

Product Datasheet

DDX54 Antibody - BSA Free NB100-60678

Unit Size: 100 ul

Store at 4C. Do not freeze.

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NB100-60678

DDX54 Antibody - BSA Free

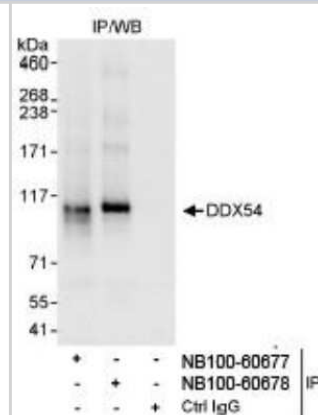
Product Information	
Unit Size	100 ul
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris-Citrate/Phosphate (pH 7.0 - 8.0)

Product Description	
Description	Novus Biologicals Rabbit DDX54 Antibody - BSA Free (NB100-60678) is a polyclonal antibody validated for use in WB and IP. Anti-DDX54 Antibody: Cited in 3 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	79039
Gene Symbol	DDX54
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in (PMID: 22028794).
Immunogen	The immunogen recognized by this antibody maps to a region between residue 800 and 850 of human DEAD (Asp-Glu-Ala-Asp) box polypeptide 54 using the numbering given in entry NP_076977.3 (GenelD 79039).

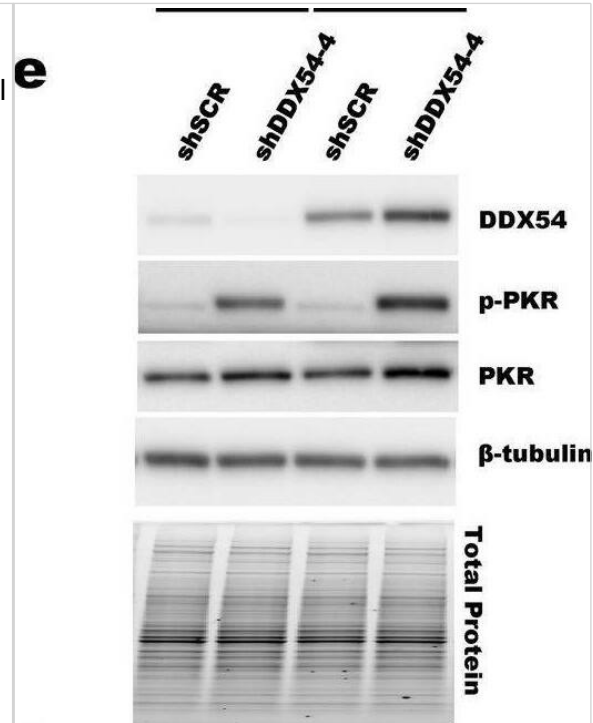
Product Application Details	
Applications	Immunoprecipitation, Western Blot (Negative)
Recommended Dilutions	Immunoprecipitation 2 - 5 ug/mg lysate, Western Blot (Negative)
Application Notes	Western Blot Not recommended, use rabbit anti-DDX54 antibody NB100-60677.

Images

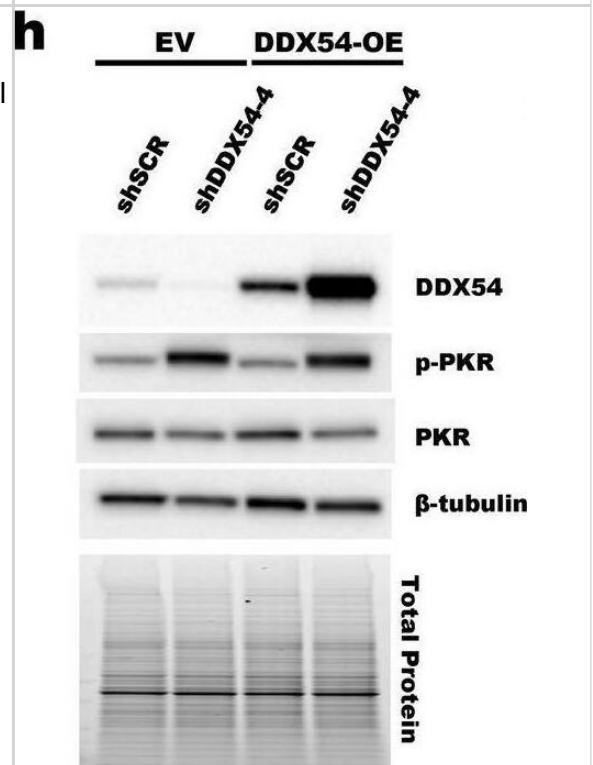
Immunoprecipitation: DDX54 Antibody [NB100-60678] - Detection of Human DDX54 on HeLa whole cell lysate using NB100-60678. DDX54 was also immunoprecipitated by rabbit anti-DDX54 antibody NB100-60677.



