**Description**

**A FORMULATION DISPLAYING AN ANTI-CARCINOGENIC EFFECT BY SUPPRESSING TYROSİNASE, (TRP-1) AND MITF PROTEINS’ EXPRESSION AND FUNCTION**

**Field of Invention**

The present invention herewith discloses a formulation developed to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function.

**Background of the Related Technology**

At present it is known that melanosome is an organelle that prevalently contains the light absorbing pigment melanine. Cells producing melanosome are called melanocytes. The phase before pigments occupy the cell is called the pre-melanosome phase. The amino acid that plays a role in melanine production is tyrosine and the related enzyme is tyrosinase. Deficiency of this enzyme and other enzymes that play a role in production of melanine lead to a disease called albinism. On the other hand MITF is microphthalmia associated transcription factor.

In state of art technology, invention no “EP1748767B1", with title “1-(3-methyl-2,4-dimethoxyphenyl)-3-(2',4'-dihydroxyphenyl)-propane as a potent tyrosinase inhibitor” and under classification number “A61K 31/015" discloses 1-(3-methyl-2,4-dimethoxyphenyl)-3-(2',4'-dihydroxyphenyl)-propane compound. The referred compound inhibits the enzyme activity of an enzyme, referred herein as binuclear enzyme, and has a binuclear active zone and the referred compound can be administered to a host that needs it, at an effective quantity. The compound referred herein can be synthesized and/or isolated from one or more plants. Regarding binuclear enzymes, following can be given as an example, but are not limited to these; tyrosinase, arginase, ureasae, cytochrome c oxidase, proton pumping heme-copper oxidase, bifunctional carbon monoxide dehydrogenase/acetyl-coenzyme A synthase, ribonucleotide reductase, metalo-beta-lactamase, H(+)-ATPase and alternative oxidase, and bacterial phosphotriesterase

Again invention no “EP1986622B1", with title “Small-molecule modulators of trp-p8 activity" and under classification number “A61K 31/12" discloses small-molecule modulators of Trp-p8 activity, which include Trp-p8 agonists and Trp-p8 antagonists, as well as compositions comprising small-molecule Trp-p8 agonists, also provided are methods for identifying and characterizing novel small-molecule Trp-p8 modulators, methods to reduce activity and/or to inhibit growth of Trp-p8 synthesizing cells, methods to activate Trp-p8 mediated cation flow, methods to enhance apoptosis and/or necrosis and methods for treatment of cancer diseases such as lung, breast, colon, and/or prostate cancers as well as other disease like benign prostate enlargement related to Trp-p8 expression.

To conclude it has become inevitable to proceed with a development in the area of the related technology, considering the inadequacy of the existing solutions and the need for a formulation intended to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function.

**Objective of the Invention**

To overcome the disadvantages experienced in state of art technology;

* One objective of the invention is to suppress tyrosinase level.
* One other objective of the invention is to suppress TRP-1 expression.
* One other objective of the invention is to reduce MITF protein function.

The present invention, which is aimed to achieve the above-mentioned advantages, is intended to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function, and is a formulation that is obtained by combination of the compositions selected in a single form or in combinations from a group containing; 3,5-bis(3-methoxyethyl)-6-0-(3-methyl-2-butene-1-yl)-4H-1-benzopyrane-4-one, 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol.

Structural and characteristic properties as well as all the advantages of the invention presented herewith will be clearly understood with the detailed description provided below and thus the evaluation regarding the present invention should be based on the detailed description presented herewith.

**Detailed Description of the Invention**

The present invention herewith discloses a formulation developed to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function. Referred formulation suppresses tyrosinase level, suppresses TRP-1 expression and reduces MITF protein function.

The formulation of the invention presented herewith contains; 3,5-bis(3-methoxyethyl)-6-0-(3-methyl-2-butene-1-yl)-4H-1-benzopyrane-4-one, 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol .

The referred formulation is formed by mixing the above-mentioned components at below percentages by weight;

* 1-99% of 3,5-bis(3-methoxyethyl)-6-0-(3-methyl-2-butene-1-yl)-4H-1-benzopyrane-4-one,
* 99-1% of 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol.

Components given above are obtained by combining the components from the above-mentioned group at the given range of weight ratios in a single form or in combinations thereof.

The present invention at the same time discloses using the above-referred formulation to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function, and manufacturing it for such purpose.

**CLAIMS**

1. A formulation intended to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function, and which consists of combining the components selected from the group; 3,5-bis(3-methoxyethyl)-6-0-(3-methyl-2-butene-1-yl)-4H-1-benzopyrane-4-one, 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol in a single form or in combinations thereof.
2. The formulation of Claim 1 which is characterized by containing 1-99% of 3,5-bis(3-methoxyethyl)-6-0-(3-methyl-2-butene-1-yl)-4H-1-benzopyrane-4-one by weight.
3. The formulation of Claim 1 which is characterized by containing 99-1% of 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol by weight.
4. Using the compositions obtained by selecting singly or in combination of components from the group of; 3,5-bis(3-methoxyethyl)-6-0-(3-methyl-2-butene-1-yl)-4H-1-benzopyrane-4-one, 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol from any one as given in Claims 2-3 in manufacturing the formulation intended to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function.

**SUMMARY**

**A FORMULATION DISPLAYING AN ANTI-CARCINOGENIC EFFECT BY SUPPRESSING TYROSİNASE, (TRP-1) AND MITF PROTEINS’ EXPRESSION AND FUNCTION**

The present invention herewith discloses a formulation developed to display an anti-carcinogenic effect by suppressing tyrosinase, (TRP-1) and MITF proteins’ expression and function. Referred formulation suppresses tyrosinase level, suppresses TRP-1 expression and reduces MITF protein function

There are no illustrations.