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Anti-HER2/Anti-HER3 Bispecific Monoclonal Antibody MCLA-128

National Cancer Institute

Source

National Cancer Institute. *Anti-HER2/Anti-HER3 Bispecific Monoclonal Antibody MCLA-128*. NCI Thesaurus. Code C153211.

A full-length IgG1 bispecific antibody with enhanced antibody-dependent cellular cytotoxicity (ADCC) directed against human epidermal growth factor receptor 2 (HER2; EGFR2, ERBB2) and human epidermal growth factor receptor 3 (HER3; ErbB3), with potential antineoplastic activity. Upon intravenous administration, the bispecific antibody docks on HER2, and subsequently blocks heregulin-stimulated proliferation of tumor cells by binding HER3. In addition to inhibiting HER3-dependent signaling, simultaneous targeting of HER2 and HER3 by MCLA-128 may overcome a common resistance mechanism driven by heregulin-mediated dimerization of HER2 and HER3. MCLA-128 is expected to eliminate tumor cells by recruiting natural killer (NK) cells to tumor cells coated with the bispecific antibody.