Recombinant Human TIGIT Protein (aa 22-141, His Tag)

Catalog Number: PKSH033394

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

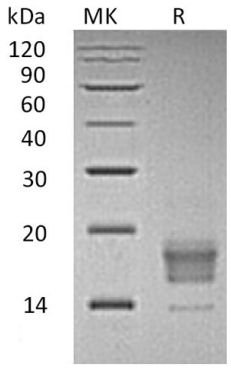
Description

Species	Human
Source	HEK293 Cells-derived Human TIGIT protein Met22-Pro141, with an C-terminal His
Calculated MW	14.1 kDa
Observed MW	13-19 kDa
Accession	Q495A1
Bio-activity	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 ℃. Reconstituted protein solution can be stored at 4-8℃ 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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) is a member of the CD28 family within the Ig superfamily of proteins. TIGIT is expressed on NK cells and subsets of activated; memory and regulatory T cells; and particularly on follicular helper T cells within secondary lymphoid organs. It binds to CD155 and Nectin-2 that appear on dendritic cells (DC) and endothelium. Ligation of TIGIT on T cells down-regulates TCR-mediated activation and subsequent proliferation; while NK cell TIGIT ligation blocks NK cell cytotoxicity. Through CD155 and Nectin-2; which also interact with DNAM-1/CD226 and CD96/Tactile; TIGIT is part of an interacting network of Ig superfamily members that may augment or oppose each other. In particular; TIGIT binding to CD155 can antagonize the effects of DNAM1.