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Anti-CD157 Monoclonal Antibody MEN1112

National Cancer Institute

Source

National Cancer Institute. *Anti-CD157 Monoclonal Antibody MEN1112*. NCI Thesaurus. Code C120317.

A humanized, Fc engineered, de-fucosylated monoclonal immunoglobulin G1 (IgG1) antibody directed against the bone marrow stromal cell antigen 1 (BST1/CD157), with potential antineoplastic activity. Upon intravenous infusion, anti-CD157 monoclonal antibody MEN1112 specifically binds to and induces an antibody dependent cell cytotoxic (ADCC) response against CD157-expressing tumor cells. CD157, also known as ADP-ribosyl cyclase 2, is a glycosyl-phosphatidylinositol (GPI)-anchored transmembrane protein belonging to the ADP-ribosyl-cyclase family and is overexpressed on certain cancer cell types. Fc-optimization of MEN1112, which involves the removal of fucose residues from its Fc domain, allows for enhanced Fc-gamma receptor binding on effector cells, such as natural killer (NK) cells, and further enhances tumor cell lysis.