

Abstract

N-substituted imidazole carboxylic ester chiral compound containing an ether side chain, its preparation and application

The present invention relates to an N-substituted imidazole carboxylic ester chiral compound containing an ether side chain and to its preparation and application. The structure of this compound is represented by Formula (I). This compound can induce a rapid and reversible general anesthesia effect. Animal experiments show that this compound has rapid and short-acting pharmacological characteristics, so that it can be used as a rapid and short-acting general anesthesia medicine. Compared with etomidate, this compound can reduce the inhibition on the synthesis of adrenal cortical hormone, with an advantage of rapid and full recovery of the post-operative patient. The only chiral carbon in the compound structure belongs to the R form. This imidazole ring in the compound structure has acidifiable N atoms, so that this compound or its related pharmaceutically-acceptable salts can be used in preparation of the central inhibitory medicines, which can produce sedative, hypnotic and/or anesthetic effects on animals or human beings *via* their intravenous or non-intravenous administration.

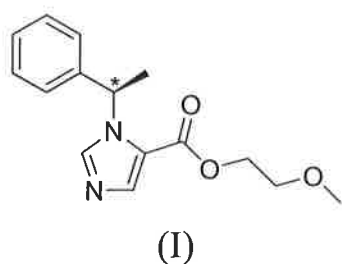


Figure 1