

ABSTRACT

Provided are an anti-CD3 antibody or an antigen binding fragment thereof and a use thereof. The anti-CD3 antibody includes heavy chain variable region CDRs and light chain variable region CDRs, the heavy chain variable region CDRs having amino acid sequences as set forth in any one of SEQ ID NOs: 1 to 3, 7 to 8, and 74 to 86, or a conservative modification form thereof; and/or the light chain variable region CDRs having amino acid sequences as set forth in any one of SEQ ID NOs: 4 to 6, 9, and 87 to 92, or a conservative modification form thereof. The provided anti-CD3 antibody or antigen binding fragment thereof can bind to human CD3 protein and reduce the production of pro-inflammatory cytokines. The bispecific antibody constructed using the same has high PBMC-mediated tumor-killing activity and weak ability of promoting the secretion of pro-inflammatory cytokines. A pharmaceutical composition prepared using the anti-CD3 antibody or the antigen-binding fragment thereof or a multi-specific antibody thereof has better safety and has high value for clinical applications and drug development.

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No Figure.