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Pepinemab

National Cancer Institute

Source

National Cancer Institute. *Pepinemab*. NCI Thesaurus. Code C96222.

A humanized IgG4 monoclonal antibody against the semaphorin 4D (SEMA4D; CD100) with potential immunomodulating and antineoplastic activities. Upon administration, pepinemab binds to and neutralizes SEMA4D, thereby preventing binding of SEMA4D to its receptor plexin-B1 (PLXNB1). By blocking the interaction of SEMA4D and PLXNB1, pepinemab may cause an inhibition of endothelial cell activation and migration, eventually leading to an inhibition of angiogenesis and tumor cell proliferation. Semaphorin 4D, a large cell surface antigen found on the resting T-cell and overexpressed in a variety of tumor cell types, plays an important role in vascular growth, tumor progression, invasion and immune cell regulation.