

TMEM173/STING Polyclonal antibody

Catalog Number: 19851-1-AP

Featured Product

424 Publications

Basic Information

Catalog Number:

19851-1-AP

Size:

150ul, Concentration: 700 ug/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: 1:20000-1:100000

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

IHC: 1:2000-1:8000

IF-P: 1:50-1:500

IF-Fro: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), IP, ELISA

Cited Applications:

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

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, monkey, bovine, hamster

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, HEK-293 cells, HepG2 cells, mouse kidney tissue, mouse spleen tissue, Raji cells, THP-1 cells, HT-29 cells, mouse thymus tissue, C2C12 cells, RAW 264.7 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-P: human tonsillitis tissue,

IF-Fro: mouse brain tissue,

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

FC (Intra): THP-1 cells,

Background Information

Stimulator of interferon genes (STING, also known as ERIS, 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

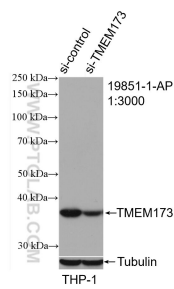
For technical support and original validation data for this product please contact:

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

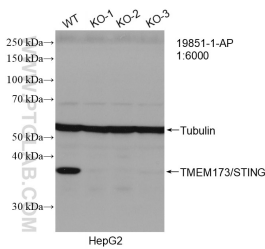
E: proteintech@ptglab.com
 W: ptglab.com

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

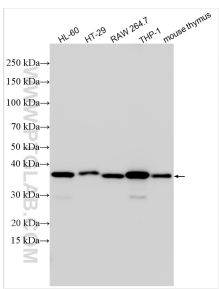
Selected Validation Data



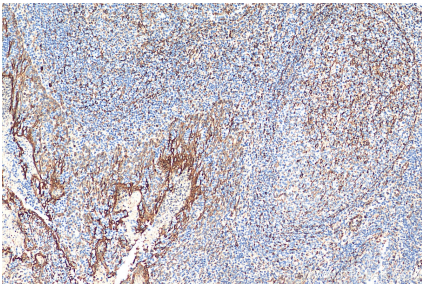
WB result of TMEM173/STING antibody (19851-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TMEM173/STING transfected THP-1 cells.



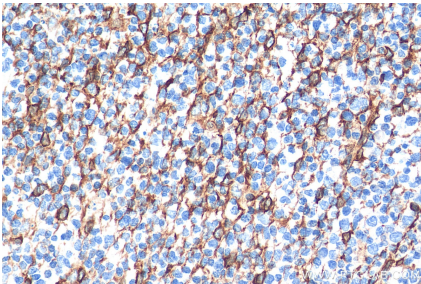
WB result of TMEM173/STING antibody (19851-1-AP; 1:6000; room temperature for 1.5 hours) with wild-type and TMEM173/STING knockout HepG2 cells.



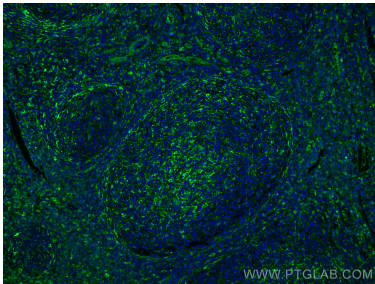
Various lysates were subjected to SDS PAGE followed by western blot with 19851-1-AP (TMEM173/STING antibody) at dilution of 1:60000 incubated at room temperature for 1.5 hours.



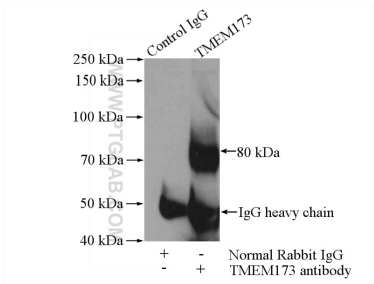
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19851-1-AP (TMEM173/STING antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



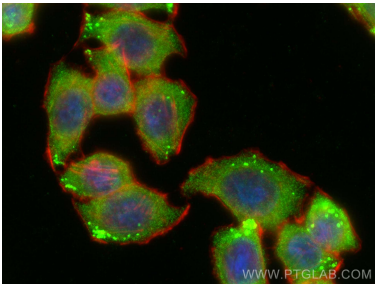
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 19851-1-AP (TMEM173/STING antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



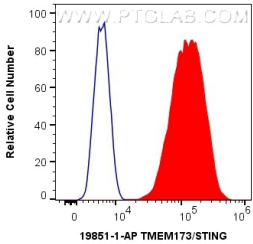
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using TMEM173/STING antibody (19851-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



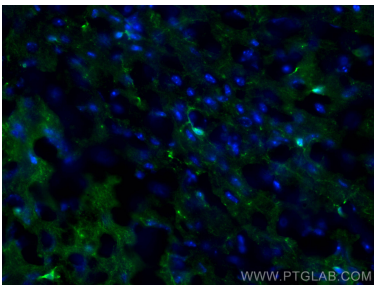
IP result of anti-TMEM173/STING (IP:19851-1-AP, 4ug; Detection:19851-1-AP 1:1000) with mouse spleen tissue lysate 4000ug.



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), CL594-phalloidin (red).



1X10⁶ 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 Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using TMEM173/STING antibody (19851-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).