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Anti-PD-1 Checkpoint Inhibitor PF-06801591

National Cancer Institute

Source

National Cancer Institute. *Anti-PD-1 Checkpoint Inhibitor PF-06801591*. NCI Thesaurus. Code C124058.

An inhibitor of the human inhibitory receptor programmed cell death 1 (PD-1; PDCD1), with potential immune checkpoint inhibitory and antineoplastic activities. Upon administration, anti-PD-1 checkpoint inhibitor PF-06801591 targets and binds to PD-1 and blocks the interaction between PD-1 and its ligands, PD-1 ligand 1 (PD-L1) and PD-1 ligand 2 (PD-L2). This prevents the activation of PD-1 and its downstream signaling pathways. This may restore immune function through the activation of natural killer (NK) cells and cytotoxic T-lymphocytes (CTLs) against tumor cells. PD-1, an inhibitory receptor belonging to the B7-receptor family, is expressed on activated T-lymphocytes, B-cells and NK cells; it functions as an immune checkpoint that negatively regulates T-cell activation and effector function when activated by its ligands, and plays an important role in tumor evasion from host immunity.