[0064] In some embodiments of the methods for preparing the compound of formula (I), the compound of formula (II), the compound of formula (III) and the compound of formula (IV) involved in the present disclosure, the refinement of the crude product in the step f workup comprises the following steps:

washing the mixture containing a compound of formula (V-1) with a $NaHCO_3$ solution, performing phase separation, and collecting the organic phase to obtain the compound of formula (V-1).

[0065] In some embodiments of the methods for preparing the compound of formula (I), the compound of formula (II), the compound of formula (III) and the compound of formula (IV) involved in the present disclosure, the workup in step e comprises refining the crude compound of formula (IV).

[0066] In some embodiments of the methods for preparing the compound of formula (I), the compound of formula (II), the compound of formula (III) and the compound of formula (IV) involved in the present disclosure, the refinement of the crude product in the step e workup comprises the following steps:

washing the mixture containing a compound of formula (IV) with a $NaHCO_3$ solution, and performing phase separation to obtain the compound of formula (IV).

[0067] In some embodiments of the methods for preparing the compound of formula (I), the compound of formula (II) and the compound of formula (III) involved in the present disclosure, the workup in step d comprises refining the crude compound of formula (III).

[0068] In some embodiments of the methods for preparing the compound of formula (I), the compound of formula (II) and the compound of formula (III) involved in the present disclosure, the refinement of the crude product in the step d workup comprises the following steps:

1) adding a sodium carbonate solution to the compound of formula (III), and performing phase separation to obtain an organic phase;

2) adding a mixed solution of sodium carbonate and sodium chloride and a sodium chloride solution to the organic phase successively, performing phase separation, and collecting the organic phase to obtain the compound of formula (III).

TsOH: p-Toluenesulfonic acid

$CuSO_4$: Copper sulphate

$Zn(OAc)_2$: Zinc acetate

$Co(OAc)_2 \cdot 4H_2O$: Cobalt acetate hydrate

Na_2SO_4: Sodium sulfate

$MgSO_4$: Magnesium sulfate

$Ti(Oi\text{-}Pr)_4$: Titanium tetraisopropoxide

DCC/ DMAP: N,N'-Dicyclohexylcarbodiimide/4-dimethylaminopyridine

EDCI /DMAP: 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride/4-dimethylaminopyridine

HOAc/ molecular sieve: Acetic acid/molecular sieve system

CsF: Cesium fluoride

KF: Potassium fluoride

NH_4F: Ammonium fluoride

TBAF: Tetrabutylammonium fluoride

Na_2CO_3: Sodium carbonate solution

$NaHCO_3$: Sodium bicarbonate solution

NaOH: Sodium hydroxide

K_3PO_4: Potassium phosphate

$Ti(OEt)_4$: Tetraethyl titanate

n-Heptane

ACN: Acetonitrile

Toluene