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Anti-CD3/Anti-CD20 Trifunctional Bispecific Monoclonal Antibody FBTA05

National Cancer Institute

Source

National Cancer Institute. *Anti-CD3/Anti-CD20 Trifunctional Bispecific Monoclonal Antibody FBTA05*. NCI Thesaurus. Code C95760.

A trifunctional bispecific monoclonal antibody with potential antineoplastic activity. FBTA05 contains two antigen-recognition sites: one for human CD3, a T cell surface antigen; and one for human CD20, a tumor-associated antigen that is exclusively expressed on B cells during most stages of B cell development and often overexpressed in B-cell malignancies. In addition, the modified Fc portion of this antibody binds Fc receptors on antigen presenting cells (APCs) such as macrophages and dendritic cells (DCs). FBTA05 brings T cells, CD20-expressing tumor B-cells and APCs together into tricellular complexes, which may result in a potent cytotoxic T-lymphocyte (CTL) response against CD20-expressing tumor B-cells. Fc-mediated binding of APCs in the tricellular complex potentiates CD20 antigen presentation to T cells and the activation of anti-tumor cytotoxic T cells.