Recombinant Protein Technical Manual

Recombinant Cynomolgus TIGIT/VSIG9/VSTM3 Protein (His Tag)

RPES2920

Product Data:

Product SKU: RPES2920

Size: 10µg

Species: Cynomolgus

Expression host: Human Cells

Uniprot: G7NXM4

Protein Information:

Molecular Mass: 14.2 kDa

AP Molecular Mass: 168 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 protein should be stored at < -20℃, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 the printed manual for detailed information.

Application:

Synonyms: T-cell immunoreceptor with Ig and ITIM domains; VSIG9; VSTM3; TIGIT; V-set and transmembrane domain-containing protein 3; V-set and immunoglobulin domain-containing protein 9

Immunogen Information:

Sequence: Met89-Pro209

Background:

T cell immunoreceptor with Ig and ITIM domains (TIGIT), also called 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.