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ECSIT Antibody
Catalog # ASC10264

Specification

ECSIT Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q9BQ95
Other Accession	NP_057665, 20149633
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**ECSIT antibody can be used for detection of ECSIT by Western blot at 0.5 to 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL.**

ECSIT Antibody - Additional Information

Gene ID **51295**

Other Names
ECSIT Antibody: SITPEC, Evolutionarily conserved signaling intermediate in Toll pathway, mitochondrial, Protein SITPEC, ECSIT homolog (Drosophila)

Target/Specificity
ECSIT;

Reconstitution & Storage
ECSIT antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
ECSIT Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ECSIT Antibody - Protein Information

Name ECSIT (HGNC:29548)

Function
Adapter protein that plays a role in different signaling pathways including TLRs and IL-1 pathways or innate antiviral induction signaling. Plays a role in the activation of NF-kappa-B by forming a signal complex with TRAF6 and TAK1/MAP3K7 to activate TAK1/MAP3K7 leading to activation of IKKs (PubMed:25355951, PubMed:31281713). Once ubiquitinated, interacts with the dissociated RELA and NFKB1 proteins and translocates to the nucleus where it induces NF-kappa-B-dependent gene

expression (PubMed:25355951). Plays a role in innate antiviral immune response by bridging the pattern recognition receptors RIGI and MDA5/IFIT1 to the MAVS complex at the mitochondrion (PubMed:25228397). Promotes proteolytic activation of MAP3K1. Involved in the BMP signaling pathway. Required for normal embryonic development (By similarity).

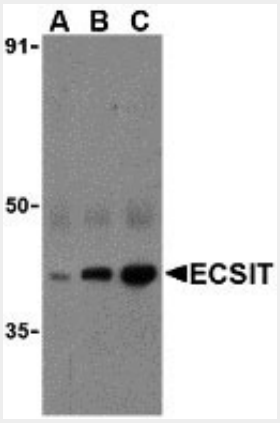
Cellular Location
Cytoplasm. Nucleus. Mitochondrion

ECSIT Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ECSIT Antibody - Images



Western blot analysis of ECSIT in human heart cell lysates with ECSIT antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.

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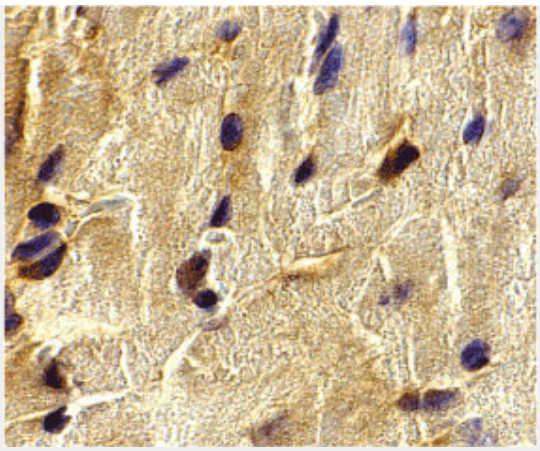

Immunohistochemistry of ECSIT in mouse heart cells with ECSIT antibody at 2 µg/mL.

ECSIT Antibody - Background

ECSIT Antibody: Activation of NF-κB as a result of Toll-like receptor (TLR) and IL-1 receptor signaling is a major component of innate immune responses. Signals from these receptors are relayed by a number of adapter molecules such as TRIF, TIRAP, and MyD88 to kinases such as IRAK and other intermediates such as TNF receptor associated factor (TRAF)-6. ECSIT (evolutionarily conserved signaling intermediate in Toll pathways) was initially identified as a cytoplasmic protein interacting specifically with TNF receptor associated factor (TRAF)-6 in the TLR pathway. Recently however, ECSIT has also been shown to be required for bone morphogenetic protein (Bmp) signaling and mesoderm formation during mouse embryogenesis, indicating the possibility of cross-talk between the TLR/IL-B and Bmp signaling pathways.

ECSIT Antibody - References

Takeda K, Kaisho T, and Akira S. Toll-like receptors. Annu. Rev. Immunol. 2003; 21:335-76.
Vogel SN, Fitzgerald KA, and Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. Mol. Interv. 2003; 3:466-77.
Janssens S and Beyaert R. Functional diversity and regulation of different interleukin-1 receptor-associated kinase (IRAK) family members. Mol. Cell. 2003; 11:293-302.
Sato S, Sugiyama M, Yamamoto M, et al. Toll/IL-1 receptor domain-containing adaptor inducing IFN-β (TRIF) associates with TNF receptor-associated factor 6 and TANK-binding kinase 1, and activates two distinct transcription factors, NF-κ B and IFN-regulatory factor-3, in the Toll-like receptor signaling. J. Immunol. 2003; 171(8):4304-10.