

C L A I M S

1. Composition for hair follicle modulation comprising:
a bioactive agent selected from the following list: dipyridamole, dipyridamole salt, rivastigmine, rivastigmine salt, paroxetine, paroxetine salt, ethacrynic acid, ethacrynic salt, midodrine, midodrine salt, topiramate, topiramate salt, entacapone, entacapone salt, or mixtures thereof;
a thickener agent; a preservative; and a denaturing alcohol;
wherein hair follicle modulation is a hair colour modulation and/or a hair volume modulation;
wherein paroxetine, and/or paroxetine salt are not use for a hair volume modulation.
2. Composition according to the previous claim wherein the bioactive agent is selected from the following list: dipyridamole, dipyridamole salt, rivastigmine, rivastigmine salt, ethacrynic acid, ethacrynic salt, midodrine, midodrine salt, topiramate, topiramate salt, entacapone, entacapone salt, or mixtures thereof.
3. Composition according to the previous claim comprising 0.001-50% by weight of the bioactive agent, preferably 0.01-25% by weight of the bioactive agent, more preferably 0.2-8% by weight of the bioactive agent.
4. Composition according to any of the previous claims wherein the thickener agent is selected from a list of: sodium acrylates copolymer and lecithin; aluminum stearates/isostearates/myristates/laurates/palmitates, glycol distearate, hydrogenated castor oil, hydrogenated castor oil hydroxystearate, hydrogenated castor oil isostearate, hydrogenated castor oil stearate, hydrogenated castor PEG-8 esters, PEG-150 distearate, polyethylene glycol, polyacrylic acid/carbomer, carcomer 934, tea-carbomer, carboxymethyl chitin, carboxymethyl chitosan, carboxymethyl dextran, carboxymethyl hydroxypropyl guar, sodium carbomer,

sodium dextran sulfate, sodium polystyrene sulfonate, sodium surfactin, stearalkonium bentonite, stearalkonium hectorite, steareth-30/-40/-50, xanthan gum, vegetable gums, *Ahnfeltia confina* extract, *Euglena gracilis* polysaccharide or mixtures thereof.

5. Composition according to any of the previous claims wherein the preservative agent is selected from a list consisting of: phenoxyethanol and ethylhexylglycerin; butyl paraben, diazolidinyl urea, DMDM hydantoin, ethyl paraben, imidazolidinyl urea, iodopropynyl butylcarbamate, isobutyl paraben, methyl paraben, methylchloroisothiazolinone, methylisothiazolinone, phenoxyethanol, ethylhexylglycerin, propyl paraben, sodium benzoate, Germaben II, Germall Plus, Kathon, potassium sorbate/ sorbic acid, quaternium-15, polyoxymethylene urea, sodium hydroxymethylglycinate, bromopol, glyoxal, isopropylparaben, benzylate, benzoic acid, and benzyl ester, triclosan and triclocarban, benzyl alcohol, benzalkonium chloride, citric acid, dehydroacetic acid, essential oils, grapefruit seed extract, lactic acid, levulinic acid, sodium dehydroacetate, sodium metabisulfite, sodium salicylate, vitamin E, zinc pyrithione, or mixtures thereof.
6. Composition according to any of the previous claims wherein the denaturing alcohol is selected from a list of diethylene glycol monoethyl ether; 1,2,6 hexanetriol, dipropylene glycol, glycerin, hexylene glycol, panthenol, phytantriol, propylene glycol, sodium pyroglutamic acid (PCA), sorbitol, diethylene glycol monoethyl ether, triethylene glycol, polyglyceryl sorbitol, glucose, fructose, polydextrose, potassium PCA, hydrogenated honey, hyaluronic acid, inositol, hexanediol beeswax, hexanetriol beeswax, hydrolyzed elastin, hydrolyzed collagen, hydrolyzed silk, hydrolyzed keratin, erythritol, capryl glycol, isoceteth-(3-10, 20, 30), isolaureth-(3-10, 20, 30), laneth-(5-50), laureth-(1-30), steareth-(4-20), trideceth-(5-50), lithium chloride, glyceryl triacetate, butylene glycol, lactic acid, aloe vera, xylitol, maltitol, castor oil, urea, tripropylene glycol, collagen, pentylene glycol, or mixtures thereof.

7. Composition according to any of the previous claims wherein the hair colour modulation comprises hair darkening or hair lightening.
8. Composition according to any of the previous claims wherein the hair volume modulation comprises hair straightening or hair curling.
9. Composition according to any of the previous claims 1, 3-8 wherein the colour modulation is regulated by dipyridamole, dipyridamole salt, rivastigmine salt, paroxetine, paroxetine salt or mixtures thereof.
10. Composition according to any of the previous claim wherein hair darkening is regulated by dipyridamole or dipyridamole salt.
11. Composition according to any of the previous claims 1, 3-10 wherein hair lightening is regulated by rivastigmine, rivastigmine salt, paroxetine, paroxetine salt or mixtures thereof.
12. Composition according to any of the previous claims wherein the hair volume modulation is regulated by ethacrynic acid, ethacrynic salt, midodrine, midodrine salt, topiramate, topiramate salt, entacapone, entacapone salt, or mixtures thereof.
13. Composition according to any of the previous claims wherein hair straightening is regulated by ethacrynic acid, ethacrynic salt, midodrine, midodrine salt, or mixtures thereof.
14. Composition according to any of the previous claims wherein hair curling is regulated by topiramate, topiramate salt, entacapone, entacapone salt, or mixtures thereof.
15. Composition according to any of the previous claims wherein hair modulation comprises hair darkening and hair straightening.

