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Mouse Monoclonal Antibody to DHX58

Purified Mouse Monoclonal Antibody
Catalog # AO2348a

Product Information

Application	WB, FC, E
Primary Accession	Q96C10
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6A6A3
Isotype	Mouse IgG2b
Calculated MW	76613
Description	DHX58 (DEXH (Asp-Glu-X-His) box polypeptide 58) is a protein-coding gene. GO annotations related to this gene include single-stranded RNA binding and helicase activity. An important paralog of this gene is IFIH1.;
Immunogen	Purified recombinant fragment of human DHX58 (AA: 479-678) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; FCM: 1/200 - 1/400

Additional Information

Gene ID	79132
Other Names	LGP2; RLR-3; D11LGP2; D11lgp2e
Dilution	WB~~1:1000 FC~~1:10~50 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Monoclonal Antibody to DHX58 is for research use only and not for use in diagnostic or therapeutic procedures.

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: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.

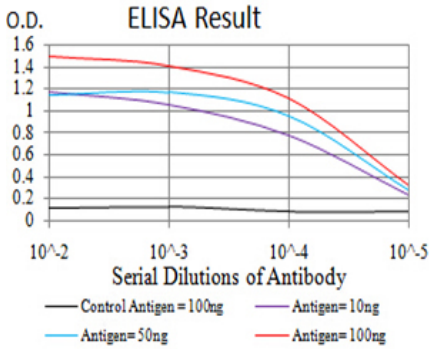
Cellular Location Cytoplasm.

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

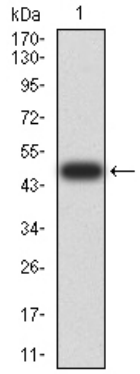
References

1.J Biol Chem. 2009 May 15;284(20):13881-91. ; 2.J Biol Chem. 2008 Jun 6;283(23):15825-33.;

Images

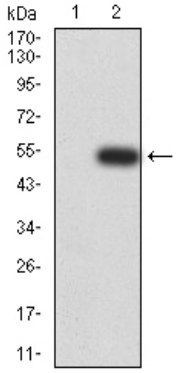


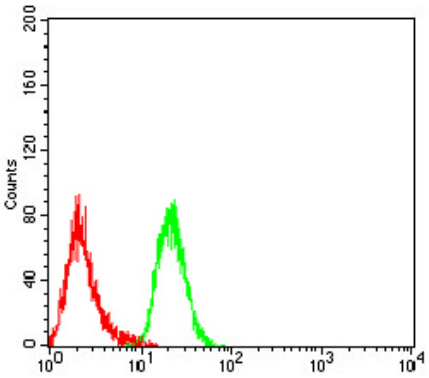
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Western blot analysis using DHX58 mAb against human DHX58 (AA: 479-678) recombinant protein. (Expected MW is 48.7 kDa)

Western blot analysis using DHX58 mAb against HEK293 (1) and DHX58 (AA: 479-678)-hIgGFc transfected HEK293 (2) cell lysate.





Flow cytometric analysis of Hela cells using DHX58 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.