Open Peer Review on Qeios

Anti-CD33/CD3 BiTE Antibody AMG 673

National Cancer Institute

Source

National Cancer Institute. <u>Anti-CD33/CD3 BiTE Antibody AMG 673</u>. NCI Thesaurus. Code C147026.

A bispecific T-cell engager (BIT E) antibody composed of two single-chain variable fragments (scFv), one directed against the tumor-associated antigen (TAA) CD33 fused to one that is directed against the CD3 antigen found on T-lymphocytes, with potential immunostimulating and antineoplastic activities. Upon administration, anti-CD33/CD3 BIT E antibody AMG 673 binds to both the CD3 antigen on cytotoxic T-lymphocytes (CT Ls) and the CD33 antigen found on CD33-expressing tumor cells. This activates and redirects CT Ls to CD33-expressing tumor cells, which results in the CT L-mediated cell death of CD33-expressing tumor cells. CD33, a myeloid differentiation antigen, is expressed on normal non-pluripotent hematopoietic stem cells and overexpressed on a variety of cancer cell types, including acute myeloid leukemia (AML). It plays a key role in tumor initiation, proliferation and progression.