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Bispecific Antibody MDX-H210

National Cancer Institute

Source

National Cancer Institute. *Bispecific Antibody MDX-H210*. NCI Thesaurus. Code C1578.

A humanized bivalent antibody directed against both cytotoxic effector cells expressing Fc gamma receptor type I (Fc gammaRI, or CD64) and HER2/neu-overexpressing tumor cells with potential antineoplastic activity. Bispecific antibody MDX-H210 was constructed by chemically linking Fab' fragments of the anti-HER2/neu-specific monoclonal antibody 520C9 and the Fab' fragments of the anti-Fc gammaRI-specific monoclonal antibody H22. This agent selectively binds to both HER2/neu-expressing tumor cells and Fc gammaRI-expressing cytotoxic effector cells, which may trigger antibody-dependent cell-mediated cytotoxicity (ADCC) and cell lysis of HER2/neu-expressing tumor cells. While HER2/neu is overexpressed in a variety of epithelial malignancies, expression of Fc gammaRI is primarily found in cytotoxic immune cells, including monocytes, macrophages, and cytokine-activated polymorphonuclear (PMN) cells.