBP6, THBS1, CCL25, IGFBP2, FSTL3, IGFBP4, KLK3, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, TIMP2, SEMA7A, FURIN, DKK1, INFRSF10C, and CXCL1.

474. The composition of claim 471 or 472, wherein the secretome comprises XCL1, IGFBP3, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, CD99, LGALS3, CXCL5, TNFRSF21, FST, SERPINE1, GP1BA, PDGFB, F11R, CCL13, TIMP1, NID1, CCL8, NUP85, IGFBP6, THBS1, CCL25, IGFBP2, FSTL3, IGFBP4, KLK3, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, TIMP2, SEMA7A, FURIN, DKK1, INFRSF10C, and CXCL1.

475. The composition of any one of claims 471-474, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

476. A method of inducing biological regulation in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 471-475.

477. Use of a composition of any one of claims 471-475, for inducing biological regulation in a subject in need thereof, or for the manufacture of a medicament for inducing biological regulation in a subject in need thereof.

478. A composition that comprises a) about 0.1% or more w/w of a secretome and b)

~~a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of TGFβ1, TNFRSF21, PDGFB, or a combination thereof.~~

~~479. The composition of claim 478, wherein the composition is substantially free from a cell or is free of cells.~~

~~480. The composition of claim 478 or 479, wherein the secretome comprises one or two of TGFβ1, TNFRSF21, and PDGFB.~~

~~481. The composition of claim 478 or 479, wherein the secretome comprises TGFβ1, TNFRSF21, and PDGFB.~~

~~482. The composition of any one of claims 478-481, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~483. A method of inducing cell proliferation in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 478-482.~~

~~484. Use of a composition of any one of claims 478-482, for inducing cell proliferation in a subject in need thereof, or for the manufacture of a medicament for inducing cell proliferation in a subject in need thereof.~~

~~485. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises one or more of UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, MMP1, or a combination thereof.~~

~~486. The composition of claim 485, wherein the composition is substantially free from a cell or is free of cells.~~

~~487. The composition of claim 485 or 486, wherein the secretome comprises one, two, three, four, five, six, or seven of UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, and MMP1.~~

~~488. The composition of claim 485 or 486, wherein the secretome comprises UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, and MMP1.~~

~~489. The composition of any one of claims 485-488, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to~~

about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.

490. A method of inducing cellular organization or biogenesis in a subject in need thereof, comprising administering to a subject in need thereof a composition of any one of claims 485-489.

491. Use of a composition of any one of claims 485-489, for inducing cellular organization or biogenesis in a subject in need thereof, or for the manufacture of a medicament for inducing cellular organization or biogenesis in a subject in need thereof.

492. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. TNFRSF21, GP1BA, or a combination thereof, wherein the secretome induces cell activation;

b. XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof, wherein the secretome induces cellular communication;

c. BIRC2, wherein the secretome induces a cell cycle process or a microtubule-based process;

d. BIRC2, BCL10, LGALS3, TNFRSF21, INFRSF10C, or a combination thereof, wherein the secretome induces cell death;

e. SEMA7A, wherein the secretome induces cell growth;

f. UNC5C, BIRC2, LGALS3, BSG, POSTN, TGFβI, SEMA7A, MMP1, or a combination thereof, wherein the secretome induces Cellular component organization;

g. UNC5C, FSTL1, FST, MET, F11R, BSG, FLT1, FSTL3, SEMA7A, or a combination thereof, wherein the secretome induces a cellular developmental process;

h. UNC5C, FSTL1, FST, MET, F11R, BSG, FLT1, FSTL3, SEMA7A, or a combination thereof, wherein the secretome induces cell differentiation;

i. UNC5C, BSG, SEMA7A, or a combination thereof, wherein the secretome induces morphogenesis;

j. XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25,

FSTL3, CCL7, GDF15, CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof, wherein the secretome induces a cellular metabolic process;

k. XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof, wherein the secretome induces a cellular response to stimulus;

l. TNFRSF21, wherein the secretome induces export from a cell;

m. TNFRSF21, GP1BA, or a combination thereof, wherein the secretome induces cellular activation; or

n. XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof, wherein the secretome induces cellular communication.

493. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. XCL1, CCL5, CCL20, CCL4, CD99, LGALS3, CXCL5, MET, PDGFB, CCL13, SDC4, CCL8, CCL25, CXCL11, GPC1, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof, wherein the secretome induces cell motility;

b. UNC5C, BSG, SEMA7A, or a combination thereof, wherein the secretome induces neuron projection guidance;

c. TNFRSF21, wherein the secretome induces myelination; or

d. XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof, wherein the secretome induces signal transduction.

494. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. UNC5C, FSTL1, PTX3, TNFRSF21, FST, MET, FUR, BSG, THBS1, FLT1, FSTL3, SEMA7A, or a combination thereof, wherein the secretome induces a developmental process;

b. UNC5C, FSTL1, PTX3, TNFRSF21, FST, MET, FUR, BSG, THBS1, FLT1, FSTL3, SEMA7A, or a combination thereof, wherein the secretome induces anatomical structure development;

c. THBS1, wherein the secretome induces anatomical structure formation involved in morphogenesis;

d. UNC5C, PTX3, BSG, THBS1, SEMA7A, or a combination thereof, wherein the secretome induces anatomical structure morphogenesis;

e. UNC5C, FSTL1, FST, MET, F11R, BSG, FLT1, FSTL3, SEMA7A, or a combination thereof, wherein the secretome induces a cellular developmental process; or

f. SEMA7A, or a combination thereof, wherein the secretome induces growth.

495. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. IFNL1, SEMA7A, or a combination thereof, wherein the secretome induces an immune effector process;

b. XCL1, CCL5, CCL20, CCL4, BCL10, CXCL5, TNFRSF21, PTX3, CCL13, IFNL1, CCL8, FLT1, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof, wherein the secretome induces an immune response;

c. FLT1, wherein the secretome induces immune system development;

d. TNFRSF21, wherein the secretome induces leukocyte activation; or

e. XCL1, CCL5, CCL20, CCL4, BCL10, CD99, LGALS3, CXCL5, CCL13, CCL8, CXCL11, CCL7, PF4, CCL26, CXCL1, or a combination thereof, wherein the secretome induces leukocyte migration.

496. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. NUP85, GPC1, or a combination thereof, wherein the secretome induces cellular localization;

b. ALB, LGALS3, TNFRSF21, MET, F11R, NUP85, or a combination thereof, wherein the secretome induces establishment of localization;

c. XCL1, CCL5, CCL20, CCL4, CD99, LGALS3, CXCL5, MET, PDGFB, CCL13, SDC4, CCL8, CCL25, CXCL11, GPC1, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof, wherein the secretome induces localization of cell; or

d. TNFRSF21, NUP85, GPC1, or a combination thereof, wherein the secretome induces macromolecule localization.

e. XCL1, CCL5, CCL20, CCL4, CD99, LGALS3, CXCL5, MET, PDGFB, CCL13, SDC4, CCL8, or a combination thereof, wherein the secretome induces cell motility;

f. CCL25, CXCL11, GPC1, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof; or

g. XCL1, UNC5C, CCL5, CCL20, CCL4, LGALS3, CXCL5 CCL13, BSG, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof, wherein the secretome induces taxis.

497. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. TGFβ1, FSTL1, BCL10, FST, NUP85, FSTL3, GDF15, or a combination thereof, wherein the secretome induces a biosynthetic process;

b. TIMP4, LGMN, CED1, TIMP1, CTSB, TIMP2, MMP1, or a combination thereof, wherein the secretome induces a catabolic process;

c. XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25, FSTL3, CCL7, GDF15, CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof, wherein the secretome induces a cellular metabolic process;

d. FURIN, wherein the secretome induces a hormone metabolic process;

e. XCL1, TGFβ1, CCL5, TIMP4, CCL20, FSTL1, CCL4, BIRC2, BCL10, LGMN, FST, SERPINE1, PDGFB, CCL13, TIMP1, CCL8, CTSB, NUP85, CCL25, FSTL3, CCL7, GDF15, or a combination thereof, wherein the secretome induces a nitrogen compound metabolic process; or

f. CCL26, TIMP2, SEMA7A, FURIN, or a combination thereof.

498. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises XCL1, CCL5, CCL20, CCL4, CXCL5, PTX3, CCL13, IFNL1, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, CXCL1, or a combination thereof.

499. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. GP1BA, wherein the secretome induces coagulation;

b. TNFRSF21, SEMA7A, or a combination thereof, wherein the secretome induces cytokine production;

c. f11R, wherein the secretome induces digestion;

d. UNC5C, FSTL1, TNFRSF21, FST, MET, BSG, THBS1, FLT1, FSTL3, SEMA7A, or a combination thereof, wherein the secretome induces multicellular organism development; or

e. TNFRSF21, FUR, KLK3, or a combination thereof, wherein the secretome induces a system process.

500. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof, wherein the secretome induces a cellular response to stimulus; or

b. XCL1, CCL5, CCL20, CCL4, BCL10, CXCL5, TNFRSF21, PTX3, CCL13, IFNL1, CCL8, CCL25, CXCL11, CCL7, PF4, CCL26, SEMA7A, CXCL1, or a combination thereof, wherein the secretome induces an immune response.

501. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

a. NID1, DKK1, DKK3, or a combination thereof, wherein the secretome induces cell-cell signaling; or

b. XCL1, IGFBP3, TGFβ1, CCL5, CCL20, FSTL1, CCL4, BCL10, LGALS3, CXCL5, FST, PDGFB, CCL13, NID1, CCL8, IGFBP6, CCL25, IGFBP2, FSTL3, IGFBP4, CXCL11, GPC1, CCL7, DKK3, PF4, GDF15, TF, CCL26, SEMA7A, DKK1, INFRSF10C, CXCL1, or a combination thereof, wherein the secretome induces signal transduction.

502. A composition that comprises a) about 0.1% or more w/w of a secretome and b) a pharmaceutically acceptable excipient, wherein the secretome comprises:

c. FURIN, wherein the secretome is for use in treating Alzheimer disease via the amyloid secretase pathway;

d. FSTL1, FURIN, MMP1, or a combination thereof, wherein the secretome is for use in treating Alzheimer disease via the presenilin pathway.

e. PDGFB, ANGPT1, TF, or a combination thereof, wherein the secretome is for use in treating angiogenesis;

f. BIRC2, FAS, TNFRSF1A, INFRSF10C, or a combination thereof, wherein the secretome is for use in inducing or signaling apoptosis;

g. CXCL12, wherein the secretome induces axon guidance mediated by Slit/Robo;

h. UNC5C, wherein the secretome induces axon guidance mediated by netrin;

i. SERPINE1, PLAUR, GP1BA, THBD, KLK3, TF, or a combination thereof, wherein the secretome induces blood coagulation;

j. BIRC2, SERPINE1, CLU, CXCL1, or a combination thereof, wherein the secretome is for CCKR signaling;

k. FSTL1, wherein the secretome induces cadherin signaling;

l. FURIN, wherein the secretome induces the endothelin signaling pathway;

m. FAS, wherein the secretome induces the FAS signaling pathway;

n. TGFβ1, MIF, FST, INS, or a combination thereof, wherein the secretome induces the gonadotropin-releasing hormone receptor pathway;

o. IL6, CCL5, CCL20, CCL4, CCL13, CCL8, CCL7, PF4, CCL26, or a combination thereof, wherein the secretome induces inflammation mediated by a chemokine or a cytokine signaling pathway;

p. insulin (INS), wherein the secretome induces the MAPKK/MAPK cascade;

q. insulin (INS), wherein the secretome induces the PKB signaling cascade;

r. IL6, IL21, or a combination thereof, wherein the secretome induces an interleukin signaling pathway;

s. PDGFB, wherein the secretome induces a PDGF signaling pathway;

t. SEREPIN1, PLAUR, MMP1, or a combination thereof, wherein the secretome induces a plasminogen activating cascade;

u. B2M, wherein the secretome induces T cell activation;

v. TGFβ1, GDF15, or a combination thereof, wherein the secretome induces a TGF-beta signaling pathway;

w. TLR3, wherein the secretome induces a Toll receptor signaling pathway;

x. FSTL1, wherein the secretome induces a Wnt signaling pathway; or

y. IGFBP3, SEREPINE1, FAS, THBS1, or a combination thereof, wherein the secretome induces the p53 pathway.

503. The composition of any one of claims 492-502, wherein the composition is substantially free from a cell or is free of cells.

~~504. The composition of any one of claims 492-503, wherein the secretome is present in the composition in an amount of from about 0.1% to about 75% by weight, from about 0.1% to about 65% by weight, from about 0.1% to about 50% by weight, from about 0.1% to about 40% by weight, from about 0.1% to about 30% by weight, from about 0.1% to about 20% by weight, from about 0.1% to about 15% by weight, from about 0.1% to about 10% by weight, or from about 0.1% to about 5% by weight.~~

~~505. A method, comprising administering to a subject in need thereof a composition of any one of claims 492-504.~~

~~506. Use of a composition of any one of claims 492-504, for treating a subject in need thereof, or for the manufacture of a medicament for treating a subject in need thereof.~~

~~507. Use of a composition of any one of claims 492-504, for use in an *in vitro* culture or assay.~~