**Description**

**A COMPOSITION COMPRISING SYNTHETIC METHYLPROTOBIOCIDE DERIVATIVES THAT EXHIBIT ANTI-VIRAL ACTION**

**Technical Field**

The invention relates to a composition comprising synthetic methylprotobiocide derivatives formed for exhibiting anti-viral action.

**State of the Art**

Anti-virals are the pharmacological agents used against the virus infections. They are employed for the purpose of controlling or eliminating the viral infections.

According to the state of the art, the invention no. EP2155758B1 with classification “C07D 519/00” entitled “Tetrahydrofuro[3,4-d]dioxolane compounds for use in the treatment of viral infections and cancer” provides compounds of formula 1, as described herein, or pharmaceutically acceptable salts thereof, as well as pharmaceutical compositions comprising the compounds, and synthetic methods and intermediates that are useful for preparing the compounds. The compounds of formula 1 are useful as anti-viral agents and/or as anti-cancer agents.

Further, the invention no. EP1274713B1 entitled "Anti-viral pyrimidine nucleoside analogues" pertains to a compound having the formula (I) wherein Ar is an, optionally substituted, aromatic ring system, the aromatic ring system comprising one six-membered aromatic ring or two fused six-membered aromatic rings; R8 and R9 are each selected from hydrogen, alkyl, cycloalkyl, halogens, amino, alkylamino, nitro, cyano, alkyloxy, aryloxy, thiol, alkylthiol, arylthiol and aryl; Q is selected from O, S and CY2; X is selected from O, NH, S, N-alkyl, (CH2)m and CY2; Z is selected from O, NH, S, N-alkyl; U'' is H and U' is selected from H and CH2T, or U' and U'' are joined so as to form a ring moiety including Q selected from (a) and (b); wherein the other variables are as described the specification, with the proviso that when T is OAc and T' and T'' are present and are H, Ar is not 4-(2-benzoxazolyl)phenyl. These compounds exhibit anti-viral activity against the varicella zoster virus for instance.

As a result, the presence of the need for a composition for exhibiting anti-viral action 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 RNA replicase.

Another object of the invention is to enable the suppression of RNA polymerase.

Another object of the invention is to enable the suppression of integrase.

In order to achieve the aforesaid advantages, the invention is a composition for exhibiting anti-viral action, said composition being obtained by the components selected from the group comprising 4-​[4-​[[2-​(4-chloromethyl)-​5,​5-​dimethyl-​1-cyclopentadien-​1-yl]dimethyl]-​1-​piperazinyl]-​N-​[[4-​[[(1R)-​3-​(4-​morpholinyl)-​methylprotobiocide, 4-​[4-​[[2-​(4-​dichlorophenyl)-​4,​5-​dimethyl-​1-cyclohexen-​1-yl]methyl]-​1-coumaroyl]-​N-​[[4-​[[(1R)-​3-​(4-​dimorpholinyl)-​methylprotobiocide 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 synthetic methylprotobiocide derivatives formed for exhibiting anti-viral action. Said invention enables the suppression of RNA replicase, the suppression of RNA polymerase and the suppression of integrase.

The composition according to the invention contains 4-​[4-​[[2-​(4-chloromethyl)-​5,​5-​dimethyl-​1-cyclopentadien-​1-yl]dimethyl]-​1-​piperazinyl]-​N-​[[4-​[[(1R)-​3-​(4-​morpholinyl)-​methylprotobiocide, 4-​[4-​[[2-​(4-​dichlorophenyl)-​4,​5-​dimethyl-​1-cyclohexen-​1-yl]methyl]-​1-coumaroyl]-​N-​[[4-​[[(1R)-​3-​(4-​dimorpholinyl)-​methylprotobiocide.

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

1-99% 4-​[4-​[[2-​(4-chloromethyl)-​5,​5-​dimethyl-​1-cyclopentadien-​1-yl]dimethyl]-​1-​piperazinyl]-​N-​[[4-​[[(1R)-​3-​(4-​morpholinyl)-​methylprotobiocide,

99-1% 4-​[4-​[[2-​(4-​dichorophenyl)-​4,​5-​dimethyl-​1-cyclohexen-​1-yl]methyl]-​1-coumaroyl]-​N-​[[4-​[[(1R)-​3-​(4-​dimorpholinyl)-​methylprotobiocide.

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 exhibiting anti-viral action and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for exhibiting anti-viral action, said composition being obtained by the components selected from the group comprising 4-​[4-​[[2-​(4-chloromethyl)-​5,​5-​dimethyl-​1-cyclopentadien-​1-yl]dimethyl]-​1-​piperazinyl]-​N-​[[4-​[[(1R)-​3-​(4-​morpholinyl)-​methylprotobiocide, 4-​[4-​[[2-​(4-​dichlorophenyl)-​4,​5-​dimethyl-​1-cyclohexen-​1-yl]methyl]-​1-coumaroyl]-​N-​[[4-​[[(1R)-​3-​(4-​dimorpholinyl)-​methylprotobiocide that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 1-99% by weight 4-​[4-​[[2-​(4-chloromethyl)-​5,​5-​dimethyl-​1-cyclopentadien-​1-yl]dimethyl]-​1-​piperazinyl]-​N-​[[4-​[[(1R)-​3-​(4-​morpholinyl)-​methylprotobiocide.
3. A composition according to Claim 1 characterized in that it comprises 99-1% by weight 4-​[4-​[[2-​(4-​dichlorophenyl)-​4,​5-​dimethyl-​1-cyclohexen-​1-yl]methyl]-​1-​coumaroyl]-​N-​[[4-​[[(1R)-​3-​(4-​dimorpholinyl)-​methylprotobiocide.
4. Use of the components according to Claims 1 to 3 obtained individually or in combinations selected from the group consisting of 4-​[4-​[[2-​(4-chloromethyl)-​5,​5-​dimethyl-​1-cyclopentadien-​1-yl]dimethyl]-​1-​piperazinyl]-​N-​[[4-​[[(1R)-​3-​(4-​morpholinyl)-​methylprotobiocide, 4-​[4-​[[2-​(4-​dichlorophenyl)-​4,​5-​dimethyl-​1-cyclohexen-​1-yl]methyl]-​1-coumaroyl]-​N-​[[4-​[[(1R)-​3-​(4-​dimorpholinyl)-​methylprotobiocide for the manufacture of a composition for exhibiting anti-viral action.

**ABSTRACT**

**A COMPOSITION COMPRISING SYNTHETIC METHYLPROTOBIOCIDE DERIVATIVES THAT EXHIBIT ANTI-VIRAL ACTION**

The invention relates to a composition comprising synthetic methylprotobiocide derivatives formed for exhibiting anti-viral action.

No figure.