

Recombinant Mouse TIGIT Protein (His Tag)

Catalog No. PKSM041197

Note: Centrifuge before opening to ensure complete recovery of vial contents.

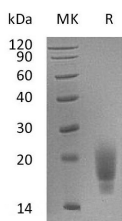
Description

Synonyms	T-cell immunoreceptor with Ig and ITIM domains;TIGIT;V-set and transmembrane domain-containing protein 3;VSTM3
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Gly26-Phe135
Accession	NP_001139797
Calculated Molecular Weight	13.3 kDa
Observed molecular weight	15-22 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

T cell immunoreceptor with Ig and ITIM domains (TIGIT), also called WUCAM, VSIG9 and Vstm3, is a member of the

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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 IL-10, 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.