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# Anti-HER-2 Bispecific Antibody KN026

National Cancer Institute

## Source

National Cancer Institute. *Anti-HER-2 Bispecific Antibody KN026*. NCI Thesaurus. Code C162577.

An engineered Fc-based heterodimeric bispecific monoclonal antibody, derived from trastuzumab and pertuzumab, directed against two distinct epitopes of the extracellular dimerization domain of the tumor-associated antigen (TAA) human tyrosine kinase receptor epidermal growth factor receptor 2 (HER2; ErbB2; HER-2), with potential immunomodulating and antineoplastic activities. Upon administration, anti-HER-2 bispecific antibody KN026 simultaneously targets and binds to two separate, non-overlapping epitopes of HER-2, thereby inhibiting HER-2 heterodimerization and prevents the activation of HER-2 signaling pathways. By binding to HER-2, KN026 induces an antibody-dependent cell-mediated cytotoxicity (ADCC) against tumor cells that overexpress HER-2. This results in tumor cell apoptosis and inhibits tumor cell proliferation of HER-2-overexpressing tumor cells. HER-2, overexpressed on a variety of tumor cell types, plays an important role in proliferation, differentiation and survival.