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DHX58 / LGP2 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS12429

Specification

DHX58 / LGP2 Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	Q96C10
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**77kDa KDa**

DHX58 / LGP2 Antibody (Internal) - Additional Information

Gene ID 79132

Other Names
Probable ATP-dependent RNA helicase DHX58, 3.6.4.13, Probable ATP-dependent helicase LGP2, Protein D11Lgp2 homolog, RIG-I-like receptor 3, RLR-3, RIG-I-like receptor LGP2, RLR, DHX58, D11LGP2E, LGP2

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
DHX58 / LGP2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

DHX58 / LGP2 Antibody (Internal) - Protein Information

Name DHX58 (HGNC:29517)

Synonyms D11LGP2E, LGP2

Function
Acts as a regulator of RIGI and IFIH1/MDA5 mediated antiviral signaling. Cannot initiate antiviral signaling as it lacks the CARD domain required for activating MAVS/IPS1-dependent signaling events. Can have both negative and positive regulatory functions related to RIGI and IFIH1/MDA5 signaling and this role in regulating signaling may be complex and could probably depend on characteristics of the infecting virus or target cells, or both. Its inhibitory action on RIG- I signaling may involve the following mechanisms: competition with RIGI for binding to the viral RNA, binding to RIGI and inhibiting its dimerization and interaction with MAVS/IPS1, competing with IKBKE in its binding to MAVS/IPS1 thereby inhibiting activation of interferon regulatory factor 3 (IRF3). Its positive regulatory role may involve unwinding or stripping nucleoproteins of viral RNA thereby facilitating their recognition by RIGI and IFIH1/MDA5. Involved in the innate immune response to various RNA viruses and some DNA viruses such as poxviruses and coronavirus SARS-CoV-2, and also to the bacterial pathogen Listeria monocytogenes (PubMed:<a

href="http://www.uniprot.org/citations/31256877" target="_blank">31256877). Can bind both ssRNA and dsRNA, with a higher affinity for dsRNA. Shows a preference to 5'-triphosphorylated RNA, although it can recognize RNA lacking a 5'-triphosphate.

Cellular Location
Cytoplasm.

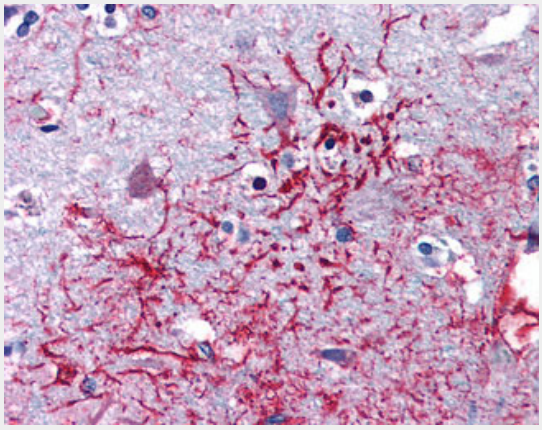
Tissue Location
Expressed in testis, nerve and spleen. Also expressed in the brain.

DHX58 / LGP2 Antibody (Internal) - 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

DHX58 / LGP2 Antibody (Internal) - Images



Anti-DHX58 antibody IHC of human brain, cortex.

DHX58 / LGP2 Antibody (Internal) - Background

Acts as a regulator of DDX58/RIG-I and IFIH1/MDA5 mediated antiviral signaling. Cannot initiate antiviral signaling as it lacks the CARD domain required for activating MAVS/IPS1- dependent signaling events. Can have both negative and positive regulatory functions related to DDX58/RIG-I and IFIH1/MDA5 signaling and this role in regulating signaling may be complex and could probably depend on characteristics of the infecting virus or target cells, or both. Its inhibitory action on DDX58/RIG-I signaling may involve the following mechanisms: competition with DDX58/RIG-I for binding to the viral RNA, binding to DDX58/RIG-I and inhibiting its dimerization and interaction with MAVS/IPS1, competing with IKBKE in its binding to MAVS/IPS1 thereby inhibiting activation of interferon regulatory factor 3 (IRF3). Its positive regulatory role may involve unwinding or stripping nucleoproteins of viral RNA thereby facilitating their recognition by DDX58/RIG-I and IFIH1/MDA5. Involved in the innate immune response to various RNA viruses and some DNA viruses such as poxviruses, and also to the bacterial pathogen Listeria monocytogenes. Can bind both ssRNA and

dsRNA, with a higher affinity for dsRNA. Shows a preference to 5'-triphosphorylated RNA, although it can recognize RNA lacking a 5'-triphosphate.

DHX58 / LGP2 Antibody (Internal) - References

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Yoneyama M.,et al.J. Immunol. 175:2851-2858(2005).
Komuro A.,et al.J. Virol. 80:12332-12342(2006).
Saito T.,et al.Proc. Natl. Acad. Sci. U.S.A. 104:582-587(2007).
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