**Description**

**A NEUROTROPHIC COMPOSITION**

**Technical Field**

The invention relates to a neurotrophic composition.

**State of the Art**

Neurotrophic is a term related to the nervous system. According to the state of the art, the invention no. WO 1998/033502 with classification "A61K 31/44" entitled "Use of 1-[4-(3-trifluoromethylphenyl)-1,2,3,6-tetrahydropyrid-1-yl]-2-(6,7-dimethoxynapht-2-yl)ethane for preparing medicines with neurotrophic effect" concerns the use of 1-[4-(3-trifluoromethylphenyl)-1,2,3,6-tetrahydropyrid-1yl]-2-(6,7-dimethoxynapht-2-yl) ethane (I) for preparing medicines for the treatment and/or prevention of cerebral and neuronal disorders.

Further, the invention no. WO 1997/001536 entitled "4-aryl-1-phenylalkyl-1,2,3,6-tetrahydropyridines having neurotrophic and neuroprotective activity" relates to compounds of formula (I), wherein Y is -CH- or -N-; R1 is hydrogen, halogen or a CF3 group, (C3-4) alkyl or (C1-4) alkoxyl; R2 is hydrogen, halogen, hydroxyl, or a CF3 group, (C3-4) alkyl or (C1-4) alkoxyl; each of R3 and R4 is hydrogen or (C1-3) alkyl; X is (a) (C3-6) alkyl, (C3-6) alkoxyl, (C3-7) carboxyalkyl, (C1-4)alkoxycarbonyl (C3-6)alkyl, (C3-7) carboxyalkoxyl or (C1-4)alkoxycarbonyl (C3-6)alkoxyl; (b) a radical selected from (C3-7) cycloalkyl, (C3-7) cycloalkyloxy, (C3-7) cycloalkylmethyl, (C3-7) cycloalkylamino and cyclohexenyl, said radical being optionally substituted by halogen, hydroxy, (C1-4) alkoxy, carboxy, (C1-4) alkoxycarbonyl, amino, mono- or di-(C1-4)alkylamino; or (c) a group selected from phenyl, phenoxy, phenylamino, N-(C1-3) alkyl-phenylamino, phenylmethyl, phenylethyl, phenylcarbonyl, phenylthio, phenylsulphonyl, phenylsulphinyl or styryl, said group being optionally mono- or polysubstituted on the phenyl group by halogen, CF3, (C1-4)alkyl, (C1-4)alkoxy, cyano, amino, mono- or di-(C1-4)alkylamino, (C1-4)acylamino, carboxy, (C1-4)alkoxycarbonyl, aminocarbonyl, mono- or di-(C1-4)alkylaminocarbonyl, amino(C1-4)alkyl, hydroxy(C1-4)alkyl or halo(C1-4)alkyl.

Further, the invention no. EP2011497B1 entitled "Phenotropil for the prophylaxis and treatment of hemorrhagic stroke and acute phase of ischemic stroke" relates in particular to pharmacology and to medicinal agents exhibiting a neurotropic and cerebrovascular activity. The novelty of the invention consists in that an N-carbomoyl-methyl-4-phenyl-2-pyrrolidon agent injected into an organism displays an universal pronounced effect in the form of the one hundred percent survival of animals, eliminates the development of a neurological symptom complex of a cerebral stroke of different aetiologies, localizes a cerebral affection area and the destructive development thereof. It is proved that the inventive agent exhibits universal neurotropic (neuromodulator) activity and produces a neuroprotective-cerebrovascular action.

As a result, the presence of the need for a composition for neurotrophic use and the inadequacy of the existing solutions have made it necessary to perform an improvement in the relevant art.

**Object of the Invention**

In order to eliminate the disadvantages of the state of the art, an object of the invention is to enable an increase in the density of muscarinic receptor.

Another object of the invention is to enable the suppression of the enzyme acetylcholinesterase.

Another object of the invention is to enable the regeneration of the dopaminergic neurons via an increase in BDNF.

