

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TIGIT in direct ELISAs.
Source	Monoclonal Rat IgG ₁ Clone # 826118
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TIGIT Met1-Thr143 Accession # P86176
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Blockade of Receptor-ligand Interaction Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

TIGIT (T cell Immunoreceptor with Ig and ITIM domains; also Vstm3 and Vsigt9) is a 30-34 kDa (in human) member of the CD28 family, Ig superfamily of molecules. It is expressed by NK cells and multiple subsets of mature T cells, and binds to PVR/CD155 and PVR2/CD112 that appear on dendritic cells (DC) and endothelium. Along with CD226, the TIGIT:CD226/DNAM1 and PVR:PVR2 pairings appear to form a network that parallels the well-characterized B7-1:B7-2 and CD28:CTLA4 system. Binding of TIGIT by DC induces DC IL-10 release and inhibits IL-12 production. Ligation of TIGIT on T cells dampens TCR-mediated activation, while NK cell TIGIT ligation blocks NK cell cytotoxicity. Mature mouse TIGIT is a type I transmembrane protein 215 amino acids (aa) in length. It contains a 116 aa extracellular region (aa 26-141) with a V-type Ig-like domain (aa 27-125), and a 79 aa cytoplasmic domain with one ITIM motif. There is one isoform variant that is quite unusual and shows an addition of nine amino acids spread over three insertion sites (SwissProt #:P86176). Mouse and human TIGIT are highly divergent, and over aa 26-143, mouse TIGIT shares only 68% aa sequence identity with human TIGIT.

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