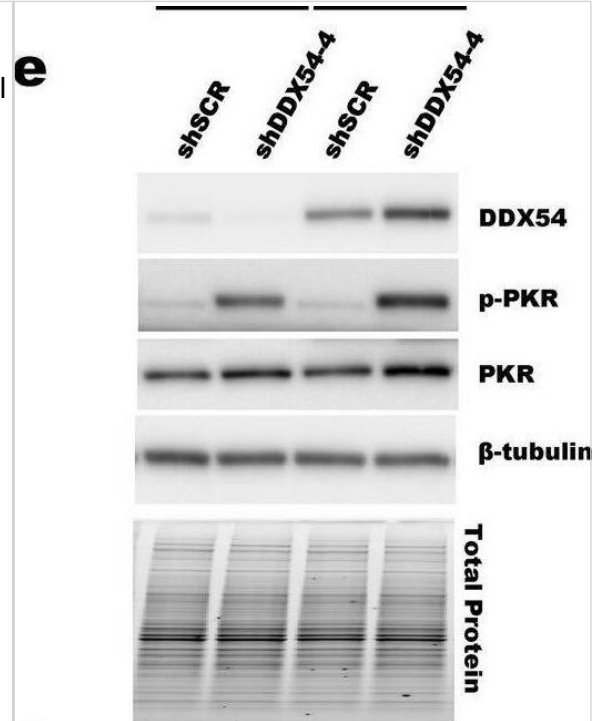
An shRNA targeting DDX54 causes activation of PKR. (a) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 and shDDX54-5 (identical shRNA sequence) in MDA-MB-231 and BT549. Total protein was imaged using a Stain-Free Gel and was used for normalization. (b) Quantification of pPKR/PKR from the immunoblot in (a). See Supplemental Fig. 1 for quantification of other proteins of interest. (c) Quantification of foci formation shown in (d). (e) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control MDA-MB-231 or DDX54 overexpressing (DDX54-OE) MDA-MB-231. (f) Cell proliferation as measured by counting viable cells by trypan blue exclusion. (g) Quantification of immunoblot in (e). (h) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control BT549 or DDX54 overexpressing (DDX54-OE) BT549. (i) Quantification of immunoblot in (h). Bars or larger points represent the average of at least three replicates (shown as differently shaped points), error bars are +/- SD. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. P-values determined by Dunnett's test (b,c) or one-way ANOVA with post-hoc Tukey (g-i). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/39384561>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



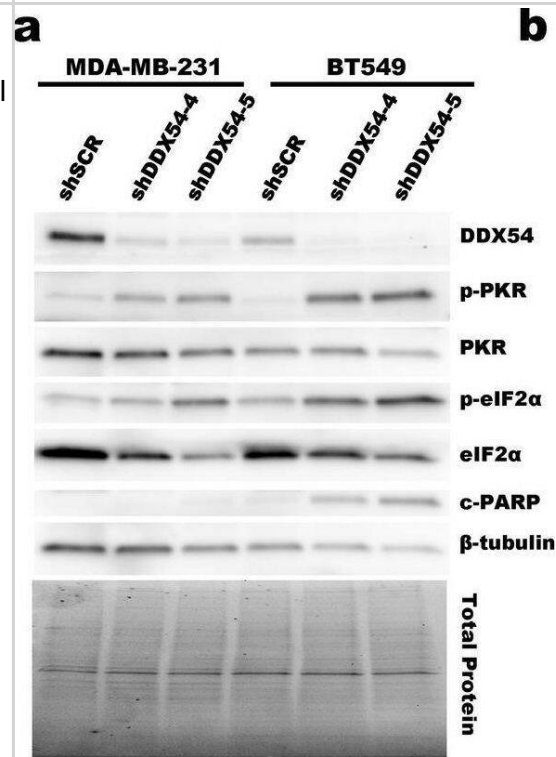
An shRNA targeting DDX54 causes activation of PKR. (a) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 and shDDX54-5 (identical shRNA sequence) in MDA-MB-231 and BT549. Total protein was imaged using a Stain-Free Gel and was used for normalization. (b) Quantification of pPKR/PKR from the immunoblot in (a). See Supplemental Fig. 1 for quantification of other proteins of interest. (c) Quantification of foci formation shown in (d). (e) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control MDA-MB-231 or DDX54 overexpressing (DDX54-OE) MDA-MB-231. (f) Cell proliferation as measured by counting viable cells by trypan blue exclusion. (g) Quantification of immunoblot in (e). (h) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control BT549 or DDX54 overexpressing (DDX54-OE) BT549. (i) Quantification of immunoblot in (h). Bars or larger points represent the average of at least three replicates (shown as differently shaped points), error bars are +/- SD. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. P-values determined by Dunnett's test (b,c) or one-way ANOVA with post-hoc Tukey (g-i). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/39384561>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



