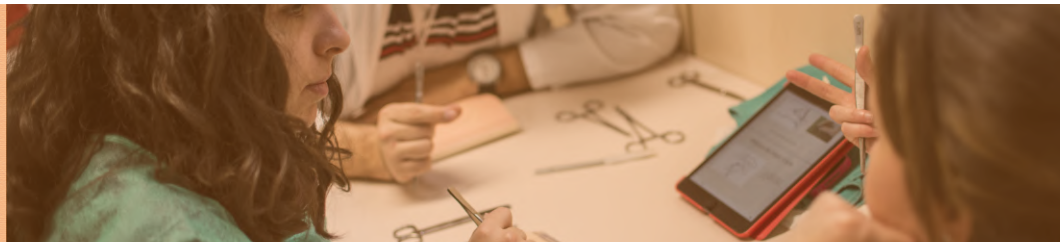




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DERIVATIVES OF INDOLIN-2-ONE AND ITS THERAPEUTIC USE IN INFLAMMATORY, AUTOIMMUNE, METABOLIC, CARDIOVASCULAR, NEUROLOGICAL AND CANCER DISEASES

Patent
ES2646993

Code

BIO_UAH_26

Application areas

- Biological Sciences,
Health Science



Type of Collaboration

- Technical cooperation
- Commercial agreement with
technical assistance
- License agreement

Main Researchers

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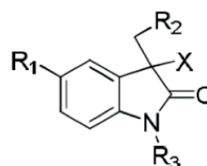
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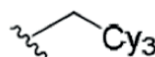


(I)

View of the structure of the compound of Formula I

ABSTRACT

A compound whose base formula (I) is in the image, where O represents a pharmaceutically acceptable salt thereof, wherein X represents hydrogen or halogen; R1 represents hydrogen or halogen; R2 represents phenyl or Cy1 and R3 represents hydrogen or a group of formula:



The compounds of formula (I) and their salts may differ in certain physical properties, but are equivalent for purposes of the invention.

Other aspects of the invention are related to (1) pharmaceutical composition comprising a compound of formula (I) as defined above and one or more pharmaceutically acceptable excipients thereof and (2) use of a compound of formula (I) for the manufacture of a medicament for the treatment of a disease associated with the modulation of the AMPK enzyme, such as autoimmune, inflammatory, cardiovascular, metabolic, neurological and cancer diseases, more preferably where the disease is selected from diabetes type 1 and 2, obesity, inflammation, dyslipidemia, hypertension, hyperglycemia, hypertriglyceridemia, insulin resistance, epilepsy, stroke, Krabbe / Twitcher diseases, Alzheimer's, Parkinson's, Huntington's and cancer, even more preferably where the disease is cancer; and still more preferably where the disease is prostate cancer, breast cancer, pancreatic cancer, uterine cancer and gliomas.

The compounds of formula (I) can exist in different physical forms, for instance, in amorphous form and crystalline forms.

As for the administration of the compounds, this can occur in several formulations: oral, parenteral, nasal, ocular, rectal, and topical.

ADVANTAGES AND INNOVATIONS

- The formulas described in the invention represent a novelty in terms of the modulation of the levels of AMP/ATP optimal concentrations, using derivatives of indolin-2-one, which act as modulators of AMPK, whose decompensation is related to the appearance of metabolic diseases, cancer, etc., which represents an advantage with respect to the products currently in the market.
- The administration of the compounds can be done in several formulations: oral, parenteral, nasal, ocular, rectal, and topical, which significantly improves their use.
- It presents commercial potential at a national and international level, with reasonable difficulty and implementation cost.