

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TIGIT in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2190A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TIGIT Met1-Thr143 Accession # P86176
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Mouse CD4+ splenocytes

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 Vsig9) 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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