

Abstract

An antibody targeting human Trop2 simultaneously is coupled to a camptothecin drug to form an antibody-drug conjugate with stable treatment and excellent uniformity, and the drug-to-antibody ratio (DAR) is 6.0-8.0. The antibody-drug conjugate has a structure shown in general formula **I**, wherein Ab refers to an antibody targeting Trop2 simultaneously, which is coupled to a linker-camptothecin drug. In addition, also disclosed are a preparation and purification method for the antibody-drug conjugate, and an application in tumor treatment. Further, also disclosed is a linker-drug compound that can be coupled to Ab to form an antibody-drug conjugate.

