

# Recombinant Protein Technical Manual

# Recombinant Human TIGIT Protein (aa 2241, His Tag)(Active) RPES3371

**Product Data:** 

**Product SKU:** RPES3371 **Size:** 10μg

Species: Human Cells

Uniprot: Q495A1

#### **Protein Information:**

Molecular Mass: 14.1 kDa

AP Molecular Mass: 168 kDa

Tag: C-6His

Bio-activity: Immobilized Human PVR-Fc(Cat: PKSH033562) at 10μg/ml(100 μl/well) can bind

Human TIGIT-His. The ED50 of Human TIGIT-His is 8.2 ug/ml.

**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 a 0.2 µm filtered solution of PBS, pH7.4.

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

**Application:** Functional ELISA

**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: Met22-Pro141

## 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/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.