Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-C08

MPYS Antibody

Overview

Description:	Anti-MPYS (RABBIT) Antibody - 600-401-C08
Item No.:	600-401-C08
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	MPYS is a recently identified plasma membrane tetraspanner that is associated with major histocompatibility complex class II (MHC-II) and mediates its transduction of apoptotic signals. It has also been found to be associated with VISA, a mitochondrial protein that acts as an adaptor in virus-triggered signaling. MPYS also interacts with IRF3 and recruits the kinase TBK1 to the VISA-associated complex, acting as a critical mediator of virus-triggered IRF3 activation and interferon (IFN) expression. It is thought that the binding of nucleic acid to the innate immune protein RIG-I causes complex formation between RIG-I, VISA, and MPYS. This complex then recruits TBK1 to phosphorylate IRF3 which then directly activates IFN transcription. At least three isoforms of MPYS are known to exist. Anti-MYPS antibody is ideal for investigators involved transcription factor and infectious disease.
Synonyms:	MPYS, Transmembrane protein 173, TMEM173, ERIS, MITA, STING, Stimulator of interferon genes protein, hSTING, Mediator of IRF3 activation
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TMEM173
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	MPYS Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the c-terminus of human MPYS.
Purity/Specificity:	Anti-MPYS Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with MPYS with Human and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with MPYS from other sources has not been determined.
Relevant Links:	• UniProtKB - Q86WV6 • NCBI - NP_938023 • GeneID - 340061

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-MPYS antibody has been tested in ELISA, WB, IF, and ICC. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~37-42 kDa in size corresponding to MPYS by Western blotting in the appropriate cell lysate or extract. A20 cell lysate may be used as positive control.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IF:	20 µg/mL
WB:	1.0 - 2.0 µg/mL

Formulation

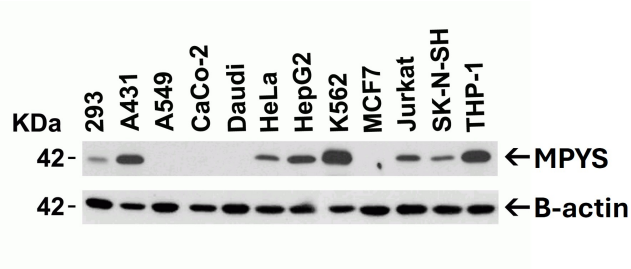
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

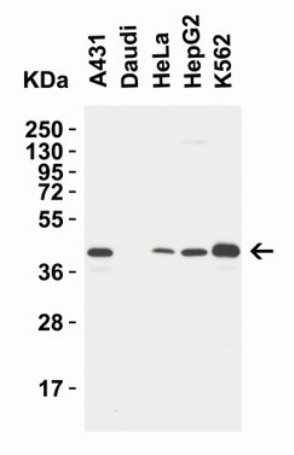
Shipping Condition:	Wet Ice

Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

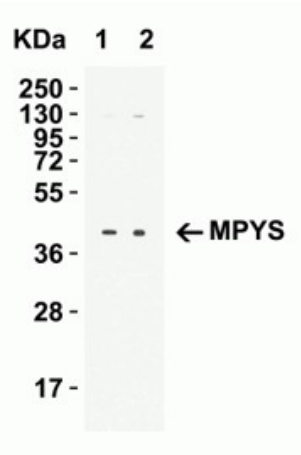
Images



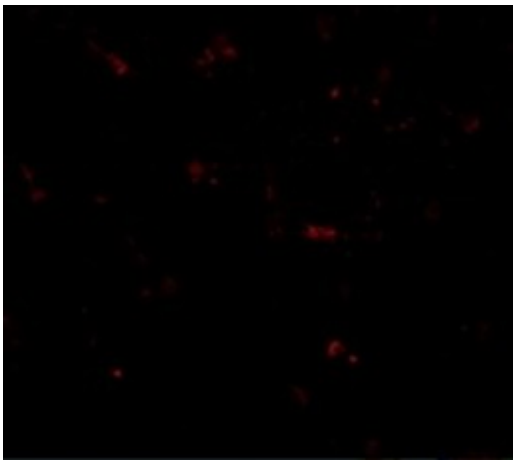
Western Blot
Western Blot using MPYS. Loading: 15 µg of human cell line lysates per lane. Antibodies: MPYS (1 µg/mL), and beta-actin (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



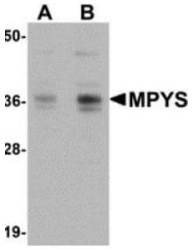
Western Blot
Western Blot Validation using MPYS. Loading: 15 µg of human cell lysates per lane. Antibodies: MPYS (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot Validation using MPYS. Loading: 15 µg of Human THP-1 Cell Lysate per lane. Antibodies: MPYS (Lane 1: 1 µg/mL and Lane 2: 2 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunofluorescence Microscopy
Immunofluorescence Validation of MPYS.
Immunofluorescent analysis of 4% paraformaldehyde-fixed A20 Cells labeling MPYS at 20 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).



Western Blot
Western blot of MPYS Antibody. Lysate: A20 cell lysate. Primary antibody: Anti-MPYS at 1.0 µg/mL (Lane A); 2.0 µg/mL (Lane B). Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.



Immunocytochemistry
Immunocytochemistry showing detection of MPYS in A20 cells. For primary antibody, a concentration of 5µg/mL was used.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.