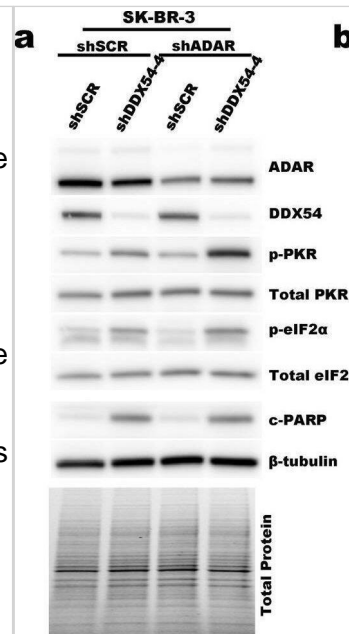
An shRNA targeting DDX54 causes activation of PKR. (a) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 and shDDX54-5 (identical shRNA sequence) in MDA-MB-231 and BT549. Total protein was imaged using a Stain-Free Gel and was used for normalization. (b) Quantification of pPKR/PKR from the immunoblot in (a). See Supplemental Fig. 1 for quantification of other proteins of interest. (c) Quantification of foci formation shown in (d). (e) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control MDA-MB-231 or DDX54 overexpressing (DDX54-OE) MDA-MB-231. (f) Cell proliferation as measured by counting viable cells by trypan blue exclusion. (g) Quantification of immunoblot in (e). (h) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control BT549 or DDX54 overexpressing (DDX54-OE) BT549. (i) Quantification of immunoblot in (h). Bars or larger points represent the average of at least three replicates (shown as differently shaped points), error bars are +/- SD. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. P-values determined by Dunnett's test (b,c) or one-way ANOVA with post-hoc Tukey (g-i). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/39384561>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



An shRNA targeting DDX54 causes activation of PKR. (a) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 and shDDX54-5 (identical shRNA sequence) in MDA-MB-231 and BT549. Total protein was imaged using a Stain-Free Gel and was used for normalization. (b) Quantification of pPKR/PKR from the immunoblot in (a). See Supplemental Fig. 1 for quantification of other proteins of interest. (c) Quantification of foci formation shown in (d). (e) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control MDA-MB-231 or DDX54 overexpressing (DDX54-OE) MDA-MB-231. (f) Cell proliferation as measured by counting viable cells by trypan blue exclusion. (g) Quantification of immunoblot in (e). (h) Representative immunoblot of pPKR and other proteins of interest following knockdown of DDX54 by shDDX54-4 in empty vector (EV) control BT549 or DDX54 overexpressing (DDX54-OE) BT549. (i) Quantification of immunoblot in (h). Bars or larger points represent the average of at least three replicates (shown as differently shaped points), error bars are +/- SD. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. P-values determined by Dunnett's test (b,c) or one-way ANOVA with post-hoc Tukey (g-i). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/39384561>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Knockdown of ADAR1 enhances PKR activation in cells expressing shDDX54-4. (a) Representative immunoblot of pPKR and other proteins of interest in SKBR3 expressing shDDX54-4 or shSCR, with or without knockdown of ADAR1. Total protein was imaged using a Stain-Free Gel and was used for normalization. (b) Quantification of pPKR/PKR from the immunoblot in (a). See Supplemental Fig. 2 for quantification of other proteins of interest. (c) Quantification of foci formation shown in (d) for SK-BR-3. (a) Representative immunoblot of pPKR and other proteins of interest in MCF-7 expressing shDDX54-4 or shSCR, with or without knockdown of ADAR1. Total protein was imaged using a Stain-Free Gel and was used for normalization. (b) Quantification of pPKR/PKR from the immunoblot in (a). See Supplemental Fig. 2 for quantification of other proteins of interest. (c) Quantification of foci formation shown in (d) for MCF-7. Bars represent the average of at least three replicates (shown as differently shaped points), error bars are +/- SD. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. P-values determined by one-way ANOVA with post-hoc Tukey. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/39384561>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Cottrell KA, Ryu S, Pierce JR et al. Induction of Viral Mimicry Upon Loss of DHX9 and ADAR1 in Breast Cancer Cells *Cancer Res Commun* 2024-04-01 [PMID: 38530197]

Cottrell KA, Ryu S, Torres LS et al. Induction of viral mimicry upon loss of DHX9 and ADAR1 in breast cancer cells *bioRxiv : the preprint server for biology* 2023-03-01 [PMID: 36909617] (IP, WB)

Kajiro M, Tsuchiya M, Kawabe Y et al. The E3 ubiquitin ligase activity of Trip12 is essential for mouse embryogenesis. *PLoS One*. 2011-01-01 [PMID: 22028794] (Mouse)



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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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