# **Product Datasheet**

# DDX19B Antibody NB100-760

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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#### NB100-760

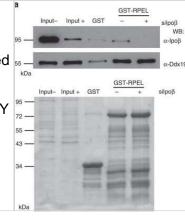
DDX19B Antibody

Product Information	
Unit Size	0.1 ml
Concentration	0.2 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	TBS and 0.1% BSA
Product Description	
Host	Rabbit
Gene ID	11269
Gene Symbol	DDX19B
Species	Human, Mouse
Immunogen	The immunogen recognized by this antibody maps to a region between residue 450 and the C-terminus (residue 479) of human DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B using the numbering given in entry NP_009173.1 (GeneID 11269).
Product Application Details	
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000-1:10000, Immunohistochemistry 1:100-1:500, Immunoprecipitation 2- 5 ug/mg lysate, Immunohistochemistry-Paraffin 1:100-1:500
Application Notes	Epitope retrieval with Tris-EDTA pH 9.0 is recommended for FFPE tissue

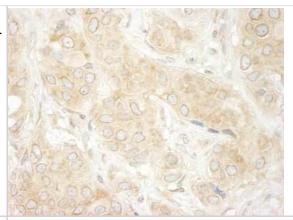
### **Images**

Western Blot: DDX19B Antibody [NB100-760] - Ddx19 binds directly to MKL1 RPEL domain. Recruitment of Ipobeta and Ddx19 from Ipobeta-depleted NIH 3T3 cytoplasmic lysates by GST-RPEL. (-), NIH 3T3 cytoplasmic lysate transfected with control siRNAs; (+), Ipobeta-depleted NIH 3T3 cytoplasmic lysate. Ponceau-stained full membrane (below). Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY license.

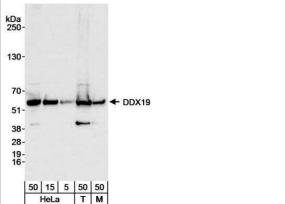
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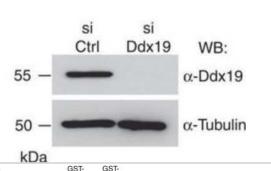
Immunohistochemistry: DDX19B Antibody [NB100-760] - Sample: FFPE section of human breast carcinoma. Antibody: Affinity purified rabbit anti-DDX19 used at a dilution of 1:200 ( 1ug/ml). Detection: DAB



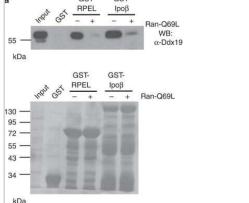
Western Blot: DDX19B Antibody [NB100-760] - Detection of Human and Mouse. Whole cell lysate from HeLa (5, 15 and 50 ug), 293T (T; 50 ug) and NIH3T3 (M; 50 ug) cells. Antibody used at 0.04 ug/ml.



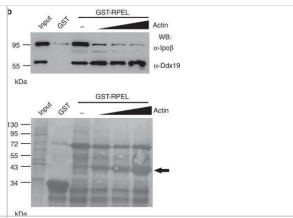
Western Blot: DDX19B Antibody [NB100-760] - Ddx19 is specifically required for the nuclear localization of MKL1. Western blotting (WB) of cells treated with control (Ctrl) or Ddx19 siRNAs (si). Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY license.



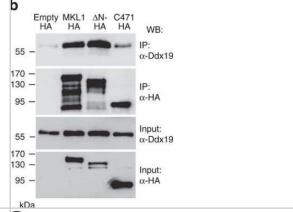
Western Blot: DDX19B Antibody [NB100-760] - Ddx19 interacts with MKL1 RPEL domain and Ipobeta. Ddx19 recruitment from Hela cell lysate by GST-RPEL and GST-Ipobeta (left). WB, western blotting; (-), without Ran-Q69L; (+), with RanQ69L. Corresponding GST baits are stained with Ponceau to ensure the equal loading of the samples (below). Input sample corresponds to 5% of the Hela cell lysate used in the assay. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY license.



