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# Anti-PD-1/Anti-CTLA4 DART Protein MGD019

National Cancer Institute

## Source

National Cancer Institute. *Anti-PD-1/Anti-CTLA4 DART Protein MGD019*. NCI Thesaurus. Code C158505.

A hinge stabilized immunoglobulin G4 (IgG4) tetravalent bispecific antibody-like protein directed against the human negative immunoregulatory checkpoint receptors programmed cell death protein 1 (PD-1; PDCD1; CD279) and cytotoxic T-lymphocyte-associated antigen 4 (CTLA4; CTLA-4), with potential immune checkpoint inhibitory and antineoplastic activities. Upon administration, the anti-PD-1/anti-CTLA4 dual-affinity re-targeting (DART) protein MGD019 specifically binds to both PD-1 and CTLA4 expressed on tumor-infiltrating lymphocytes (TILs) and inhibits the PD-1- and CTLA4-mediated downregulation of T-cell activation and proliferation. Dual blockade of PD1 and CTLA4 pathways provides enhanced activity against PD1+CTLA4+ double positive cells and may increase T-cell activation and proliferation compared to the blockade of either immune checkpoint alone.