

# DHX58 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5429a

#### **Product Information**

**Application** WB, IHC-P, E **Primary Accession** Q96C10 **Other Accession** NP 077024.2 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB26842 **Calculated MW** 76613 41-69 **Antigen Region** 

## **Additional Information**

**Gene ID** 79132

Other Names Probable ATP-dependent RNA helicase DHX58, Probable ATP-dependent

helicase LGP2, Protein D11Lgp2 homolog, RIG-I-like receptor 3, RLR-3,

RIG-I-like receptor LGP2, RLR, DHX58, D11LGP2E, LGP2

**Target/Specificity** This DHX58 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 41-69 amino acids from the N-terminal

region of human DHX58.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** DHX58 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name DHX58 ( <u>HGNC:29517</u>)

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: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.

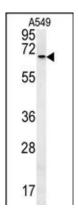
Cellular Location Cytoplasm.

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

### References

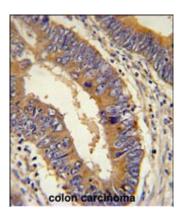
Mosbruger, T.L., et al. J. Infect. Dis. 201(9):1371-1380(2010)
Parisien, J.P., et al. J. Virol. 83(14):7252-7260(2009)
Li, X., et al. J. Biol. Chem. 284(20):13881-13891(2009)
Murali, A., et al. J. Biol. Chem. 283(23):15825-15833(2008)
Saito, T., et al. Proc. Natl. Acad. Sci. U.S.A. 104(2):582-587(2007)
Komuro, A., et al. J. Virol. 80(24):12332-12342(2006)
Yoneyama, M., et al. J. Immunol. 175(5):2851-2858(2005)
Cui, Y., et al. Genomics 78(3):129-134(2001)

# **Images**



DHX58 Antibody (N-term)(Cat. #AP5429a) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the DHX58 antibody detected the DHX58 protein (arrow).

DHX58 Antibody (N-term) (Cat. #AP5429a) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DHX58 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



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