Datasheet for ABIN388602

anti-DDX58 antibody (C-Term)

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Overview

Quantity:	400 µL
Target:	DDX58
Binding Specificity:	AA 894-925, C-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DDX58 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This RIG-I antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 894-925 amino acids from the C-terminal region of human RIG-I.
Clone:	RB8008
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	DDX58
Alternative Name:	RIG-I (DDX58 Products)

Target Details

Background:	DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases which are implicated in a number of cellular processes involving RNA binding and alteration of RNA secondary structure. RIG-I contains RNA helicase-DEAD box protein motifs and a caspase recruitment domain (CARD). It is involved in viral double-stranded (ds) RNA recognition and the innate immune defense against viruses. Upon interaction with intracellular dsRNA produced during viral replication, RIG-I triggers a transduction cascade involving MAVS/IPS1, which results in the activation of NF-kappa-B, IRF3 and IRF7 and the induction of the expression of antiviral cytokines such as IFN-beta and RANTES (CCL5). This protein is essential for the production of interferons in response to RNA viruses including paramyxoviruses, influenza viruses, Japanese encephalitis virus and HCV.
Molecular Weight:	106600
Gene ID:	23586
NCBI Accession:	NP_055129
UniProt:	O95786
Pathways:	Activation of Innate immune Response, Hepatitis C

Application Details

Application Notes:	WB: 1:1000. WB: 1:2000. WB: 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	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.
Expiry Date:	6 months

Publications

Product cited in:

Munday, Howell, Barr, Hiscox: "Proteomic analysis of mitochondria in respiratory epithelial cells infected with human respiratory syncytial virus and functional implications for virus and cell biology." in: **The Journal of pharmacy and pharmacology**, Vol. 67, Issue 3, pp. 300-18, (2015) (PubMed).

Huang, Kolokoltsova, Yun, Seregin, Ronca, Koma, Paessler: "Highly Pathogenic New World and Old World Human Arenaviruses Induce Distinct Interferon Responses in Human Cells." in: **Journal of virology**, Vol. 89, Issue 14, pp. 7079-88, (2015) (PubMed).

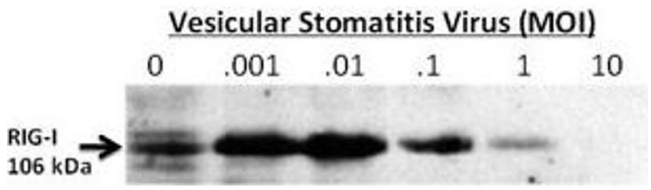
Crill, Furr-Rogers, Marriott: "RIG-I is required for VSV-induced cytokine production by murine glia and acts in combination with DAI to initiate responses to HSV-1." in: **Glia**, (2015) (PubMed).

Feng, Langereis, Lork, Nguyen, Hato, Lanke, Emdad, Bhoopathi, Fisher, Lloyd, van Kuppeveld: " Enterovirus 2Apro targets MDA5 and MAVS in infected cells." in: **Journal of virology**, Vol. 88, Issue 6, pp. 3369-78, (2014) (PubMed).

Huang, Kolokoltsova, Yun, Seregin, Poussard, Walker, Brasier, Zhao, Tian, de la Torre, Paessler: " Junín virus infection activates the type I interferon pathway in a RIG-I-dependent manner." in: **PLoS neglected tropical diseases**, Vol. 6, Issue 5, pp. e1659, (2012) (PubMed).

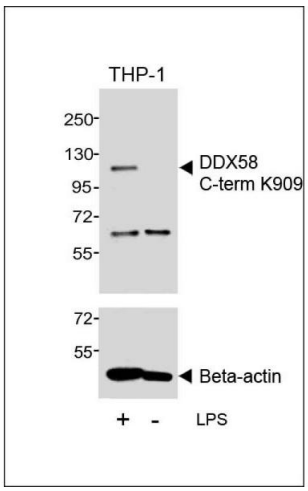
There are more publications referencing this product on: Product page

Images



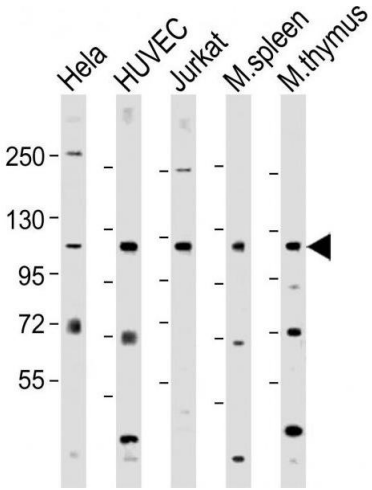
Western Blotting

Image 1. 24-hour post infection immunoblots of whole cell lysates from primary murine microglia cells (2x106) untreated (0) or exposed to vesicular stomatitis virus at a range of viral particle/cell ratios. Data courtesy of Dr. Samantha Furr, University of North Carolina at Charlotte.



Western Blotting

Image 2. Western blot analysis of lysates from THP-1 cell line, untreated or treated with LPS, 1 µg/mL, using DDX58 C-term (upper) or Beta-actin (lower).



Western Blotting

Image 3. All lanes : Anti-DDX58 C-term at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HUVEC whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: mouse spleen lysate Lane 5: mouse thymus lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 107 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.