



Recombinant Protein Technical Manual

Recombinant Mouse TIGIT Protein (His Tag)

RPES4852

Product Data:

Product SKU: RPES4852

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: NP_001139797

Protein Information:

Molecular Mass: 13.3 kDa

AP Molecular Mass: 18-22 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by 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 a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to it for detailed information.

Application:

Synonyms: T-cell immunoreceptor with Ig and ITIM domains;TIGIT;V-set and transmembrane domain-containing protein 3; VSTM3

Immunogen Information:

Sequence: Gly26-Phe135

Background:

T cell immunoreceptor with Ig and ITIM domains (TIGIT), also called WUCAM, VSIG9 and Vstm3, is a member of the CD28 family within the Ig superfamily of proteins. TIGIT contains an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based inhibitory motif (ITIM), and is expressed on regulatory, memory, activated T cells and NK cells. TIGIT binds to CD155(PVR) that appear on dendritic cells (DC), macrophages and endothelium with high affinity, and CD112(PVRL2) with lower affinity, but not CD113 (PVRL3). TIGIT-Fc fusion protein could interact with PVR on DC and enhance the secretion of IL0, but inhibit the macrophage activation. Mice lacking TIGIT show increased T cell responses and susceptibility to autoimmune challenges, while knockdown of TIGIT with siRNA in human memory T cells did not affect T cell responses.