abcam

Product datasheet

Alexa Fluor® 647 Anti-STING antibody [EPR13130] ab198952

Recombinant RabMAb

Overview

Product name Alexa Fluor® 647 Anti-STING antibody [EPR13130]

Description Alexa Fluor® 647 Rabbit monoclonal [EPR13130] to STING

Host species Rabbit

Conjugation Alexa Fluor® 647. Ex: 652nm, Em: 668nm

Tested applications
Suitable for: ICC/IF
Species reactivity
Reacts with: Human

Immunogen Recombinant fragment within Human TMEM173 aa 250 to the C-terminus. The exact immunogen

sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact**

our Scientific Support team to discuss your requirements.

Database link: **Q86WV6**

Run BLAST with
Run BLAST with

Positive control ICC/IF: HeLa cells.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, 59% PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EPR13130

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab198952 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★ ★ (1)	1/100. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).

Target

Function

Facilitator of innate immune signaling that promotes the production of type I interferon (IFN-alpha and IFN-beta). Innate immune response is triggered in response to non-CpG double-stranded DNA from viruses and bacteria delivered to the cytoplasm. Able to activate both NF-kappa-B and IRF3 transcription pathways to induce expression of type I interferon and exert a potent anti-viral state following expression. May be involved in translocon function, the translocon possibly being able to influence the induction of type I interferons. May be involved in transduction of apoptotic signals via its association with the major histocompatibility complex class II (MHC-II). Mediates death signaling via activation of the extracellular signal-regulated kinase (ERK) pathway.

Tissue specificity Ubiquitously expressed.

Sequence similarities Belongs to the TMEM173 family.

Post-translational modifications

Phosphorylated on tyrosine residues upon MHC-II aggregation (By similarity). Phosphorylated on

Ser-358 by TBK1, leading to activation and production of IFN-beta.

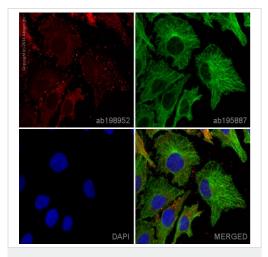
Ubiquitinated. 'Lys-63'-linked ubiquitination mediated by TRIM56 at Lys-150 promotes

homodimerization and recruitment of the antiviral kinase TBK1 and subsequent production of IFN-beta. 'Lys-48'-linked polyubiquitination at Lys-150 occurring after viral infection is mediated by RNF5 and leads to proteasomal degradation.

Cellular localization

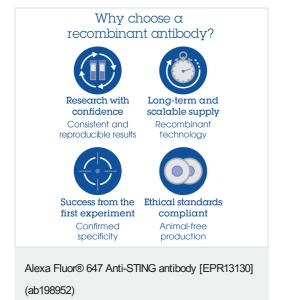
Endoplasmic reticulum membrane. Mitochondrion outer membrane. Cell membrane. Cytoplasm > perinuclear region. In response to double-stranded DNA stimulation, relocalizes to perinuclear region, where the kinase TBK1 is recruited.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-STING antibody [EPR13130] (ab198952) ab198952 staining TMEM173 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab198952 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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