In order to achieve the aforesaid advantages, the invention is a composition for neurotrophic use, said composition being obtained by the components selected from the group comprising 3-​[(3-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-hexa​methoxy-​2-​(4-​dimethoxyphenyl)-​8-​(3-​dimethyl-​2-​buten-​2-​yl)-​4H-​1-​benzopyren-​4-​one, 4-​[(6-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-​dimethoxy-​2-​(2-​dimethoxyphenyl)-​8-​(3-​trimethyl-​2-​buten-​1-​yl)-​4H-​1-​benzopyren-​4-​one that are used individually or in combinations.

The structural and characteristic features and all the advantages of the invention will become more clearly understood from the detailed description provided below and therefore, the evaluation must be made taking this detailed description into consideration.

**Detailed Description of the Invention**

The invention is a neurotrophic composition. Said invention enables an increase in the density of muscarinic receptor, enables the suppression of the enzyme acetylcholinesterase, and enables the regeneration of the dopaminergic neurons via an increase in BDNF.

The composition according to the invention contains 3-​[(3-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-hexa​methoxy-​2-​(4-​dimethoxyphenyl)-​8-​(3-​dimethyl-​2-​buten-​2-​yl)-​4H-​1-​benzopyren-​4-​one, 4-​[(6-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-​dimethoxy-​2-​(2-​dimethoxyphenyl)-​8-​(3-​trimethyl-​2-​buten-​1-yl)-​4H-​1-​benzopyren-​4-​one.

Said composition is obtained by a mixture of the aforesaid components according to the following ratios by weight:

1-99% 3-​[(3-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-hexa​methoxy-​2-​(4-​dimethoxyphenyl)-​8-​(3-​dimethyl-​2-​buten-​2-yl)-​4H-​1-​benzopyren-​4-​one,

99-1% 4-​[(6-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-​dimethoxy-​2-​(2-​dimethoxyphenyl)-​8-​(3-​trimethyl-​2-​buten-​1-​yl)-​4H-​1-​benzopyren-​4-​one.

The composition is obtained from the aforesaid components selected from the aforesaid group and used according to the mentioned weight ratio ranges individually or in combinations.

Said invention also encompasses the use of said composition for neurotrophic purpose and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for neurotrophic use, said composition being obtained by the components selected from the group comprising 3-​[(3-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-hexa​methoxy-​2-​(4-​dimethoxyphenyl)-​8-​(3-​dimethyl-​2-​buten-​2-​yl)-​4H-​1-​benzopyren-​4-​one, 4-​[(6-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-​dimethoxy-​2-​(2-​dimethoxyphenyl)-​8-​(3-​trimethyl-​2-​buten-​1-​yl)-​4H-​1-​benzopyren-​4-​one that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 1-99% by weight 3-​[(3-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-hexa​methoxy-​2-​(4-​dimethoxyphenyl)-​8-​(3-​dimethyl-​2-​buten-​2-​yl)-​4H-​1-​benzopyren-​4-​one.
3. A composition according to Claim 1 characterized in that it comprises 99-1% by weight 4-​[(6-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-​dimethoxy-​2-​(2-​dimethoxyphenyl)-​8-​(3-​trimethyl-​2-​buten-​1-​yl)-​4H-​1-​benzopyren-​4-​one.
4. Use of the components according to Claims 1 to 3 obtained individually or in combinations selected from the group consisting of 3-​[(3-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-hexa​methoxy-​2-​(4-​dimethoxyphenyl)-​8-​(3-​dimethyl-​2-​buten-​2-​yl)-​4H-​1-​benzopyren-​4-​one, 4-​[(6-​deoxy-​α-​L-​mannopyranosyl)oxy]-​4-​(β-​D-​glucopyranosyloxy)-​6-​dimethoxy-​2-​(2-​dimethoxyphenyl)-​8-​(3-​trimethyl-​2-​buten-​1-​yl)-​4H-​1-​benzopyren-​4-​one for the manufacture of a composition for neurotrophic use.

**ABSTRACT**

**A NEUROTROPHIC COMPOSITION**

The invention relates to a composition formed for neurotrophic use.

No figure.