Product Datasheet

USF2 Antibody - BSA Free
NBP1-92649

Unit Size: 100 ul

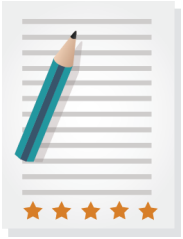
Store at 4C. Do not freeze.

www.novusbio.com technical@novusbio.com

Publications: 4

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-92649

Updated 9/9/2025 v.20.1



NBP1-92649

USF2 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

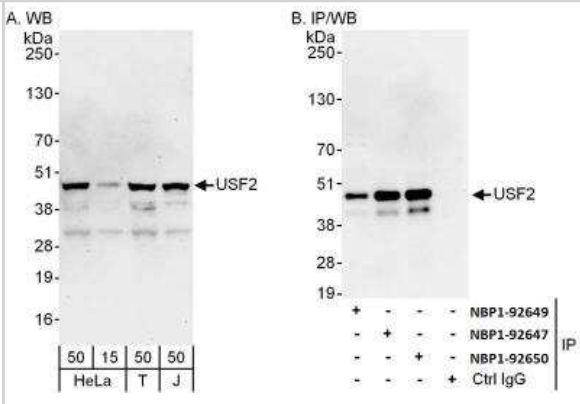
Description	Novus Biologicals Knockout (KO) Validated Rabbit USF2 Antibody - BSA Free (NBP1-92649) is a polyclonal antibody validated for use in IHC, WB and IP. Anti-USF2 Antibody: Cited in 4 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7392
Gene Symbol	USF2
Species	Human, Mouse
Immunogen	The immunogen this antibody was made to, maps to a region between residue 1 and 50 of human Upstream Transcription Factor 2 using the numbering given in entry NP_003358.1 (GeneID 7392).

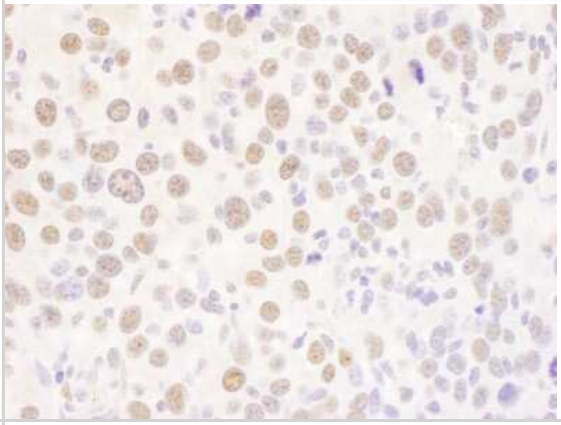
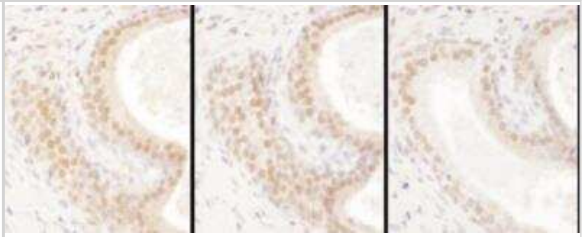
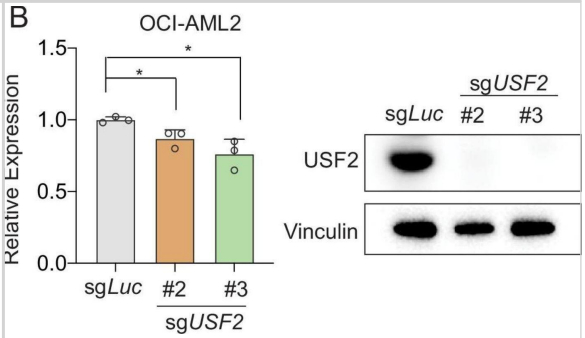
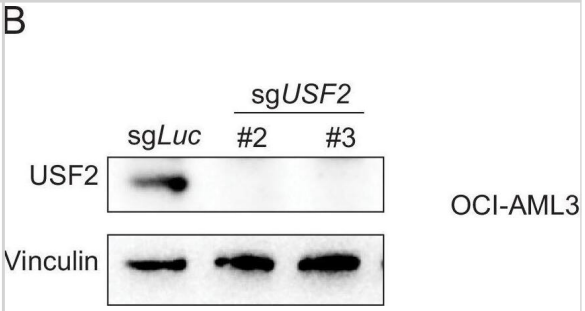
Product Application Details

Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Immunoprecipitation, Knockout Validated
Recommended Dilutions	Western Blot 1:2000-1:10000, Immunohistochemistry 1:1000- 1:5000, Immunoprecipitation 2-10 ug/mg, Immunohistochemistry-Paraffin 1:1000 - 1:5000, Knockout Validated
Application Notes	Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.

