

## IFIH1 polyclonal antibody

Catalog: BS61543

Host: Rabbit

Reactivity: Human, Mouse, Rat

### Background:

Antiviral innate immunity depends on the combination of parallel pathways triggered by virus detecting proteins in the Toll-like receptor (TLR) family and RNA helicases, such as Rig-I (retinoic acid-inducible gene I) and MDA-5 (melanoma differentiation-associated antigen 5), which promote the transcription of type I interferons (IFN) and antiviral enzymes. TLRs and helicase proteins contain sites that recognize the molecular patterns of different virus types, including DNA, single-stranded RNA (ssRNA), double-stranded RNA (dsRNA), and glycoproteins. These antiviral proteins are found in different cell compartments; TLRs (i.e. TLR3, TLR7, TLR8, and TLR9) are expressed on endosomal membranes and helicases are localized to the cytoplasm. Rig-I expression is induced by retinoic acid, LPS, IFN, and viral infection. Both Rig-I and MDA-5 share a DExD/H-box helicase domain that detects viral dsRNA and two amino-terminal caspase recruitment domains (CARD) that are required for triggering downstream signaling. Rig-I binds both dsRNA and viral ssRNA that contains a 5'-triphosphate end not seen in host RNA. Though structurally related, Rig-I and MDA-5 detect a distinct set of viruses. The CARD domain of the helicases, which is sufficient to generate signaling and IFN production, is recruited to the CARD domain of the MAVS/VISA/Cardif/IPS-1 mitochondrial protein, which triggers activation of NF- $\kappa$ B, TBK1/IKK $\epsilon$ , and IRF-3/IRF-7.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 116 kDa

### Swiss-Prot:

Q9BYX4

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)

### Applications:

WB: 1:500~1:1000

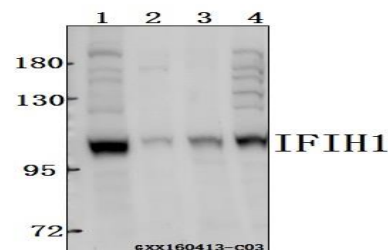
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

IFIH1 polyclonal antibody detects endogenous levels of IFIH1 protein.

### DATA:



Western blot (WB) analysis of IFIH1 polyclonal antibody at 1:500 dilution

Lane1:A549 whole cell lysate(40ug)

Lane2:The Brain tissue lysate of Mouse(40ug)

Lane3:The Placenta tissue lysate of Rat(40ug)

Lane4:SK-OVCAR3 whole cell lysate(40ug)

### Note:

For research use only, not for use in diagnostic procedure.

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