

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human STING/TMEM173 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 723505
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human STING/TMEM173 Ala215-Ser379 Accession # Q86WV6
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	Human peripheral blood mononuclear cell (PBMC) monocytes, THP-1 human acute monocytic leukemia cell line, and U937 human histiocytic lymphoma cell line fixed with paraformaldehyde and permeabilized with saponin

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

STING (Stimulator of Interferon Genes), also called ERIS, MPYS, or MITA and designated TMEM173, is a 40-42 kDa 4-transmembrane protein that mediates both antiviral and MHC-II antigen recognition responses. STING is found predominantly in the endoplasmic reticulum. It acts as an adaptor protein for intracellular viral detection molecules, participating in the induction of type I interferon. It also may play a role in the initiation of apoptosis following MHC-II engagement. Cells known to express STING include B cells, dendritic cells, macrophages, and monocytes. Human STING is 379 amino acids (aa) in length. It contains an N-terminal cytoplasmic region (aa 1-20), four transmembrane segments (aa 21-173), and a C-terminal cytoplasmic domain (aa 174-379). Ubiquitination occurs at Lys150, and phosphorylation occurs at Ser358. STING forms 80 kDa homodimers. There are two potential splice forms, one that shows a 25 aa substitution for aa 1-173, and another that possesses an alternative start site at Met215, coupled to a premature truncation following Arg334. Over aa 215-379, human and mouse STING share 76% aa sequence identity.

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.