Images

Western Blot: USF2 Antibody [NBP1-92649] - Detection of human USF2 by western blot and immunoprecipitation. Samples: Whole cell lysate from HeLa (15 and 50 ug for WB; 1 mg for IP, 20% of IP loaded), HEK293T (T; 50 ug) and Jurkat (J; 50 ug) cells. Antibodies: Affinity purified rabbit anti-USF2 antibody NBP1-92649 used for WB at 0.1 ug/ml (A) and 1 ug/ml (B) and used for IP at 6 ug/mg lysate. USF2 was also immunoprecipitated by rabbit anti-USF2 antibodies NBP1-92647 and NBP1-92650, which recognize downstream epitopes. Detection: Chemiluminescence with exposure times of 3 minutes (A) and 10 seconds (B).



Immunohistochemistry-Paraffin: USF2 Antibody [NBP1-92649] - Sample: FFPE section of mouse renal cell carcinoma. Antibody: Affinity purified rabbit anti- USF2 used at a dilution of 1:1,000 (1ug/ml). Detection: DAB. Counterstain: Hematoxylin (blue).	
Immunohistochemistry-Paraffin: USF2 Antibody [NBP1-92649] - FFPE serial sections of human prostate carcinoma.Antibody: Affinity purified rabbit anti- USF2 left image, middle image and right image used at a dilution of 1:1,000 (1ug/ml). Detection: DAB. Counterstain: Hematoxylin (blue).	
Western Blot: USF2 Antibody [NBP1-92649] - USF2 depletion in MLLr leukemia cells. Q-PCR was performed to validate the transcriptional regulation of HOXA9 upon USF2 targeting by two sgRNAs (sgUSF2#2 and sgUSF2#3) in OCI-AML2 cells. Immunoblotting confirmed the complete depletion of USF2. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/33001025/) licensed under a CC-BY license.	
Western Blot: USF2 Antibody [NBP1-92649] - USF2 depletion in non-MLLr leukemia cells.(A) Q-PCR was performed to validate the transcriptional impact of HOXA9 upon USF2 targeting by two sgRNAs (sgUSF2#2 & sgUSF2#3) in OCI-AML3 cells. Immunoblotting confirmed the complete depletion of USF2. (B) Immunoblotting confirmed the complete depletion of USF2 in OCI-AML3 cells upon USF2 targeting by a sgRNA. (C) Q-PCR was performed to validate the transcriptional impact of HOXA9 upon USF2 targeting by two sgRNAs (sgUSF2#2 & sgUSF2#3) in U937 cells. Immunoblotting confirmed the complete depletion of USF2. (D) Immunoblotting confirmed the complete depletion of USF2 in U937 cells upon USF2 targeting by a sgRNA. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33001025), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

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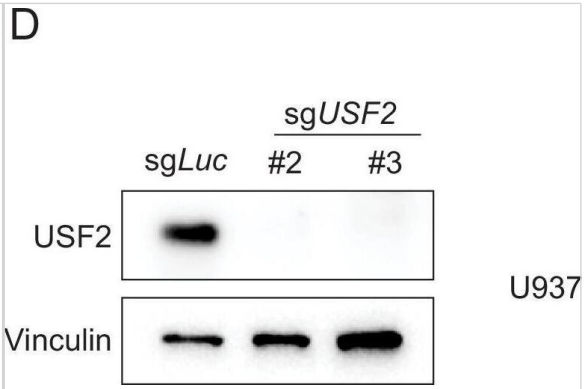
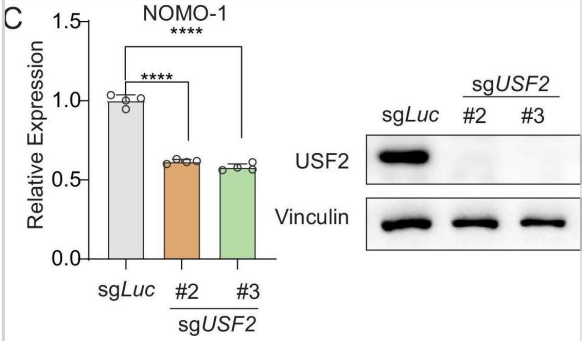
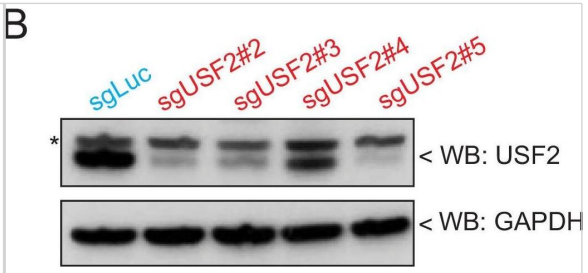


