Product Datasheet

IRF6 Antibody

NBP1-51911

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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Publications: 8

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Updated 9/9/2025 v.20.1

NBP1-51911

IRF6 Antibody

Product Information

Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA

Product Description

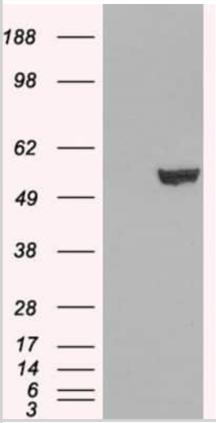
Description	Novus Biologicals Goat IRF6 Antibody (NBP1-51911) is a polyclonal antibody validated for use in IHC, WB, ELISA, IP and ChIP. Anti-IRF6 Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Goat
Gene ID	3664
Gene Symbol	IRF6
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 25358290).
Immunogen	Peptide with sequence C-TPSMQLPPALPPQ corresponding to C-Terminus according to NP_006138.1.

Product Application Details

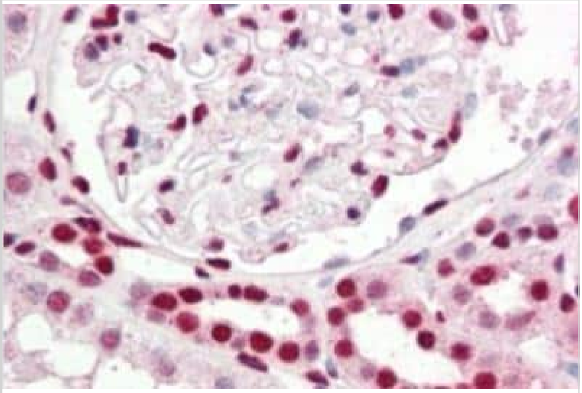
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Peptide ELISA, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 0.2 - 0.6 ug/ml, Immunohistochemistry 2 - 3 ug/ml, Immunohistochemistry-Paraffin 2 - 3 ug/ml, Peptide ELISA Detection limit 1:32000, Chromatin Immunoprecipitation (ChIP)
Application Notes	WB: Approx. 60 kDa band observed in human ovary lysates (calculated MW of 53.1 kDa band according to NP_006138.1). In transfected HEK293 transiently expressing IRF6 a band of approx. 55 kDa is observed. This band is not observed in the non-transfected HEK293. IHC-P: Human kidney shows strong nuclear staining in DCT and glomerulus. Use in chromatin immunoprecipitation reported in scientific literature (PMID: 21807998).

Images

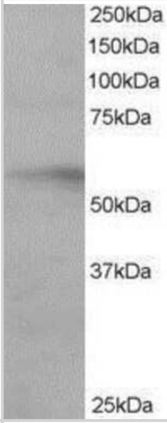
Western Blot: IRF6 Antibody [NBP1-51911] - HEK293 overexpressing IRF6 and probed with (mock transfection in first lane).



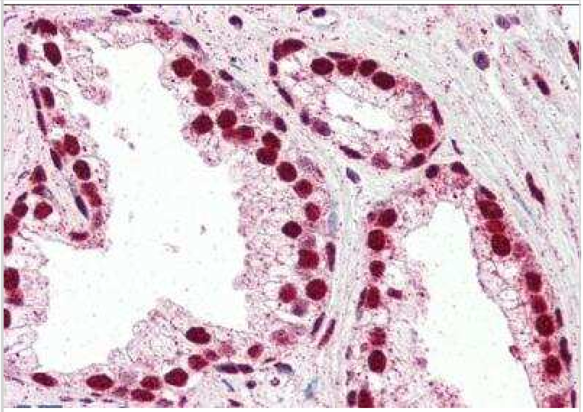
Immunohistochemistry-Paraffin: IRF6 Antibody [NBP1-51911] - Staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

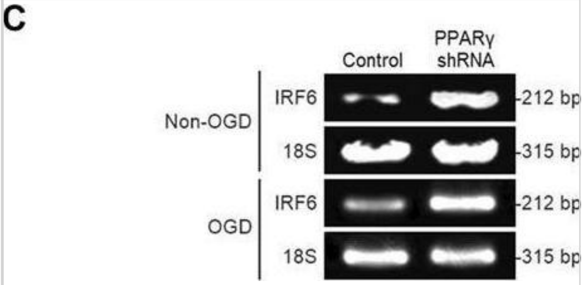


Western Blot: IRF6 Antibody [NBP1-51911] - (0.2ug/ml) of Human Ovary lysate (RIPA buffer, 35ug total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



Immunohistochemistry-Paraffin: IRF6 Antibody [NBP1-51911] - staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.





