For Research Use Only

MCOLN3 Recombinant monoclonal antibody

Catalog Number:86202-1-RR

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Basic Information

Catalog Number:
86202-1-RR

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4962

GenBank Accession Number:
BC060765

GeneID (NCBI):
55283

UNIPROT ID:
Q8TDD5

Full Name:
mucolipin 3

Calculated MW:
64 kDa

Observed MW:
80 kDa

Purification Method:
Protein A purification

CloneNo.:
250799F8

Recommended Dilutions:
WB: 1:1000-1:4000
IHC: 1:5000-1:20000
IF/ICC: 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
human

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 : A375 cells, HeLa cells, SH-SY5Y cells

IHC : human tonsillitis tissue,

IF/ICC : MCF-7 cells, HeLa cells

Background Information

MCOLN3 (Mucolipin 3) is a member of the TRPML (Transient Receptor Potential Mucolipin) gene family and encodes a non-selective cation channel protein that is primarily localized on the membranes of endosomes and lysosomes. MCOLN3 promotes endosome acidification, regulates membrane transport and fusion, and is involved in the autophagy process. Additionally, MCOLN3 is involved in the regulation of intracellular calcium (Ca^{2+}) and iron (Fe^{2+}) ion homeostasis, maintains lysosomal membrane potential, promotes endosome-lysosome fusion and material transport (such as autophagy), and may also be involved in neuronal signaling and immune regulation.

Storage

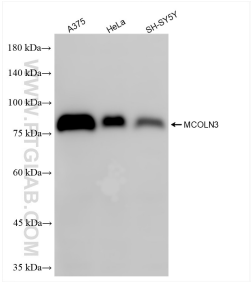
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

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

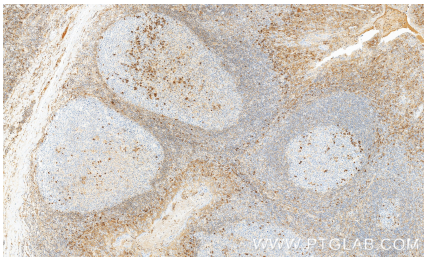
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

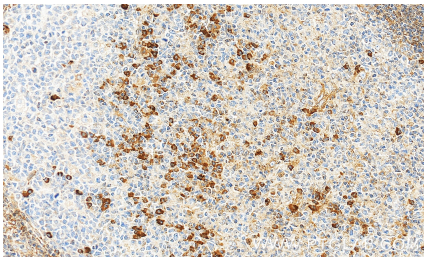
Selected Validation Data



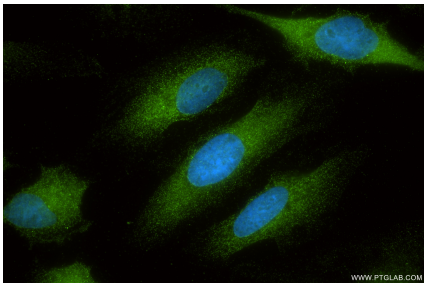
Various lysates were subjected to SDS PAGE followed by western blot with 86202-1-RR (MCOLN3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



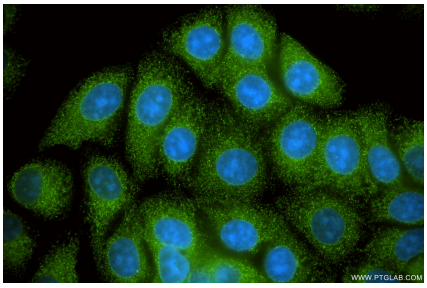
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 86202-1-RR (MCOLN3 antibody) at dilution of 1:10000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



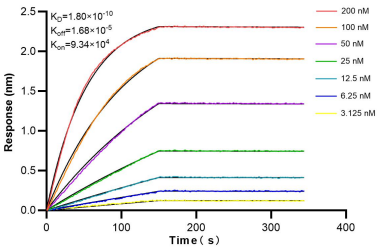
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 86202-1-RR (MCOLN3 antibody) at dilution of 1:10000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using MCOLN3 antibody (86202-1-RR, Clone: 250799F8) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using MCOLN3 antibody (86202-1-RR, Clone: 250799F8) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 86202-1-RR against Human MCOLN3 were performed. The affinity constant is 0.18 nM.