# Active T-Cell Immunoreceptor With Ig And ITIM Domains Protein (TIGIT)

*Catalog#:PHH13004*

## 概述（Summary）

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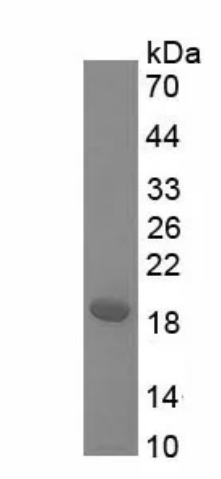
| **别称（Alternative Names）** | VSIG9; VSTM3; V-Set And Immunoglobulin Domain Containing 9; V-Set And Transmembrane Domain Containing 3 |
| **纯度（Purity）** | Greater than 95% as determined by reducing SDS-PAGE. |
| **内毒素（Endotoxin level）** | Please contact with the lab for this information |
| **蛋白构建（Construction）** | 【Met22-Pro141】 |
| **Accession #** | Q495A1 |
| **表达宿主（Host）** | 293F |
| **种属（Species）** | Homo sapiens (Human) |
| **预测分子量（Predicted MW）** | 14.7 kDa |
| **制剂（Form）** | Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. |
| **运输方式（Shipping）** | The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below. |
| **稳定性&储存（Stability &Storage）** | 12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles. |
| **复溶（Reconstitution）** | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex. |
| **背景介绍（References）** | Binds with high affinity to the poliovirus receptor (PVR) which causes increased secretion of IL10 and decreased secretion of IL12B and suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells. |

## 电泳图（SDS-PAGE image）




Greater than 95% as determined by reducing SDS-PAGE.

## 活性图（Bioactivity image）

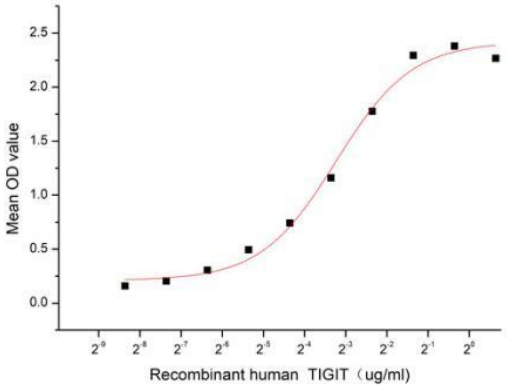



**Figure 1. The binding activity of recombinant human TIGIT and recombinant human LAG3**

T cell immunoreceptor with Ig and ITIM domains (TIGIT) is an inhibitory receptor expressed on several types of lymphocytes. 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. Human TIGIT cDNA encodes 244 amino acids (aa) including a 21 aa signal sequence, a 120 aa extracellular region with a V-type Ig-like domain and two potential N-glycosylation site, a 21 aa transmembrane sequence, and an 82 aa cytoplasmic domain with an ITIM motif. A 170 aa variant diverges after aa 166. Lymphocyte Activation Gene 3 (LAG3) and TIGIT are two potential targets for cancer immunotherapy, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human TIGIT and recombinant human LAG3. Briefly, biotin-linked TIGIT were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to LAG3-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 ℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human TIGIT and recombinant human LAG3 was shown in Figure 1, the EC50 for this effect is 0.11 ug/mL.

## 注意事项（Note）

For Research Use Only , Not for Diagnostic Use.