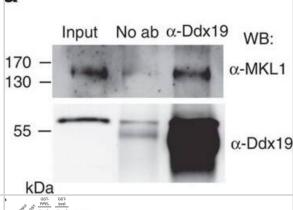
Western Blot: DDX19B Antibody [NB100-760] - Ddx19 interacts with MKL1 RPEL domain and Ipobeta. GST-RPEL was used as a bait for pull down of Ddx19 and Ipobeta from the Hela cell lysate in the presence of increasing amounts of LatB-actin (0.25-10 uM) (left). Arrow indicates the increasing amounts of actin in the corresponding Ponceau staining (below). Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY license.



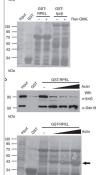
Western Blot: DDX19B Antibody [NB100-760] - MKL1 contains two Ddx19 interaction sites. HA-tagged MKL1 constructs were immunoprecipitated from NIH 3T3 lysates and their expression was detected by HA-antibody. Co-precipitated endogenous Ddx19 was detected by western blotting (WB). Empty HA was used as a negative control. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY license.



Chromatin Immunoprecipitation: DDX19B Antibody [NB100-760] - MKL1 contains two Ddx19 interaction sites.(a) Co-IPs of endogenous MKL1 with endogenous Ddx19. NIH 3T3 cytoplasmic extract was immunoprecipitated with anti-Ddx19 antibody & the immunoprecipitates were blotted for indicated antibodies. Beads without antibody (no ab) were used as a negative control. (b) HA-tagged MKL1 constructs were immunoprecipitated from NIH 3T3 lysates & their expression was detected by HA-antibody. Co-precipitated endogenous Ddx19 was detected by western blotting (WB). Empty HA was used as a negative control. Image collected & cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



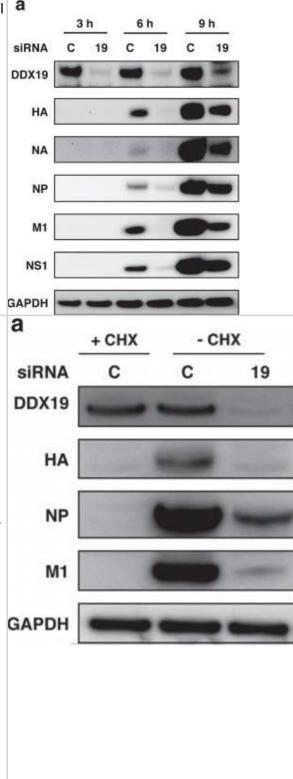
Western Blot: DDX19B Antibody [NB100-760] - Ddx19 interacts with MKL1 RPEL domain & Ipo $\beta$ .(a) Ddx19 recruitment from Hela cell lysate by GST-RPEL & GST-Ipo $\beta$  (left). WB, western blotting; (–), without Ran-Q69L; (+), with RanQ69L. Corresponding GST baits are stained with Ponceau to ensure the equal loading of the samples (below). Input sample corresponds to 5% of the Hela cell lysate used in the assay. (b) GST-RPEL was used as a bait for pull down of Ddx19 & Ipo $\beta$  from the Hela cell lysate in the presence of increasing amounts of LatB-actin (0.25–10  $\mu$ M) (left). Arrow indicates the increasing amounts of actin in the corresponding Ponceau staining (below). Image collected & cropped by CiteAb from the following publication (https://www.nature.com/articles/ncomms6978), licensed under a CC-BY



license. Not internally tested by Novus Biologicals.

