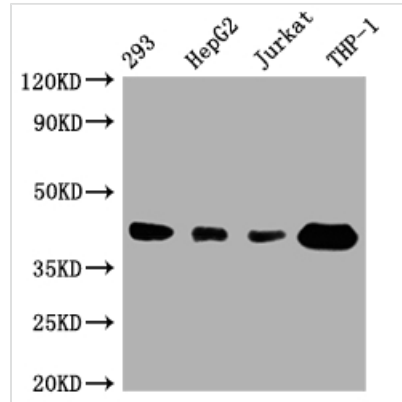




TMEM173 Antibody

Product Code	CSB-RA843206A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q86WV6
Immunogen	A synthesized peptide derived from human TMEM173
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	<p>Facilitator of innate immune signaling that acts as a sensor of cytosolic DNA from bacteria and viruses and 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. Acts by recognizing and binding cyclic di-GMP (c-di-GMP), a second messenger produced by bacteria, and cyclic GMP-AMP (cGAMP), a messenger produced in response to DNA virus in the cytosol: upon binding of c-di-GMP or cGAMP, autoinhibition is alleviated and TMEM173/STING is 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. 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. Essential for the induction of IFN-beta in response to human herpes simplex virus 1 (HHV-1) infection. Exhibits 2',3' phosphodiester linkage-specific ligand recognition. Can bind both 2'-3' linked cGAMP and 3'-3' linked cGAMP but is preferentially activated by 2'-3' linked cGAMP (PubMed:26300263).</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Immunology; Signal transduction
Gene Names	TMEM173
Accession NO.	7C7
Image	


Western Blot

Positive WB detected in: 293 whole cell lysate, HepG2 whole cell lysate, Jurkat whole cell lysate, THP-1 whole cell lysate

All lanes: TMEM173 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 43 kDa

Observed band size: 43 kDa

Description

TMEM173 gene encodes the protein STING (stimulator of interferon genes), a transmembrane protein residing in the endoplasmic reticulum (ER). STING is essential for host defense against DNA viruses and some retroviruses, including HIV, Plasmodium, and Mycobacterium tuberculosis. It recognizes nucleic acids or cyclic nucleotides, initiating the generation of type I IFN and other inflammatory cytokines thus resulting in nucleic-acid driven inflammation. It has been reported that TMEM173 is a key regulator of blood clotting during lethal bacterial infections. STING also influences the development of autoimmune diseases. Gain-of-function human TMEM173 mutations cause STING-associated vasculopathy with onset in infancy (SAVI), a rare life-threatening auto-inflammatory disease.

The recombinant TMEM173 antibody was prepared by obtaining the antibody genes, cloning the genes into a plasma vector to construct vector clone, transfecting the vector clone into a mammalian cell line for transient expression, and purifying the antibody by Affinity-chromatography. This recombinant TMEM173 antibody has been verified to detect the TMEM173 protein from Human in the ELISA, WB.