**Description**

**A COMPOSITION COMPRISING ANTI-CARCINOGENIC GIPENOLIN DERIVATIVES THAT EXHIBIT THE CHARACTERISTIC OF SUPPRESSING ERK**

**Technical Field**

The invention relates to a composition comprising anti-carcinogenic gipenolin derivatives formed for suppressing ERK.

**State of the Art**

Today, the anti-carcinogenic components are available that prevent the cancer development or prevent the tumor growth.

According to the state of the art, the invention no. EP1881826B1 with classification "A61K 31/404" entitled "Use of a benzoyl derivative of 3-aminocarbazole for the treatment of a disorder associated with the production of prostaglandin E2 (PGE2)" relates to the use of a benzoyl derivative of 3-aminocarbazole for the production of a medicament for prevention or therapeutic treatment of a disorder selected from the group comprising inflammatory processes, pain, fever, tumors, Alzheimer’s disease and atherosclerosis, and to a method for prevention or therapeutic treatment of a disorder selected from the group comprising inflammatory processes, pain, fever, tumors, Alzheimer’s disease and atherosclerosis, wherein a therapeutically effective amount of a benzoyl derivative of 3-aminocarbazole according to the invention is administered to an individual.

Further, the invention no. EP2282994B1 entitled "3-aminocarbazole compound, pharmaceutical composition containing it and preparation method therefor" relates to novel 3-aminocarbazole compounds, to a pharmaceutical composition containing them, to a method for preparing them, and to the use of such compounds for the production of a drug that is useful in the treatment of disturbances associated with the production of prostaglandin E2 (PGE2), for instance inflammatory processes, pain, fever, tumors, Alzheimer's disease and atherosclerosis. More particularly, the present invention relates to novel benzoyl derivatives of 3-aminocarbazole that are useful for treating or preventing disturbances associated with the production of prostaglandin E2 (PGE2), for instance inflammatory processes, pain, fever, tumors, Alzheimer's disease and atherosclerosis.

Further, the invention no. EP1443942B1 entitled "Pharmaceutical composition for use for the treatment of malignancies comprising in combination a bisphosphonate, a cox-2 inhibitor and a taxol" relates to a pharmaceutical composition for treatment of prostate cancer, multiple myeloma (MM), tumor induced hypertension (TIH), bone metastases (BM) associated with breast cancer, lung cancer, colon cancer or prostate cancer which comprises in combination a bisphosphonate, a COX-2 inhibitor and a taxol or derivative thereof.

Further, the invention no. EP1443967B1 entitled "Cyclooxygenase-2 inhibitor/histone deacetylase inhibitor combination" relates to a combination which comprises (a) a cyclooxygenase-2 inhibitor (“COX-2 inhibitor”) and (b) a histone deacetylase inhibitor (“HDAI”) for simultaneous, concurrent, separate or sequential use, especially for use in the treatment of pre-malignant colon lesions or a colon cancer or other malignancies in a mammal, particularly a human.

As a result, the presence of the need for a composition for suppressing ERK 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 ERK.

Another object of the invention is to enable the suppression of phosphoinositide-3 kinase.

Another object of the invention is to enable the suppression of PGE-2.

Another object of the invention is to enable the suppression of COx-2.

In order to achieve the aforesaid advantages, the invention is a composition for suppressing ERK, said composition being obtained by the components selected from the group comprising (4Z)-​N-​(2-​fluorophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin, (3Z)-​N-​(2-​aminophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin 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 anti-carcinogenic gipenolin derivatives formed for suppressing ERK. Said invention enables the suppression of ERK, the suppression of phosphoinositide-3 kinase, the suppression of PGE-2 and the suppression of COx-2.

The composition according to the invention contains (4Z)-​N-​(2-​fluorophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin, (3Z)-​N-​(2-​aminophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin.

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

99-1% (4Z)-​N-​(2-​fluorophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin,

1-99% (3Z)-​N-​(2-​aminophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin.

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 ERK and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for suppressing ERK, said composition being obtained by the components selected from the group comprising (4Z)-​N-​(2-​fluorophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin, (3Z)-​N-​(2-​aminophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 99-1% by weight (4Z)-​N-​(2-​fluorophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin.
3. A composition according to Claim 1 characterized in that it comprises 1-99% by weight (3Z)-​N-​(2-​aminophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin.
4. Use of the components according to Claims 1 to 3 obtained individually or in combinations selected from the group consisting of (4Z)-​N-​(2-​fluorophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin, (3Z)-​N-​(2-​aminophenyl)-​3-​[[3,​5-​dimethyl-​4-​[(4-​methyl-​1-​pyranosyl)carbonyl]-​2H-​dicoumaroyl]methylene]-​2,​3-​dihydro-​N-​methyl-​4-​oxo-​2H-gipenolin for the manufacture of a composition for suppressing ERK.

**ABSTRACT**

**A COMPOSITION COMPRISING ANTI-CARCINOGENIC GIPENOLIN DERIVATIVES THAT EXHIBIT THE CHARACTERISTIC OF SUPPRESSING ERK**

The invention relates to a composition comprising anti-carcinogenic gipenolin derivatives formed for suppressing ERK.

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