

TITLE OF INVENTION: METHOD FOR PREPARING FMOC-TRP(BOC)-OH

ABSTRACT

The present application provides a method for preparing Fmoc-Trp(Boc)-OH, comprising steps of: reacting tryptophan with N-(9-fluorenylmethoxycarbonyloxy)succinimide in the presence of a base to obtain an intermediate compound as represented by formula (3), reacting the intermediate compound as represented by formula (3) with benzyl halide in the presence of a base to obtain an intermediate compound as represented by formula (4); reacting the intermediate compound as represented by formula (4) with di-tert-butyl dicarbonate in the presence of a catalyst to obtain an intermediate compound as represented by formula (6), deprotecting the intermediate compound as represented by formula (6) to obtain Fmoc-Trp(Boc)-OH. The method provided in the present application uses a four-step reaction to synthesize Fmoc-Trp(Boc)-OH, avoiding a step of introducing Fmoc on H-Trp(Boc)-OH. The method simplifies the process, features simple operations and mild reaction conditions, and reduces the difficulty of industrial production. Furthermore, the method does not involve expensive raw materials, which is beneficial for controlling production costs, and the product can be obtained with a high purity and a high yield.

(No suitable figure to accompany the Abstract)