

## DHX58 Polyclonal Antibody

Cat #: ABP58368

Size: 30µl /100µl /200µl

### Product Information

	<b>Product Name:</b> DHX58 Polyclonal Antibody		
	<b>Applications:</b> WB, ELISA		<b>Isotype:</b> Rabbit IgG
	<b>Reactivity:</b> Human, Mouse		
<b>REF</b>	<b>Catalog Number:</b> ABP58368	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Formulation:</b> Liquid		<b>Concentration:</b> 1 mg/ml
	<b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles.		<b>Note:</b> Contain sodium azide.

**Background:** DHX58 (DExH-Box Helicase 58) is a Protein Coding gene. Among its related pathways are RIG-I/MDA5 mediated induction of IFN-alpha/beta pathways and Innate Immune System. GO annotations related to this gene include nucleic acid binding and helicase activity. An important paralog of this gene is IFIH1. 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.

**Application Notes:** Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: WB (1:500-1:2000), ELISA (1:5000-1:20000).

**Storage Buffer:** PBS, pH 7.4, containing 0.02% Sodium Azide as preservative and 50% Glycerol.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested

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