

[Open Peer Review on Qeios](#)

# Anti-CD70 CAR-expressing T Lymphocytes

National Cancer Institute

## Source

National Cancer Institute. *Anti-CD70 CAR-expressing T Lymphocytes*. NCI Thesaurus. Code C162699.

A preparation of human T-lymphocytes transduced with a recombinant viral vector encoding a chimeric T-cell receptor (chimeric antigen receptor or CAR) consisting of one or more binding domains that target the tumor-associated antigen (TAA) CD70 (CD27 ligand; tumor necrosis factor superfamily member 7; TNFSF7) fused to one or more co-stimulatory TCR-signaling domains, with potential immunostimulating and antineoplastic activities. Upon administration, the anti-CD70 CAR-expressing T-lymphocytes, express anti-CD70-CAR on their cell surfaces and bind to the CD70 antigen on tumor cell surfaces thereby neutralizing the activity of CD70. This may induce antibody-dependent cellular cytotoxicity (ADCC) against CD70-expressing tumor cells. CD70, a cytokine belonging to the tumor necrosis superfamily (TNFSF) and the ligand for the costimulatory receptor CD27, is expressed on the surfaces of various types of cancer cells; its overexpression may play an important role in the evasion of immune surveillance.