For Research Use Only

TMEM173/STING Monoclonal antibody

Catalog Number:66680-1-Ig Featured Product 39 Publications

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Basic Information

Catalog Number:
66680-1-Ig

Size:
150ul , Concentration: 1500 ug/ml by Nanodrop and 651 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2b

Immunogen Catalog Number:
AG20363

GenBank Accession Number:
BC047779

GeneID (NCBI):
340061

UNIPROT ID:
Q86WV6

Full Name:
transmembrane protein 173

Calculated MW:
379 aa, 42 kDa

Observed MW:
37 kDa

Purification Method:
Protein A purification

CloneNo.:
1F1E1

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:500-1:2000
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF-P, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, rat

Cited Species:
human, rat

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 : HeLa cells, HepG2 cells, HSC-T6 cells, HEK-293 cells, THP-1 cells, MOLT-4 cells, Jurkat cells

IHC : human tonsillitis tissue, human spleen tissue

IF-P : human tonsillitis tissue,

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
Mu-zi Li	36238763	J Inflamm Res	WB,IHC,IF
Jiaqi Shi	34182334	Cell Immunol	WB
Ming Zou	35347235	Cell Death Differ	WB

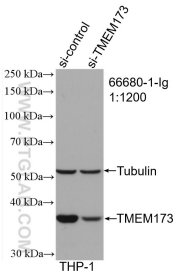
Storage

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

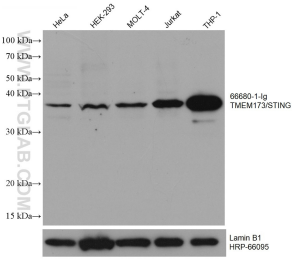
*** 20ul sizes contain 0.1% BSA

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

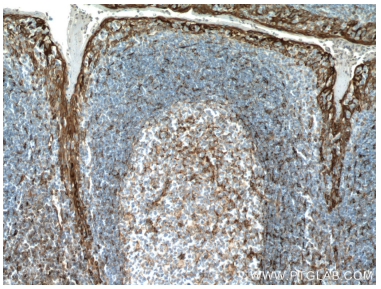
Selected Validation Data



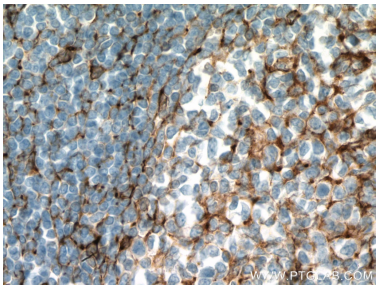
WB result of TMEM173/STING antibody (66680-1-Ig; 1:1200; incubated at room temperature for 1.5 hours) with sh-Control and sh-TMEM173/STING transfected THP-1 cells.



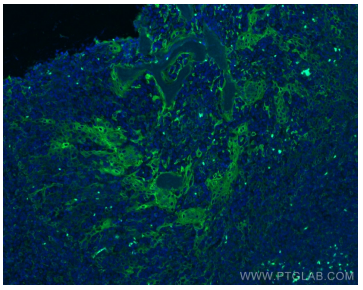
Various lysates were subjected to SDS PAGE followed by western blot with 66680-1-Ig (TMEM173/STING antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66680-1-Ig (TMEM173/STING antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66680-1-Ig (TMEM173/STING antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue using TMEM173/STING antibody (66680-1-Ig, Clone: 1F1E1) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).