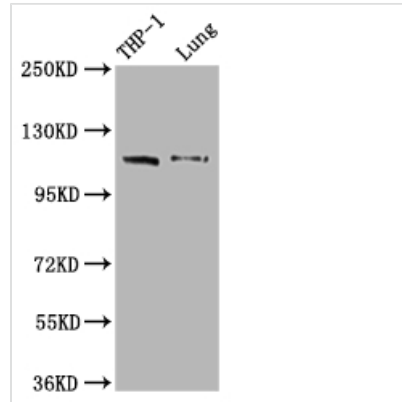




# IFIH1 Antibody

<b>Product Code</b>	CSB-RA963423A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q9BYX4
<b>Immunogen</b>	A synthesized peptide derived from human MDA5
<b>Species Reactivity</b>	Human, Mouse
<b>Tested Applications</b>	ELISA, WB; Recommended dilution: WB:1:500-1:5000
<b>Relevance</b>	<p>Innate immune receptor which acts as a cytoplasmic sensor of viral nucleic acids and plays a major role in sensing viral infection and in the activation of a cascade of antiviral responses including the induction of type I interferons and proinflammatory cytokines. Its ligands include mRNA lacking 2'-O-methylation at their 5' cap and long-dsRNA (&gt;1 kb in length). Upon ligand binding it associates with mitochondria antiviral signaling protein (MAVS/IPS1) which activates the IKK-related kinases: TBK1 and IKKε which phosphorylate interferon regulatory factors: IRF3 and IRF7 which in turn activate transcription of antiviral immunological genes, including interferons (IFNs); IFN-alpha and IFN-beta. Responsible for detecting the Picornaviridae family members such as encephalomyocarditis virus (EMCV) and mengo encephalomyocarditis virus (ENMG). Can also detect other viruses such as dengue virus (DENV), west Nile virus (WNV), and reovirus. Also involved in antiviral signaling in response to viruses containing a dsDNA genome, such as vaccinia virus. Plays an important role in amplifying innate immune signaling through recognition of RNA metabolites that are produced during virus infection by ribonuclease L (RNase L). May play an important role in enhancing natural killer cell function and may be involved in growth inhibition and apoptosis in several tumor cell lines.</p>
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling; Immunology; Microbiology
<b>Gene Names</b>	IFIH1
<b>Accession NO.</b>	3D12
<b>Image</b>	


**Western Blot**

Positive WB detected in: THP-1 whole cell lysate, Mouse lung tissue

All lanes: MDA5 antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 117, 26 kDa

Observed band size: 117 kDa

**Description**

IFIH1 antibody CSB-RA963423A0HU is a recombinant monoclonal antibody produced from the expression of the plasmids that were integrated by the IFIH1 monoclonal antibody DNA sequence in cell lines. The IFIH1 monoclonal antibody was generated from splenocytes isolated from the animals that were immunized with the human MDA5 synthesized peptide. The IFIH1 recombinant antibody is a rabbit IgG antibody. It underwent purification using the affinity-chromatography method. It can detect the IFIH1 protein from human and mouse samples. And it is suitable for ELISA and WB analyses.

IFIH1, also called MDA5, is an interferon-inducible RNA helicase involved in innate immunity. Together with RIG-1, IFIH1 serves as an early-response cytoplasmic double-stranded RNA (dsRNA) sensor to detect viral infections and then trigger antiviral responses through the activation of the IRF3 and NF- $\kappa$ B transcription factors.