

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 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.