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# Margetuximab

National Cancer Institute

## Source

National Cancer Institute. *Margetuximab*. NCI Thesaurus. Code C91733.

A Fc-domain optimized IgG monoclonal antibody directed against the human epidermal growth factor receptor 2 (HER2) with potential immunomodulating and antineoplastic activities. After binding to HER2 on the tumor cell surface, margetuximab may induce an antibody-dependent cell-mediated cytotoxicity (ADCC) against tumor cells overexpressing HER2. HER2, a tyrosine kinase receptor, is overexpressed by many cancer cell types. Compared to other anti-HER2 monoclonal antibodies, the Fc domain of MGAH22 is optimized with increased binding to the activating Fcγ receptor IIIA (CD16A), expressed on cells such as natural killer (NK) cells and macrophages, thereby mediating an enhanced ADCC; the Fc domain also shows decreased binding to the inhibitory Fcγ receptor IIB (CD32B).