Western Blot: USF2 Antibody [NBP1-92649] - USF2 depletion in MLLr leukemia cells.(A) Flow cytometry analysis was performed on the HOXA9P2A-mCherry SEM cells targeted with lentiviral Cas9 & sgRNAs against USF1, USF2, & USF1/2 (DKO). (B) Q-PCR was performed to validate the transcriptional regulation of HOXA9 upon USF2 targeting by two sgRNAs (sgUSF2#2 & sgUSF2#3) in OCI-AML2 cells. Immunoblotting confirmed the complete depletion of USF2. (C) Q-PCR was performed to validate the transcriptional regulation of HOXA9 upon USF2 targeting by two sgRNAs (sgUSF2#2 & sgUSF2#3) in NOMO-1 cells. Immunoblotting confirmed the complete depletion of USF2. (D) Immunoblotting confirmed the complete depletion of USF1 in SEM cells upon USF1 targeting by a sgRNA. (E) Immunoblotting confirmed the complete depletion of USF1 in OCI-AML2 cells upon USF1 targeting by a sgRNA. (F) Immunoblotting confirmed the complete depletion of USF2 in MOLM13 cells USF2 targeting by two sgRNAs (sgUSF2#2 & sgUSF2#3). (G) Competitive proliferation assay was conducted by infecting MOLM13Cas9 cells with Lentiviral-mCherry-sgRNAs against luciferase (sgLuc) & USF2 (sgUSF2#2, 2#3 & 2#5) at about 50% efficiency. The mCherry% was quantified at days 0, 3, 7, 11, 15, 19, & 23 by flow cytometry to evaluate the growth disadvantage. A guide RNA targeting the survival essential gene RPS19 was included as a positive control for Cas9 activity. Guide RNAs targeting Luciferase gene (sgLuc) & the human ROSA26 gene (sgROSA26) were included as negative controls. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33001025), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: USF2 Antibody [NBP1-92649] - USF2 is required to maintain HOXA9 expression in MLLr leukemia.(A) Flow cytometry analysis was performed at day 8 on the HOXA9P2A-mCherry cells targeted with lentiviral Cas9 & four sgRNAs against USF2. The sgENL-targeted cells were used as positive controls while sgLuc targeted cells were used as negative controls. (B) Q-PCR analysis was conducted on the USF2-targeted cells to monitor the reduction of HOXA9. The sgENL targeted cells were used as positive controls while sgLuc-targeted cells were used as negative controls. Data shown are means ± SEM from three independent experiments. *p<0.05, **p<0.01, ***p<0.001, two-tailed Student's t test. (C) Immunoblotting of USF2 in USF2 sgRNAs targeted cells. '*' denoted non-specific bands. (D) USF2 occupancy changes in sgLuc & sgUSF2-targeted SEM cells were characterized in HOXA9 locus (A1, HOXA1; AS3, HOXA-AS3; A7, HOXA7; A9, HOXA9).Time-course knock-down of USF2 & consequent HOXA9 expression analysis.Flow cytometry analysis was performed at day 0, 4, 6, 8, & 11 on the HOXA9P2A-mCherry cells targeted with lentiviral Cas9 & four sgRNAs against USF2. The sgLuc- & sgRosa26-targeted cells were included as negative controls. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33001025), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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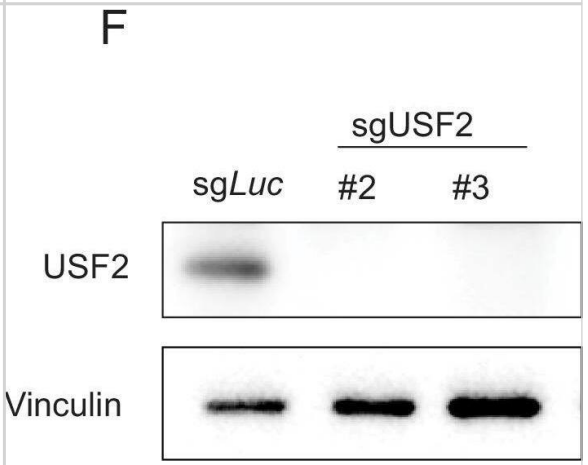

Publications

Pereira, M;Ramalho, T;Andrade, WA;Durso, DF;Souza, MC;Fitzgerald, KA;Golenbock, DT;Silverman, N;Gazzinelli, RT; The IRAK1/IRF5 axis initiates IL-12 response by dendritic cells and control of Toxoplasma gondii infection Cell reports 2024-02-15 [PMID: 38367238]

Pereira M, Durso DF, Bryant CE et al. The IRAK4 scaffold integrates TLR4-driven TRIF and MYD88 signaling pathways Cell reports 2022-08-16 [PMID: 35977521] (WB, Mouse)

Details:
Dilutions: 1:1000

Hyle J, Zhao L, An J et al. Functional Interrogation of HOXA9 Regulome in MLLr Leukemia via Reporter-based CRISPR/Cas9 screen Elife 2020-10-01 [PMID: 33001025]

Xu B, Wang H, Wright S Et al. Acute depletion of CTCF rewires genome-wide chromatin accessibility Genome biology 2021-08-24 [PMID: 34429148] (WB)

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Products Related to NBP1-92649

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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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