For Research Use Only

TMEM173/STING Recombinant antibody

Catalog Number:80165-1-RR

3 Publications



Basic Information

Catalog Number: GenBank Accession Number: **Purification Method:** 80165-1-RR BC047779 Protein A purification

GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 340061

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Q86WV6 WB 1:2000-1:10000

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

Isotype: transmembrane protein 173 IHC 1:1000-1:4000 IgG Calculated MW: IF-P 1:200-1:800 Immunogen Catalog Number: 379 aa, 42 kDa IF-Fro 1:200-1:800 AG13921 Observed MW: IF/ICC 1:50-1:500

37 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, IP, ELISA

Cited Applications: WB, IHC, IF

Species Specificity: human

Cited Species: human, mouse

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, MOLT-4 cells, Jurkat cells, K-562 cells,

THP-1 cells, HSC-T6 cells, NIH/3T3 cells

IHC: human tonsillitis tissue, human colon tissue,

human liver tissue

IF-P: human tonsillitis tissue, IF-Fro: mouse cerebellum tissue.

IF/ICC: THP-1 cells, 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.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|----------------|-----------|---------------------|-------------|
| Congyang Zheng | 39333876 | Mol Med | IF |
| Jiawei Ma | 39121926 | J Ethnopharmacol | WB,IHC,IF |
| Yuyan Guo | 37751655 | Int Immunopharmacol | WB |

Storage

Storage:

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

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

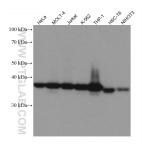
For technical support and original validation data for this product please contact:

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

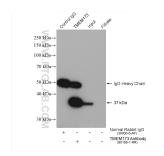
E: proteintech@ptglab.com W: ptglab.com

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

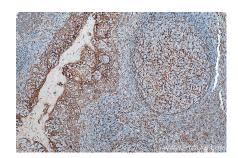
Selected Validation Data



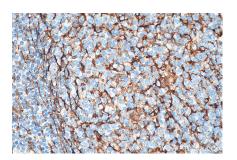
Various lysates were subjected to SDS PAGE followed by western blot with 80165-1-RR (TMEM173/STING antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



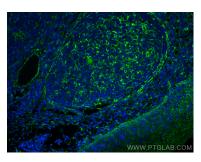
IP result of anti-TMEM173/STING (IP: 80165-1-RR, 4ug; Detection: 80165-1-RR 1:8000) with HeLa cells lysate 1800 ug.



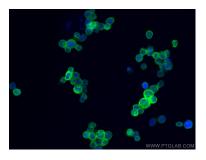
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 80165-1-RR (TMEM173/STING antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



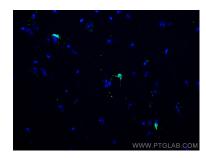
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 80165-1-RR (TMEM173/STING antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



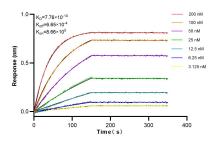
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using TMEM173/STING antibody (80165-1-RR, Clone: 7K7) at dilution of 1:400 and Coralite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using TMEM173/STING antibody (80165-1-RR, Clone: 7K7) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse cerebellum tissue using TMEM173/STING antibody (80165-1-RR, Clone: 7K7) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLL) kinetic assays of 80165-1-RR against Human TMEM173/STING were performed. The affinity constant is 0.776 nM.