**Description**

**A COMPOSITION FOR TREATING HEART ASTHENIA**

**Technical Field**

The invention relates to a composition formed for treating the heart asthenia.

**State of the Art**

Asthenia is the fatigue that is not eliminated by resting. Asthenic individuals have a general lack of energy. These individuals describe themselves as wearied, tired and weak.

According to the state of the art, the invention no. WO 1998/046645 with classification “C07K 16/00” entitled “Method for the production of antihuman antigen receptors and uses thereof” describes a method for the production of an anti-human antigen receptor that is low or not immunogenic in humans comprising the steps of selecting a combination of functionally rearranged VH and VL immunoglobulin chains wherein at least said VH chain is derived from essentially unprimed mature human B-lymphocytes or from essentially anergic human B cells and said VL chain is derived from a naturally occurring human B cell repertoire. Furthermore, receptors that are low or not immunogenic in humans and directed to human antigens are provided, said receptors being obtainable by the method of the invention. Said receptors are preferably antibodies or fragments thereof or immunoconjugates comprising the VH/VL chains of said antibody.

Further, the invention no. WO 2001/006873 entitled “Composition for the prevention of muscle fatigue and skeletal muscle adaptation to strenuous exercise” discloses a composition suitable for the prevention and/or treatment of muscular energetic deficiencies and states of asthenia for enhancing sport performances and for the treatment of states of heart fatigue, that may take the form of a dietary supplement, dietetic support or of an actual medicine, which comprises as characterizing active ingredients a combination of L-carnitine and/or at least one alkanoyl L-carnitine and creatinol-phosphate.

Further, the invention no. EP1358159B1 entitled “3,4-diaminopyridine tartrate and phosphate, pharmaceutical compositions and uses thereof” relates to 3,4-diaminopyridine salts, pharmaceutical compositions containing at least one of said salts and uses thereof for the treatment of botulism, myasthenia, myasthenic syndromes or fatigue.

As a result, the presence of the need for a composition for treating the heart asthenia 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 increase the expression of igf-1 and igf-2 in the muscles.

Another object of the invention is to increase the androgen receptor density.

Another object of the invention is to support the contraction ability of the cardiac muscle.

Another object of the invention is to support the satellite muscle cell expression and stimulate the protein synthesis.

Another object of the invention is to increase the CYP17A1 expression and support the natural adrenal androgen production.

Another object of the invention is to enable the functions of the adrenal androgens to exhibit rapid action with the partial anti-glucocorticoid effect.

Another object of the invention is to suppress the pro-asthenic cytokines such as tnf-alpha and cox-2.

Another object of the invention is to increase the insulin sensitivity and establish an efficient sugar metabolism.

In order to achieve the aforesaid advantages, the invention is a composition for the treatment of the heart asthenia, said composition being obtained by the components selected from the group comprising 3,7-bis(3-trihydroxymethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-dihydroxyl hecogenin, 3,7-bis(2-hydroxyethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-oxo-difluoro-(16,20)-dioscin 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 for treating the heart asthenia. Said composition increases the expression of igf-1 and igf-2 in the muscles, increases the androgen receptor density, supports the contraction ability of the cardiac muscle, supports the satellite muscle cell expression and stimulates the protein synthesis, increases the CYP17A1 expression and supports the natural adrenal androgen production, enables the functions of the adrenal androgens to exhibit rapid action with the partial anti-glucocorticoid effect, suppresses the pro-asthenic cytokines such as tnf-alpha and cox-2, increases the insulin sensitivity and establishes an efficient sugar metabolism.

The composition according to the invention contains 3,7-bis(3-trihydroxymethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-dihydroxyl hecogenin, 3,7-bis(2-hydroxethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-oxo-difluoro-(16,20)-dioscin.

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

22-10% 3,7-bis(3-trihydroxymethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one,

38-26% 6-dihydroxyl hecogenin,

15-24% 3,7-bis(2-hydroxyethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one,

25-40% 6-oxo-difluoro-(16,20)-dioscin

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 treating the heart asthenia and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for the treatment of the heart asthenia, said composition being obtained by the components selected from the group comprising 3,7-bis(3-trihydroxymethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-dihydroxyl hecogenin, 3,7-bis(2-hydroxyethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-oxo-difluoro-(16,20)-dioscin that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 22-10% by weight 3,7-bis(3-trihydroxymethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one.
3. A composition according to Claim 1 characterized in that it comprises 38-26% by weight 6-dihydroxyl hecogenin.
4. A composition according to Claim 1 characterized in that it comprises 15-24% by weight 3,7-bis(2-hydroxyethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one.
5. A composition according to Claim 1 characterized in that it comprises 25-40% by weight 6-oxo-difluoro-(16,20)-dioscin.
6. Use of the components according to Claims 1 to 5 obtained individually or in combinations from the group consisting of 3,7-bis(3-trihydroxymethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-dihydroxyl hecogenin, 3,7-bis(2-hydroxyethyl)-3,5-trihydroxy-2-(4-epoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyren-4-one, 6-oxo-difluoro-(16,20)-dioscin **for the manufacture of a composition for treating the heart asthenia**.

**ABSTRACT**

**A COMPOSITION FOR TREATING HEART ASTHENIA**

The invention relates to a composition formed for treating the heart asthenia.

No figure.