

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TIGIT in direct ELISAs. In direct ELISAs, less than 2% cross-reactivity with recombinant human TIGIT is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TIGIT Gly26-Thr143 Accession # NP_001139797
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 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.

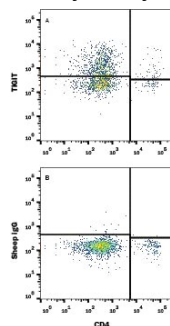
APPLICATIONS

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	5 µL/10 ⁶ cells	See Below

DATA

Flow Cytometry



Detection of TIGIT in Mouse splenocytes by Flow Cytometry.
Mouse splenocytes treated with 50 ng/mL PMA and 200 ng/mL Calcium Ionomycin overnight were stained with Rat Anti-Mouse CD4 APC-conjugated Monoclonal Antibody (Catalog # [FAB554A](#)) and either (A) Sheep Anti-Mouse TIGIT Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # [FAB7267G](#)) or (B) Normal Sheep IgG Allophycocyanin Control (Catalog # [IC016A](#)). View our protocol for [Staining Membrane-associated Proteins](#).

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 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 either PVR/CD155 or PVRL2/CD112 that appear on dendritic cells (DC) and endothelium. Along with CD226, TIGIT and CD226/DNAM1 pairings with PVR and PVRL2 appear to form a network that resembles the well-characterized B7-1 and B7-2 pairings with CD28 and 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 and IFN-γ production. 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 unusual in that it shows an addition of nine amino acids spread over three insertion sites. Over aa 26-143, mouse TIGIT shares only 84% aa sequence identity with rat TIGIT, but only 68% aa sequence identity with human TIGIT.

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