

[Open Peer Review on Qeios](#)

WT1/PRAME/Survivin-specific Cytotoxic T-lymphocytes

National Cancer Institute

Source

National Cancer Institute. *WT1/PRAME/Survivin-specific Cytotoxic T-lymphocytes*. NCI Thesaurus. Code C162764.

A preparation of cytotoxic T-lymphocytes (CTLs) specifically reactive to the tumor-associated antigens (TAAs) human Wilms tumor protein (WT1), preferentially expressed antigen of melanoma (PRAME; melanoma antigen preferentially expressed in tumors; Opa-interacting protein 4; OIP-4), and survivin (baculoviral IAP repeat-containing protein 5; BIRC5), with potential immunomodulating and antineoplastic activities. Upon collection of peripheral blood mononuclear cells (PBMCs), these cells are stimulated with antigen presenting cells (APCs) pulsed with WT1, PRAME and survivin peptides; reactive T-cells are selectively expanded. Upon administration of the WT1/PRAME/Survivin-specific CTLs, these T-cells induce a CTL-mediated response against tumor cells expressing WT1, PRAME, or survivin, leading to tumor cell lysis and inhibition of tumor cell proliferation. WT1, PRAME, and survivin, are expressed on certain tumor cell types and play key roles in tumor cell proliferation and survival.