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Anti-CLEC12A/CD3 Bispecific Antibody MCLA117

National Cancer Institute

Source

National Cancer Institute. *Anti-CLEC12A/CD3 Bispecific Antibody MCLA117*. NCI Thesaurus. Code C148141.

An immunoglobulin G1 (IgG1) bispecific human monoclonal antibody against human CD3, a T-cell surface antigen, and human C-type lectin domain family 12 member A (CLEC12A), a tumor-associated antigen (TAA) overexpressed on certain tumor cells, with potential antineoplastic activity. Upon administration, anti-CLEC12A/CD3 bispecific antibody MCLA117 binds to both CD3 on T-cells and CLEC12A expressed on malignant cells, such as myeloid blasts, atypical progenitor cells and leukemic stem cells (LSCs). This results in the cross-linking of T-cells with tumor cells, and induces a potent cytotoxic T-lymphocyte (CTL) response against CLEC12A-expressing tumor cells. CLEC12A, a myeloid differentiation antigen and member of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily, is overexpressed on myeloid leukemia cells, but not on normal early hematopoietic progenitors, including hematopoietic stem cells (HSCs).