ABSTRACT OF THE DISCLOSURE

The present invention discloses a method for synthesizing 25-hydroxy cholesterol. The method is as below: subjecting 24-dehydrocholesterol derivative as a raw material, which undergoes an addition reaction with a hydroxyl containing reagent in an organic solvent under catalysis, and then hydrolyzing the reaction product and separating to obtain 25-hydroxy cholesterol. The present invention adopts hydroxyl containing reagents such as water, formic acid, acetic acid, propionic acid, butyric acid, benzoic acid, p-methyl benzoic acid to replace the commonly used extremely toxic reagents such as Cr reagent, Hg reagent and polyfluorinated acetone in the prior art. The raw materials of the present invention are easily available, and have low effect on environment. The operation and post treatment are convenient. Moreover, the method has the advantages of mild reaction conditions, simple operation, good selectivity, high efficiency, high yield, simple post treatment, easy product separation, less three wastes and easy industrialization.