

For Research Use Only

# TMEM173/STING Polyclonal antibody



Catalog Number: 19851-1-AP

Featured Product

264 Publications

## Basic Information

### Catalog Number:

19851-1-AP

### Size:

150ul, Concentration: 700 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG13921

### GenBank Accession Number:

BC047779

### GeneID (NCBI):

340061

### UNIPROT ID:

Q86WV6

### Full Name:

transmembrane protein 173

### Calculated MW:

379 aa, 42 kDa

### Observed MW:

35-40 kDa, 80 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:2000-1:8000

IF 1:50-1:500

## Applications

### Tested Applications:

WB, IP, IF, FC, IHC, ELISA

### Cited Applications:

WB, IP, IF, FC, IHC, CoIP, Blocking assay

### Species Specificity:

human, mouse, rat

### Cited Species:

human, rat, mouse, monkey, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: HL-60 cells, mouse spleen tissue, Raji cells, HEK-293 cells, THP-1 cells, HepG2 cells, mouse kidney tissue, HT-29 cells, mouse thymus tissue, C2C12 cells, mouse testis tissue

**IP**: mouse spleen tissue,

**IHC**: human tonsillitis tissue, rat thymus tissue, mouse thymus tissue, human spleen tissue, human liver cancer tissue

**IF**: HT-29 cells, human tonsillitis tissue, THP-1 cells

## Background Information

Stimulator of interferon genes (STING, also known as ERI5, MITA and MPYS, and encoded by TMEM173) is a transmembrane adaptor protein that facilitates innate immune signaling (PMID: 18724357). STING is widely expressed in various cell types such as endothelial cells, epithelial cells, T cells, macrophages, and dendritic cells (PMID: 26603901). It is predominantly located in the endoplasmic reticulum (ER). STING functions as a sensor of cytosolic DNA and promotes the production of type I interferons and pro-inflammatory cytokines. STING is a 379 amino acid protein with a calculated molecular weight of 42 kDa. It has been observed at 35-40 kDa (PMID: 27324217; 29632140; 30918080), and 70-80 kDa corresponding to the expected size of a STING dimer (PMID: 25790474; 29491158).

## Notable Publications

Author	Pubmed ID	Journal	Application
Junzhe Jiao	36174680	Am J Pathol	WB,IHC,IF
Pu Song	36125406	EMBO Rep	WB,IF
Yulin Xu	34578409	Viruses	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

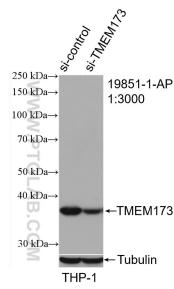
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

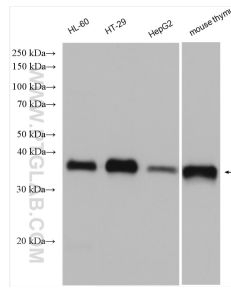
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

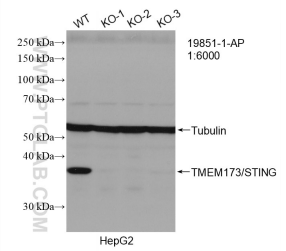
## Selected Validation Data



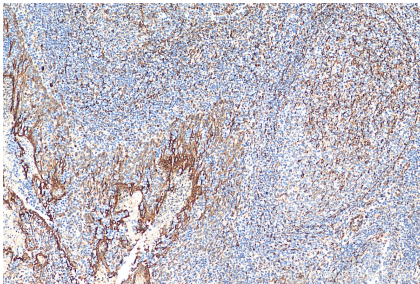
WB result of TMEM173/STING antibody (19851-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TMEM173/STING transfected THP-1 cells.



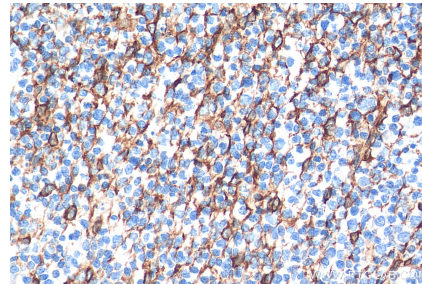
HL-60 cells were subjected to SDS PAGE followed by western blot with 19851-1-AP (TMEM173/STING antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



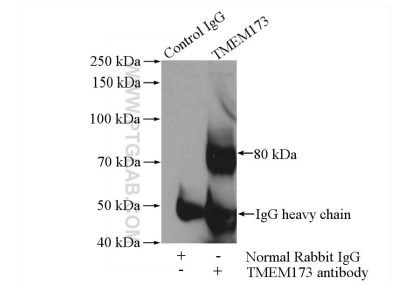
WB result of TMEM173/STING antibody (19851-1-AP; 1:6000; room temperature for 1.5 hours) with wild-type and TMEM173/STING knockout HepG2 cells.



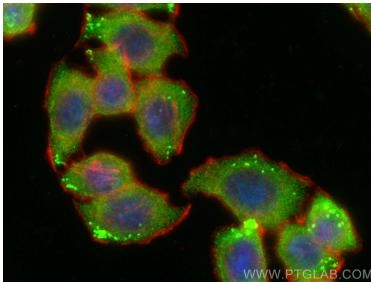
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19851-1-AP (TMEM173/STING antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



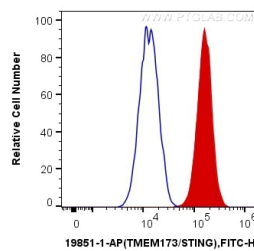
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19851-1-AP (TMEM173/STING antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-TMEM173/STING (IP:19851-1-AP, 4ug; Detection:19851-1-AP 1:1000) with mouse spleen tissue lysate 4000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HT-29 cells using TMEM173/STING antibody (19851-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



1X10<sup>6</sup> THP-1 cells were intracellularly stained with 0.4 ug Anti-Human TMEM173/STING (19851-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).