

Abstract

The present invention relates to the technical field of olefin polymerization catalysts. Disclosed are a tetrahydronaphthol-phosphine pre-transition metal complex, and a preparation method therefor and a use thereof. The structural formula of the tetrahydronaphthol-phosphine pre-transition metal complex is shown as formula (I), wherein M is selected from group IVB metals; Ar is selected from substituted or unsubstituted C₆-C₂₀ aryl groups; X is selected from halogen or C₁-C₁₀ hydrocarbyl groups, and n is 1 or 2. When the tetrahydronaphthol-phosphine pre-transition metal complex of the present invention is used as a main catalyst of an olefin polymerization catalyst, good olefin polymerization activity (homopolymerization/copolymerization activity) is achieved at a relatively high temperature, and the prepared olefin polymer has good performance.

