

# Recombinant Rat TIGIT protein, Fc-tagged

**Cat. No.** TIGIT-205R    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Product Overview</b> | Recombinant Rat TIGIT protein (Ala17-Ala138), fused to human IgG1 Fc tag at C-terminus, was expressed in human 293 cells (HEK293).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Species</b>          | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ProteinLength</b>    | 122                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | T-cell immunoreceptor with Ig and ITIM domains (TIGIT) is also known as V-set and immunoglobulin domain-containing protein 9 (VSIG9), V-set and transmembrane domain-containing protein 3 (VSTM3), which belongs to single-pass type I membrane protein containing an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based inhibitory motif (ITIM). TIGIT is expressed at low levels on peripheral memory and regulatory CD4+ T-cells and NK cells and is up-regulated following activation of these cells (at protein level). TIGIT 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. |
| <b>Form</b>             | Lyophilized from 0.22 um filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Molecular Mass</b>   | The protein has a calculated MW of 40 kDa. As a result of glycosylation, the protein migrates as 48-55 kDa under reducing (R) condition, and 85-110 kDa under non-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | reducing (NR) condition (SDS-PAGE).                                                                                                                                                                                                                                                                                                                                        |
| <b>Endotoxin</b>      | Less than 1.0 EU per ug by the LAL method.                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>         | >95% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage</b>        | <p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <p>-20 centigrade to -70 centigrade for 12 months in lyophilized state;</p> <p>-70 centigrade for 3 months under sterile conditions after reconstitution.</p> |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.                                                                                                                                                                                              |

## GENE INFORMATION

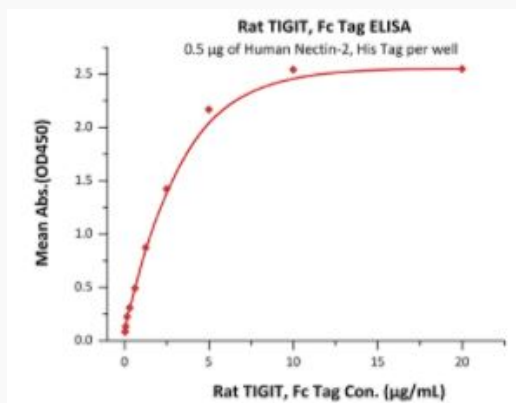
|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| <b>Gene Name</b>       | TIGIT                                                             |
| <b>Official Symbol</b> | TIGIT                                                             |
| <b>Synonyms</b>        | TIGIT; T cell immunoreceptor with Ig and ITIM domains; RGD1563191 |
| <b>Gene ID</b>         | 363784                                                            |
| <b>mRNA Refseq</b>     | XM_017598162.1                                                    |
| <b>Protein Refseq</b>  | XP_017453651.1                                                    |
| <b>UniProt ID</b>      | D3ZTQ2                                                            |

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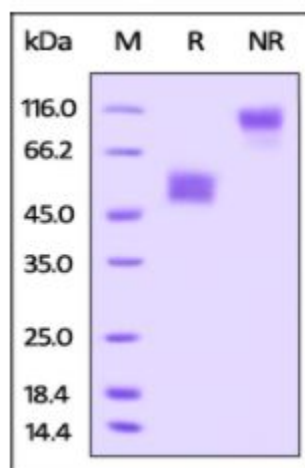
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### Bioactivity-ELISA of TIGIT-205R



Immobilized Human Nectin-2, His Tag at 5 µg/mL (100 µL/well) can bind Rat TIGIT, Fc Tag with a linear range of 0.039-5 µg/mL (QC tested).

### SDS-PAGE of TIGIT- 205R



Rat TIGIT, Fc Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.