**Description**

**A COMPOSITION COMPRISING COMPONENTS THAT EXHIBIT ANTI-OBESITY ACTION FORMED FOR SUPPRESSING 5-LIPOOXYGENASE**

**Technical Field**

The invention relates to a composition comprising the components that exhibit anti-obesity action formed for suppressing 5-lipooxygenase.

**State of the Art**

Lipooxygenases are the components for the formation of leukotrienes. Cyclooxygenase forms the prostaglandins (available in many cells) by a process that may be inhibited by the non-steroidal anti-inflammatory agents. Prostacyclin is generated by the capillary endothelium and vascular wall and thromboxane is generated by the thrombocytes.

According to the state of the art, the invention no. WO 01/42195 A1 entitled "Process for the preparation of arylethanolamine derivatives with anti-obesity and anti-diabetic properties” relates to a method for the preparation of certain biaryl derivatives.

Further, the invention no. TR2000/02529 with the classification "A61K 37/48" entitled "Process for making 5-lipooxygenase inhibitors having varied ring systems" describes a novel process intermediate, tetrahydro-4-[3-(4 fluorophenyl)thio]phenyl-2H-pyran-4-carboxamide, of the formula, as well as its use in a process of preparing 5-lipooxygenase inhibitors of the formula, which comprises establishing a reaction mixture consisting of: CONH2 and an electron deficient monocyclic or benzo-fused bicyclic N-heterocycle containing two nitrogen atoms of the formula in an aprotic solvent; in the presence of a carbonate of the formula: (M)2-CO3 where M is an alkali metal, Group 1/la element, selected from the group consisting of lithium, Li; sodium, Na; potassium, K; rubidium, Rb; and cesium, Cs; followed by heating of said reaction mixture under a nitrogen atmosphere, whereby there is produced the desired compound of the above-recited formula.

Further, the invention no. EP1497294B1 entitled "1,2,3,4,7,8-hexahydro-6H-[1,4]diazepino[6,7,1-IJ]quinoline derivatives as antipsychotic and anti-obesity agents" provides compounds of formula I or a pharmaceutically acceptable salt thereof where R1 through R7 are as defined herein. The compounds of formula I are 5HT2c agonists or partial agonists, and are useful for treating a variety of disorders.

As a result, the presence of the need for a composition for suppressing 5-lipooxygenase 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 the suppression of 5-lipooxygenase.

Another object of the invention is to provide an increase in the expression of thermogenin.

In order to achieve the aforesaid advantages, the invention is a composition for suppressing 5-lipooxygenase, said composition being obtained by the components selected from the group comprising (4E)-​1-​(2,​2-​methoxyphenyl)-​3-​(3,​4-​trihydroxyphenyl)-​4-​propen-​2-​one, (2E)-​1-​(2,​3-​epoxyphenyl)-​6-​(2,2-​dihydroxyphenyl)-​6-​propen-​2-​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 composition comprising the components that exhibit anti-obesity action formed for suppressing 5-lipooxygenase. The composition according to the invention enables the suppression of 5-lipooxygenase and an increase in the expression of thermogenin.

The composition according to the invention contains (4E)-​1-​(2,​2-​metoxyphenyl)-​3-​(3,​4-​trihydroxyphenyl)-​4-​propen-​2-​one, (2E)-​1-​(2,​3-​epoxyphenyl)-​6-​(2,2-​dihydroxyphenyl)-​6-​propen-​2-​one.

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

1-99% (4E)-​1-​(2,​2-​metoxyphenyl)-​3-​(3,​4-​trihydroxyphenyl)-​4-​propen-​2-​one,

99-1% (2E)-​1-​(2,​3-​epoxyphenyl)-​6-​(2,2-​dihydroxyphenyl)-​6-​propen-​2-​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 suppressing 5-lipooxygenase and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for suppressing 5-lipooxygenase, said composition being obtained by the components selected from the group comprising (4E)-​1-​(2,​2-​methoxyphenyl)-​3-​(3,​4-​trihydroxyphenyl)-​4-​propen-​2-​one, (2E)-​1-​(2,​3-​epoxyphenyl)-​6-​(2,2-​dihydroxyphenyl)-​6-​propen-​2-​one that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 1-99% by weight (4E)-​1-​(2,​2-​metoxyphenyl)-​3-​(3,​4-​trihydroxyphenyl)-​4-​propen-​2-​one.
3. A composition according to Claim 1 characterized in that it comprises 99-1% by weight (2E)-​1-​(2,​3-​epoxyphenyl)-​6-​(2,2-​dihydroxyphenyl)-​6-​propen-​2-​one.
4. Use of the components according to Claims 1 to 3 obtained individually or in combinations selected from the group consisting of (4E)-​1-​(2,​2-​metoxyphenyl)-​3-​(3,​4-​trihydroxyphenyl)-​4-​propen-​2-​one, (2E)-​1-​(2,​3-​epoxyphenyl)-​6-​(2,2-​dihydroxyphenyl)-​6-​propen-​2-​one for the manufacture of a composition for suppressing 5-lipooxygenase.

**ABSTRACT**

**A COMPOSITION COMPRISING COMPONENTS THAT EXHIBIT ANTI-OBESITY ACTION FORMED FOR SUPPRESSING 5-LIPOOXYGENASE**

The invention relates to a composition comprising the components that exhibit anti-obesity action formed for suppressing 5-lipooxygenase.

No figure.