

Anti-TMEM173 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

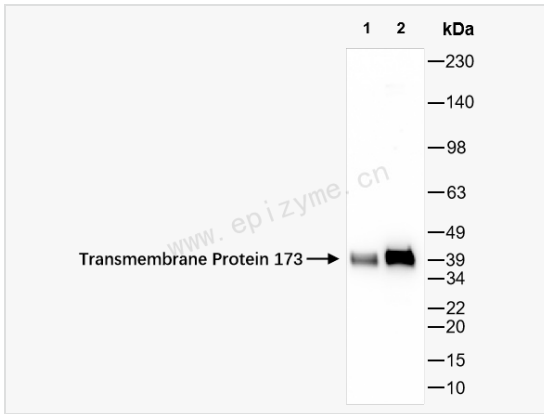
Catalog # R010017

Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	62K99K52
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human TMEM173
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-TMEM173 Rabbit mAb [62K99K52] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	ERIS; MITA; STING; TMEM173; STING1; Stimulator of interferon genes protein; hSTING; Endoplasmic reticulum interferon stimulator; Mediator of IRF3 activation; Transmembrane protein 173; hMITA.
Calculated MW	Calculated MW: 42 kDa; Observed MW: 40 kDa
Uniprot ID	Q86WV6
Gene ID	340061
Background	This gene encodes a five transmembrane protein that functions as a major regulator of the innate immune response to viral and bacterial infections. The encoded protein is a pattern recognition receptor that detects cytosolic nucleic acids and transmits signals that activate type I interferon responses. The encoded protein has also been shown to play a role in apoptotic signaling by associating with type II major histocompatibility complex. Mutations in this gene are the cause of infantile-onset STING-associated vasculopathy. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2014]
Cellular Location	Endoplasmic reticulum membrane.Multi-pass membrane protein.Cytoplasm.Perinuclear region.Endoplasmic reticulum-Golgi intermediate compartment membrane.Multi-pass membrane protein.Golgi apparatus membrane.Multi-pass membrane protein.Cytoplasmic vesicle.Autophagosome membrane.Multi-pass membrane protein.Mitochondrion outer membrane.Multi-pass membrane protein.Cell membrane.Multi-pass membrane protein.In response to double-stranded DNA stimulation, translocates from the endoplasmic reticulum through the endoplasmic reticulum-Golgi intermediate compartment and Golgi to post-Golgi vesicles, where the kinase TBK1 is recruited (PubMed:19433799, PubMed:29694889, PubMed:30842653, PubMed:30842659). Upon cGAMP-binding, translocates to the endoplasmic reticulum-Golgi intermediate compartment (ERGIC) in a process that is dependent on COPII vesicles: STING1-containing ERGIC serves as a membrane source for ILC3



Western Blot - Anti-TMEM173 Rabbit mAb [62K99K52]

All lanes: R010017 at 1:1,000 dilution

Lane 1: Ball-1 (Human B lymphocyte acute leukemia cell) whole cell lysates

Lane 2: K562 (Human chronic myeloid leukemia cell) whole cell lysates

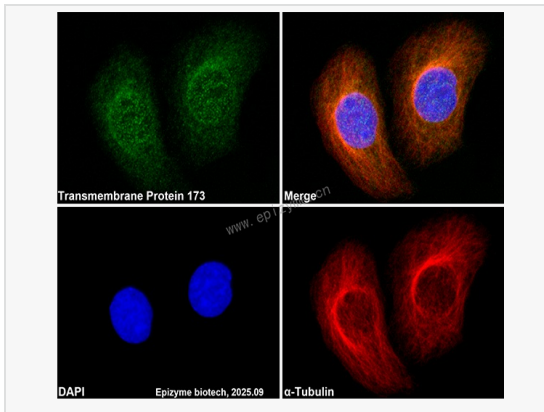
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 42 kDa

Observed band size: 40 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-TMEM173 Rabbit mAb [62K99K52]

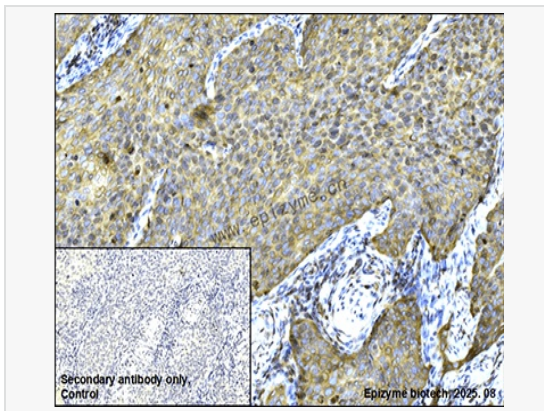
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R010017 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-TMEM173 Rabbit mAb [62K99K52]

Sample: Paraformaldehyde-fixed, paraffin embedded human cervical cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

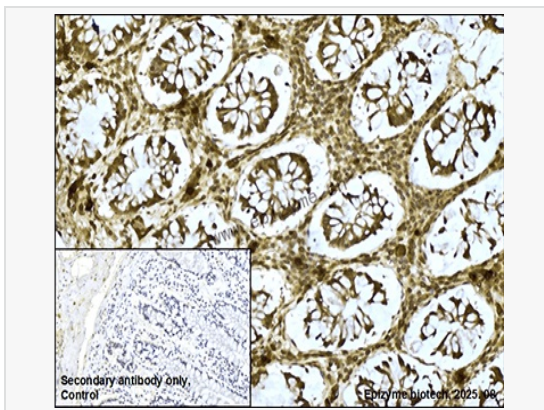
Primary antibody: R010017 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-TMEM173 Rabbit mAb [62K99K52]

Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R010017 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.