Product Datasheet

ARID5B Antibody - BSA Free
NBP1-83622

Unit Size: 0.1 ml

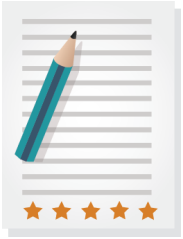
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Publications: 8

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-83622

Updated 12/2/2025 v.20.1



NBP1-83622

ARID5B Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description

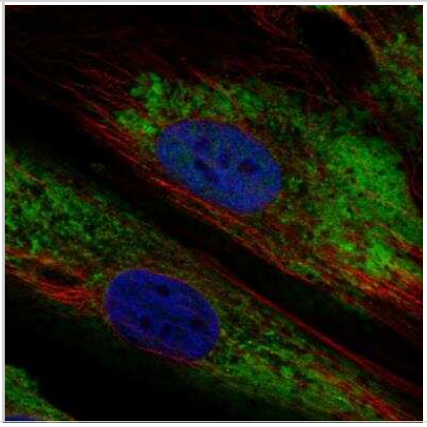
Description	Novus Biologicals Rabbit ARID5B Antibody - BSA Free (NBP1-83622) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and ChIP. Anti-ARID5B Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	84159
Gene Symbol	ARID5B
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 24276541).
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: TSKYPSRDMYRESENSSFPSHRHQEKLHVNYLTSLHLQDKKSAAAEAPTDDQ PTDLSLPKNPHKPTGKVLGLAHSTTGPQESKGISQFQVLGSQSRDCHPKACRV SPMTMSGPKKYPESLSRSGKPHHVRLENFRKME

Product Application Details

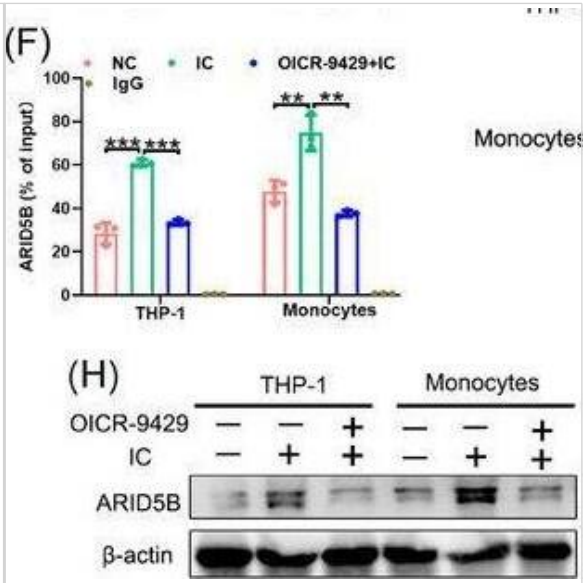
Applications	Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml
Application Notes	ICC/IF Fixation Permeabilization: Use PFA/Triton X-100.

Images

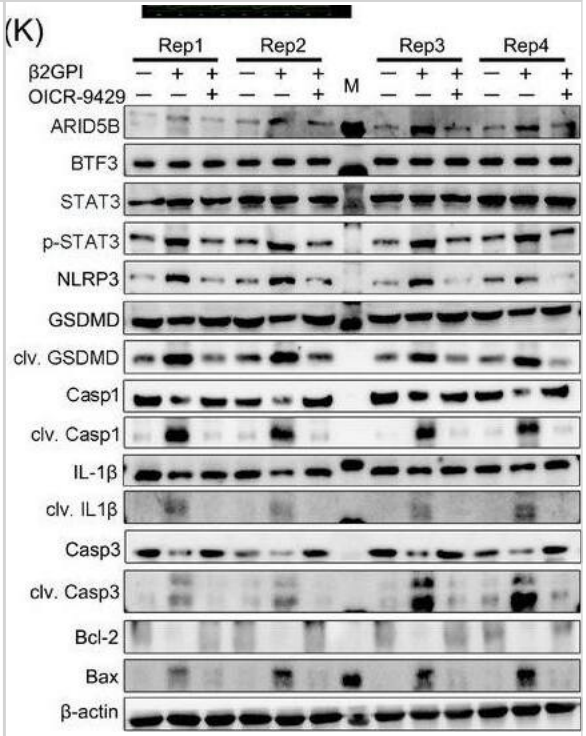
Immunocytochemistry/Immunofluorescence: ARID5B Antibody [NBP1-83622] - Staining of human cell line BJ shows localization to nucleoplasm & endoplasmic reticulum. Antibody staining is shown in green.



