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Anti-PVRIG Monoclonal Antibody COM701

National Cancer Institute

Source

National Cancer Institute. *Anti-PVRIG Monoclonal Antibody COM701*. NCI Thesaurus. Code C156791.

A humanized, hybridoma monoclonal antibody against the poliovirus receptor-related immunoglobulin (PVRIG; PVR Related Immunoglobulin Domain Containing Protein; CD112R), with potential immune checkpoint inhibitory and antineoplastic activities. Upon administration, anti-PVRIG monoclonal antibody COM701 targets and binds to PVRIG expressed on cytotoxic T-lymphocytes (CTLs) and natural killer (NK) cells within the tumor microenvironment (TME). This blocks the interaction of PVRIG with its ligand nectin cell adhesion molecule 2 (poliovirus receptor-related 2; PVRL2; CD112), which is overexpressed on a variety of tumor cell types. Inhibiting the activation of PVRIG, abrogates the PVRIG-induced inhibition of T-lymphocyte and NK cell activation. This activates CTLs and NK cells, enhances anti-tumor responses and immune-mediated tumor cell killing, and inhibits tumor cell proliferation. PVRIG, a member of the B7/CD28 family and immune checkpoint receptor that, upon activation, negatively regulates the activation of various immune cells. It plays a key role in immunosuppression.