



Recombinant Protein Technical Manual  
Recombinant Human TREML2/TLT2 Protein (His Tag)  
RPES1054

### Product Data:

**Product SKU:** RPES1054

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_079083.2

### Protein Information:

**Molecular Mass:** 28.5 kDa

**AP Molecular Mass:** 55-60 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Trem-like transcript 2 protein; TLT2; Triggering receptor expressed on myeloid cells-like protein 2; TLT2; C6orf76

## Immunogen Information:

**Sequence:** Met 1-Ser 268

## Background:

Trem-like transcript 2 protein, also known as Triggering receptor expressed on myeloid cells-like protein 2, TREML2 and TLT2, is a single-pass type I membrane protein which contains one Ig-like V-type (immunoglobulin-like) domain. TREML2 is detected in cultured B cells, T cell leukemia and monocyte leukemia. TREML2 is expressed constitutively on CD8 T-cells and induced on CD4 T-cells after activation. TREML2 is a cell surface receptor that may play a role in the innate and adaptive immune response. TREML2 acts as a counter-receptor for CD276 and interaction with CD276 on T-cells enhances T-cell activation. Murine B7-H3 specifically bound to Triggering receptor expressed on myeloid cells (TREM)-like transcript 2 (TLT-2, TREML2). TREML2 was expressed on CD8(+) T cells constitutively and on activated CD4(+) T cells. Stimulation with B7-H3 transfectants preferentially up-regulated the proliferation and IFN-gamma production of CD8(+) T cells. Transduction of TREML2 into T cells resulted in enhanced IL-2 and IFN-gamma production via interactions with B7-H3. There maybe a direct interaction between B7-H3 and TREML2 that preferentially enhances CD8(+) T cell activation.