

Abstract

ANTI-BCMA SINGLE-DOMAIN ANTIBODY, AND PREPARATION METHOD THEREFOR AND USE THEREOF

Provided are an anti-BCMA single-domain antibody, and a preparation method therefor and the use thereof. Specifically, provided is a single-domain antibody having an amino acid sequence of SEQ ID No. 1. The single-domain antibody has high affinity, can thoroughly specifically target BCMA-positive cells, and can be applied to the detection of BCMA expression in bone marrow cells of MM patients. The single-domain antibody can be prepared into a specific antibody drug clinically used for preventing and treating BCMA-target-related diseases (such as multiple myeloma, B-cell acute lymphoblastic leukemia, non-Hodgkin's lymphoma and Hodgkin's lymphoma); or a BCMA protein detection kit, etc. The single-domain antibody has a stable structure, a small molecular size, is easily recombinantly expressed and has a low production cost, can be used alone or as a drug delivery system to carry relevant drugs, and has very wide prospects and important significance in fields such as drug application and clinical diagnosis.

Fig. 1