16. Composition according to any of the previous claims wherein hair modulation comprises hair darkening and hair curling.
17. Composition according to any of the previous claims wherein hair modulation comprises hair lightening and hair straightening.
18. Composition according to any of the previous claims wherein hair modulation comprises hair lightening and hair curling.
19. Composition according to any of the previous claims wherein the bioactive agent is encapsulated or bonded to a controlled release system, in particular a liposome.
20. Composition according to any of the previous claims wherein the composition is a topical composition.
21. Composition according to the previous claim wherein the composition is administered topically to the skin of a mammal, preferably the skin of the human scalp.
22. Composition according to the previous claim wherein the topical composition is a solution, hydroalcoholic solution, dispersion, suspension, tonic, emulsion, lotion, elixir, serum, toner, cleanser, cream, mask, mousse, ointment, gel, wax, oil, foam, soap, shampoo, conditioner, spray, aerosol, powder, paste.
23. Composition according to any of the previous claims further comprising at least one cosmetically and/or pharmaceutically and/or dermatologically acceptable excipient.
24. Composition according to any of the previous claims further comprising at least one of the excipients and/or compounds selected from the following list: surfactants, anionic surfactant, amphoteric surfactant, cationic surfactant, non-ionic surfactant emulsifiers, preservatives, thickeners, natural polymers derivative, organic

polymers, proteins, humectants, cationic polymers, silicones, oils (including organic and natural oils), fragrances, vitamins, emollient esters, alkanolamides, amines, buffers, pH adjustors, salts, antimicrobial agents, antibacterial agents, aliphatic alcohols, UV filters/sunscreens, amine oxides, chelates, fatty acids, PEG-modified materials, polymers, anti-static agents, alcohols, disinfectants agents, or any mixture thereof.

25. Composition according to any of the previous claims for use in medicine, veterinary or cosmetics; in particular for use in the prevention, therapy or treatment of abnormal defective production of melanin.
26. Composition according to any of the previous claims for use as self-tanner agent.
27. Pharmaceutical composition for use in the prevention, therapy or treatment of abnormal defective production of melanin, comprising a bioactive agent selected from the following list: dipyrindamole, dipyrindamole salt, rivastigmine, rivastigmine salt, paroxetine, paroxetine salt, or mixtures thereof.
28. Pharmaceutical composition according to the previous claim for use in the prevention, therapy or treatment of melasma; solar or senile lentigo, freckles due to abnormal excessive production of melanin, post-medicinal hyperpigmentation, post-inflammatory hyperpigmentation, light induced hyperpigmentation and chemical induced hyperpigmentation.
29. Pharmaceutical composition according to any of the previous claims 27-28 further comprising a pharmaceutical acceptable thickener agent; a pharmaceutical acceptable preservative; and a pharmaceutical acceptable denaturing alcohol.
30. Pharmaceutical composition according to any of the previous claims 27-29 wherein the bioactive agent is encapsulated or bonded to a controlled release system, in particular a liposome.

31. Use of a bioactive agent as a hair modulator wherein the bioactive agent is selected from the following list: dipyridamole, dipyridamole salt, rivastigmine, rivastigmine salt, paroxetine, paroxetine salt, ethacrynic acid, ethacrynic salt, midodrine, midodrine salt, topiramate, topiramate salt, entacapone, entacapone salt, or mixtures thereof, wherein the hair modulator is a hair colour modulator and/or a hair volume modulator; wherein paroxetine, and/or paroxetine salt are not use as hair volume modulator.
32. Use of a bioactive agent as a hair modulator wherein the bioactive agent is selected from the following list: dipyridamole, dipyridamole salt, rivastigmine, rivastigmine salt, paroxetine, paroxetine salt, ethacrynic acid, ethacrynic salt, midodrine, midodrine salt, topiramate, topiramate salt, entacapone, entacapone salt, or mixtures thereof.
33. Use of a bioactive agent according to the previous claim wherein the hair modulator is a colour modulator and/or a volume modulator.
34. Use of bioactive agent according to previous claims 31-33 wherein colour modulator is a darkener or lightener of the hair fibre.
35. Use of a bioactive agent according to previous claims 31-34 wherein hair volume modulator is a hair straightener or hair curler.
36. Use of a bioactive agent according to previous claims 31-35 wherein the bioactive agent is encapsulated or bonded to a controlled release system, in particular a liposome.
37. Kit, cosmetic product, or reagent comprising the composition described in any of the previous claims.