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# Anti-PD1/ICOS Bispecific Monoclonal Antibody XmAb23104

National Cancer Institute

## Source

National Cancer Institute. *Anti-PD1/ICOS Bispecific Monoclonal Antibody XmAb23104*.  
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A humanized, Fc-engineered bispecific monoclonal antibody directed against both the human negative immunoregulatory checkpoint receptor, programmed cell death protein 1 (PD-1; PCD-1; CD279), and inducible T-cell co-stimulator (ICOS; CD278), with potential immunomodulating and antineoplastic activities. Upon administration, anti-PD1/ICOS bispecific monoclonal antibody XmAb23104 targets and binds to both PD-1 and ICOS expressed on certain T-cells, including tumor-infiltrating lymphocytes (TILs). This prevents the activation of PD-1 by its ligands, programmed cell death-1 ligand 1 (PD-L1) and PD-1 ligand 2 (PD-L2), and stimulates ICOS-mediated signaling, which promotes the activation of T-cells and enhances T-cell-mediated immune responses against tumor cells. Combined PD-1 blockade and ICOS stimulation may enhance T-cell activation and proliferation more than targeting each receptor individually. The engineered Fc domain increases the stability and half-life of the antibody.