

Datasheet for ABIN4949039

TIGIT Protein (AA 22-141) (Fc Tag,AVI tag,Biotin)[Go to Product page](#)**3** Images

Overview

Quantity:	200 µg
Target:	TIGIT
Protein Characteristics:	AA 22-141
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TIGIT protein is labelled with Fc Tag,AVI tag,Biotin.
Application:	Functional Studies (Func)

Product Details

Brand:	MABSol®,PrecisionAvi
Sequence:	AA 22-141
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	This protein carries a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (Avitag™). The protein has a calculated MW of 41.5 kDa. As a result of glycosylation, the protein migrates as 47 kDa under reducing (R) condition, and 75-116 kDa under non-reducing (NR) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.

Product Details

Endotoxin Level: Less than 1.0 EU per µg by the LAL method.

Target Details

Target: TIGIT

Alternative Name: TIGIT ([TIGIT Products](#))

Background: 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.

Molecular Weight: 41.3 kDa

NCBI Accession: [NP_776160](#)

Pathways: [Cancer Immune Checkpoints](#)

Application Details

Comment: Ready-to-use AvitagTM biotinylated protein:
The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

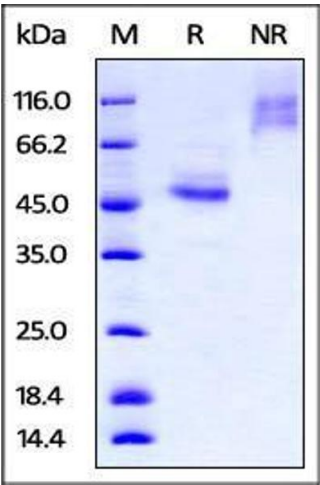
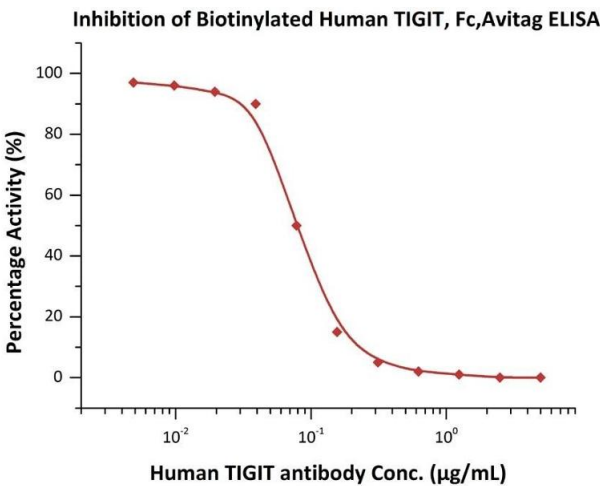
This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Buffer:	Tris with Glycine, Arginine and NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images

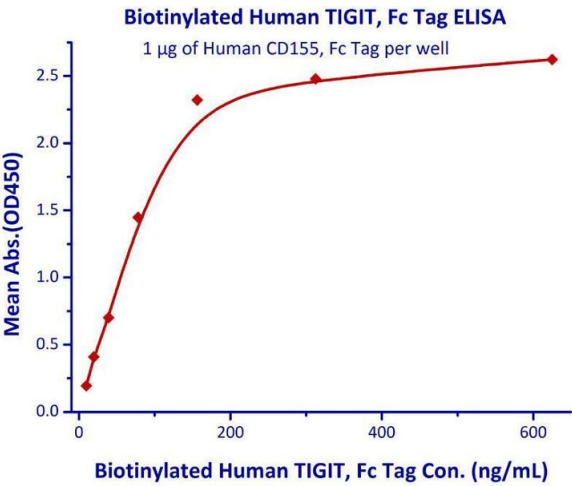


ELISA

Image 1. Serial dilutions of Human TIGIT Neutralizing antibody were added into Human CD155, Mouse IgG2a Fc Tag, low endotoxin (ABIN4949085,ABIN4949086): Biotinylated Human TIGIT, Fc,Avitag (ABIN4949039,ABIN4949040) binding reactions. The half maximal inhibitory concentration (IC₅₀) is 0.08116 µg/mL (Routinely tested).

SDS-PAGE

Image 2. Biotinylated Human TIGIT, Fc Tag on SDS-PAGE under reducing (R) and no-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Binding Studies

Image 3. Immobilized Human CD155, Fc Tag with a linear range of 9.8-78 ng/mL.