Western Blot: DDX19B Antibody [NB100-760] - The accumulation of viral proteins & RNAs is reduced in DDX19-depleted cells.A549 cells were treated with control (C) or DDX19 (19) siRNAs & infected with WSN (5) pfu/cell). (a) Total extracts were prepared at the indicated times postinfection & analyzed by immunoblots using antibodies directed against the indicated proteins. Results representative of 3 independent experiments are shown. Cropped blots are shown. The corresponding full-length blots are shown in Figure S3. (b-e) The levels of NP or NA mRNAs & vRNAs (b or c & d or e, respectively) were determined at the indicated times post-infection by strand specific RT-qPCR & were normalized to the level of the same RNA species at 3 hpi in cells treated with the control siRNAs. The results are expressed as the mean ± SEM of three independent experiments & the significance was tested with a one-sample t test using GraphPad Prism Software (\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001). Dashed lines were used to indicate that the Y-axes have been segmented. Different scales were used for the mRNA & vRNA graphs. Image collected & cropped by CiteAb from the following publication (https://www.nature.com/articles/srep33763), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Western Blot: DDX19B Antibody [NB100-760] - The earliest steps of IAV replication are not affected by DDX19 depletion. A549 cells treated with control (C in a & b, dark grey bars in c & d) or DDX19 (19 in a & b, light grey bars in c & d) siRNAs were infected with WSN (5 pfu/cell). (a) Total extracts from control cells treated with CHX (+CHX) or not (-CHX) were prepared at 6 hpi & analyzed by immunoblots using antibodies directed against the indicated proteins. Cropped blots are shown. The corresponding full-length blots are shown in Figure S4. (b) Cytoplasmic & nuclear fractions were prepared at 4 hpi. Aliquots of the indicated subcellular fractions were analyzed by immunoblots with antibodies directed against MEK1/2 kinase (cytoplasmic marker), TBP (nuclear marker) & NP. Alternatively, total RNAs were extracted & the levels of GAPDH pre-mRNA, a nuclear marker, were determined by real-time RT-PCR. Results are expressed as the mean of two determinations of the crossing point value (Cp). Cropped blots are shown. The corresponding full-length blots are shown in Figure S5. (c,d) Infection was carried out for 6 h in the presence of CHX (100 µg/mL). Total RNAs were isolated from cytoplasmic (solid bars) & nuclear (hatched bars) fractions, & the levels of NP & NA vRNAs were determined by strand specific RT-qPCR. GAPDH The results are expressed as the mean percentages ± SEM of cytoplasmic & nuclear vRNAs levels determined in three independent experiments (c). Total RNAs were extracted & the levels of NP or NA mRNAs & vRNAs were determined by strand specific RT-qPCR. The results are expressed as the mean ratios of mRNA/vRNA ± SEM determined in three independent experiments (d). Image collected & cropped by CiteAb from the following publication (https://www.nature.com/articles/srep33763), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



#### **Publications**

Zhang K, Zhang Y, Xue J et al. DDX19 Inhibits Type I Interferon Production by Disrupting TBK1-IKKe-IRF3 Interactions and Promoting TBK1 and IKKe Degradation Cell Rep 2019-01-29 [PMID: 30699353] (WB, Human)

Diot C, Fournier G, Dos Santos M et al. Influenza A Virus Polymerase Recruits the RNA Helicase DDX19 to Promote the Nuclear Export of Viral mRNAs Sci Rep 2016-09-22 [PMID: 27653209] (WB, Human)

Rajakyla EK, Viita T, Kyheroinen S et al. RNA export factor Ddx19 is required for nuclear import of the SRF coactivator MKL1 Nat Commun. 2015-01-14 [PMID: 25585691] (WB, Human, Mouse)

Zolotukhin AS, Uranishi H, Lindtner S et al. Nuclear export factor RBM15 facilitates the access of DBP5 to mRNA. Nucleic Acids Res 2009-11-01 [PMID: 19786495]





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## **Products Related to NB100-760**

HAF008 Goat anti-Rabbit IgG Secondary Antibody [HRP]

NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

NBP2-24891 Rabbit IgG Isotype Control

H00011269-Q01-10ug Recombinant Human DDX19B GST (N-Term) Protein

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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