PPARγ Trans-Represses IRF6 in Cerebrovascular Endothelial Cells. (A) Diagram of the pGL 4.10 luciferase reporter plasmid carrying the murine IRF6 gene promoter sequence 5′-upstream of Luc. Two putative PPRE binding sites were identified at −2206/−2190 bp (PPRE site 1) and −11626/−11606 bp (PPRE site 2). Transcription starts at +1 bp. (B) A luciferase reporter assay was conducted by transfecting murine cerebrovascular endothelial cells with the pGL 4.10 luciferase reporter plasmid delivering either the IRF6 wild-type promoter sequence (IRF6 PPRE WT) or the IRF6 promoter sequence carrying a mutation at one of the two PPRE sites (IRF6 PPRE site 1 mutant or IRF6 PPRE site 2 mutant). Pioglitazone and/or PPARγ gain-of-function significantly elevated IRF6 wild-type promoter activity but did not affect IRF6 PPRE site 1 mutant promoter activity. *P < 0.05 versus control group, †P < 0.05 versus Pioglitazone group, ‡P < 0.05 versus Ad.PPARγ group. (C,D) Real-time PCR on the total RNA content from control and small-hairpin PPARγ RNA (PPARγ shRNA)-transfected murine cerebrovascular endothelial cells revealed that PPARγ silencing significantly elevates IRF6 mRNA expression, particularly more significantly under oxygen-glucose deprivation (OGD) conditions. Cropped blots are displayed here. *P < 0.05 versus same-condition Control group, †P < 0.05 versus Non-OGD PPARγ shRNA group. Data are reported as means +/- standard errors of the mean (SEMs). Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/28526834), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Publications

Kim IK, Diamond M, Yuan S et al. Plasticity-induced repression of Irf6 underlies acquired resistance to cancer immunotherapy Research Square 2023-06-02 [PMID: 37398248]

Boudra R, Patenall BL, King S et al. PRMT1 Inhibition Selectively Targets BNC1-Dependent Proliferation, but not Migration in Squamous Cell Carcinoma bioRxiv : the preprint server for biology 2023-03-27 [PMID: 37034732] (ChIP)

Huang R, Hu Z et al. The Transcription Factor IRF6 Co-Represses PPAR gamma-Mediated Cytoprotection in Ischemic Cerebrovascular Endothelial Cells. Sci Rep 2017-05-19 [PMID: 28526834] (IP, Mouse)

Li C, Ying W, Huang Z et al. IRF6 regulates alternative activation by suppressing PPARg in male murine macrophages. Endocrinology. 2017-06-22 [PMID: 28645193]

Kondo S, Schutte BC, Richardson RJ et al. Mutations in IRF6 cause Van der Woude and popliteal pterygium syndromes. Nat Genet 2002-10-01 [PMID: 12219090]

Hu L, Liu J, Li Z et al. TGFB3 Regulates Periderm Removal through delta-np63 in the Developing Palate J. Cell. Physiol. 2014-10-30 [PMID: 25358290] (WB, Mouse)

Details:
IRF6 antibody used for WB on lysates of medial edge epithelial cells collected from WT mouse at 14.25 dpc subjected to exogenous recombinant rTGF beta 3 (5ng/mL) treatment. Figure 6 i and ii shows the time and concentration dependent response of cells to rTGF beta 3.

Moretti F, Marinari B, Lo Iacono N et al. A regulatory feedback loop involving p63 and IRF6 links the pathogenesis of 2 genetically different human ectodermal dysplasias. J Clin Invest 2010-04-26 [PMID: 20424325] (WB)

Botti E, Spallone G, Moretti F et al. Developmental factor IRF6 exhibits tumor suppressor activity in squamous cell carcinomas. Proc Natl Acad Sci U S A 2011-08-16 [PMID: 21807998] (Chemotaxis)

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Products Related to NBP1-51911

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat 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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