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# Anti-thyroglobulin mTCR-transduced Autologous Peripheral Blood Lymphocytes

National Cancer Institute

## Source

National Cancer Institute. *Anti-thyroglobulin mTCR-transduced Autologous Peripheral Blood Lymphocytes*. NCI Thesaurus. Code C121552.

Peripheral blood lymphocytes (PBLs) transduced with a gene encoding for a thyroglobulin (TG)-specific murine T-cell receptor (mTCR), with potential antineoplastic activity. PBLs are harvested from a thyroid cancer patient, and transfected with a retroviral vector that encodes the mTCR gene specific for the human TG antigen. The transduced PBLs are then expanded in culture. When reintroduced to the patient, these anti-TG mTCR-expressing PBLs target and bind to TG-overexpressing tumor cells, which results in both cytokine secretion and tumor cell lysis. TG is a thyroid-specific protein.