

## Human STING/TMEM173 PE-conjugated Antibody

Monoclonal Mouse IgG<sub>2B</sub> Clone # 723505

Catalog Number: IC7169P

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DESCRIPTION				
Species Reactivity	Human			
Specificity	Detects human STING/TMEM173 in direct ELISAs and Western blots.			
Source	Monoclonal Mouse IgG <sub>2B</sub> Clone # 723505			
Purification	Protein A or G purified from hybridoma culture supernatant			
Immunogen	E. coli-derived recombinant human STING/TMEM173 Ala215-Ser379 Accession # Q86WV6			
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 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.			

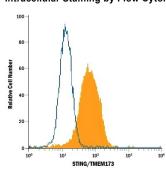
#### APPLICATIONS

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.

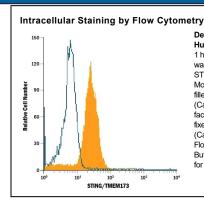
	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 μL/10 <sup>6</sup> cells	See Below

### DATA

### Intracellular Staining by Flow Cytometry

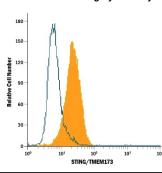


Detection of STING/TMEM173 in Human PBMC Monocytes by Flow Cytometry. Human peripheral blood mononuclear cells (PBMC) monocytes were stained with Mouse Anti-Human STING/TMEM173 PE-conjugated Monoclonal Antibody (Catalog # IC7169P, filled histogram) or isotype control antibody (Catalog # IC0041P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.



Detection of STING/TMEM173 in THP-1 Human Cell Line by Flow Cytometry. THP-1 human acute monocytic leukemia cell line was stained with Mouse Anti-Human STING/TMEM173 PE-conjugated Monoclonal Antibody (Catalog # IC7169P, filled histogram) or isotype control antibody (Catalog # IC0041P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.





Detection of STING/TMEM173 in U937 Human Cell Line by Flow Cytometry. U937 human histiocytic lymphoma cell line was stained with Mouse Anti-Human STING/TMEM173 PE-conjugated Monoclonal Antibody (Catalog # IC7169P, filled histogram) or isotype control antibody (Catalog # IC0041P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

#### 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.

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# Human STING/TMEM173 PE-conjugated Antibody

Monoclonal Mouse  $IgG_{2B}$  Clone # 723505

Catalog Number: IC7169P

25 Tests

#### 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.

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