Trimethylation of histone 3 lysine 4 (H3K4me3)□mediated ARID5B expression at its promoter. (A) Workflow of β2GPI/anti□β2GPI immune complex (IC) treatment and OICR□9424 exposure in an ex vivo monocyte or THP□1 cell model that partially mimicked antiphospholipid syndrome (APS). (B) Heatmaps of H3K4me3 Cleavage Under Targets and Tagmentation (CUT&Tag) in an ex vivo THP□1 cell and monocyte model of APS. (C) Heatmaps of Transposase□Accessible Chromatin using sequencing (ATAC□Seq) in an ex vivo THP□1 cell and monocyte model of APS. (D) Venn diagram showed the intersection of the unique peaks (ARID5B) in the IC group compared to that in the negative control (NC) group between H3K4me3 CUT&Tag and ATAC□Seq. (E) Integrative Genomics Viewer (IGV) and (F) quantitative PCR (qPCR) showed the relative enrichment levels of H3K4me3 at the promoter of ARID5B. (G) Chromatin accessibility at the ARID5B promoter was displayed using IGV. (H) The protein levels of ARID5B in the ex vivo model of APS were detected using western blotting. (I) Real□time quantitative PCR (RT□qPCR) determined the mRNA expression of ARID5B in the ex vivo model of APS. Data information: error bars represent the mean +/- SD of at least three independent experiments. **p < .01; ***p < .001. β2GPI, beta2□glycoprotein I. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/38224186), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



The activation of ARID5B/LINC01128/BTF3/STAT3 signalling in mice with antiphospholipid syndrome (APS). (A) Workflow of beta2□glycoprotein I (β2GPI) intraperitoneal injection and OICR□9429 exposure, β2GPI was injected once a week for 3 weeks to generate mice with vascular APS in vivo (number of mice in each group = 5). (B) Anti□β2GPI levels, (C) activated partial thromboplastin time (APTT) and (D) platelet count (PLT) were detected in the negative control (NC), β2GPI and OICR□9429+β2GPI groups. (E) The blood velocity of the ascending aorta was tested using Doppler ultrasound in the three groups of mice. (F) The thrombus size of the carotid artery was tested by haematoxylin–eosin (HE) staining in the three groups of mice; original magnification, 100×. (G–I) ELISA displaying the serum levels of interleukin (IL)□18, IL□1β and tissue factor (TF), respectively. (J) Real□time quantitative PCR (RT□qPCR) to detect the expression of LINC01128 in the three groups of mice. (K) Western blotting indicated the expression of ARID5B, BTF3 and p□STAT3/STAT3, the activity of pyroptosis and apoptosis pathways in the three groups of mice. (L) Schematic diagram illustrating the potential mechanism of ARID5B□mediated LINC01128 in p□STAT3□induced pyroptosis and apoptosis activation in APS. Data information: error bars represent the mean +/- SD of at least three independent experiments. M, marker; ns, not significant; **p < .01; ***p < .001. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/38224186), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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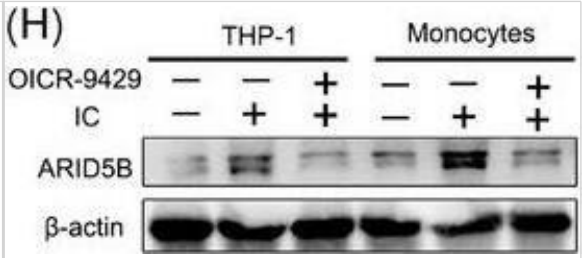
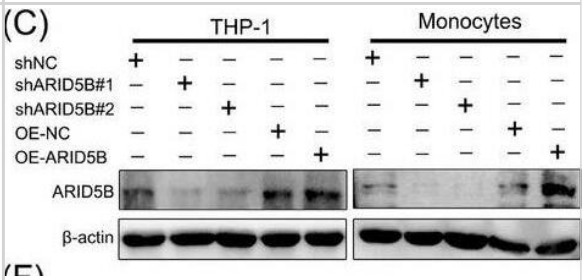
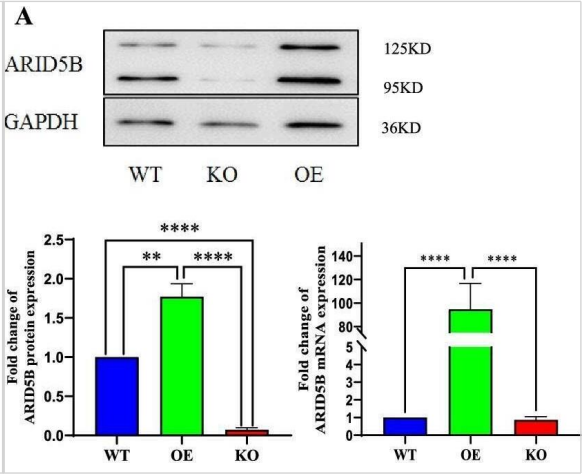


ARID5B transcriptionally activated LINC01128 expression. (A) Schematic representation of eight target long non□coding RNAs (lncRNAs) of ARID5B in anti□ARID5B Cleavage Under Targets and Tagmentation (CUT&Tag) in THP□1 cells. (B) The two binding sites of ARID5B at the LINC01128 promoter were predicted using http://bioinfo.life.hust.edu.cn/hTFtarget#!/website. (C) Western blotting and (D) real□time quantitative PCR (RT□qPCR) analysis of ARID5B expression after transfection with two shRNAs (shARID5B#1 and shARID5B#2) or overexpression lentivirus in THP□1 cells and monocytes. (E) RT□qPCR analysis of LINC01128 expression after transfection with the above shRNAs or overexpression lentivirus. (F) RT□qPCR analysis of LINC01128 expression after treatment with β2GPI/anti□β2GPI immune complex (IC) in shARID5B□THP□1 cells. (G) Integrative Genomics Viewer (IGV) and quantitative PCR (qPCR) representation of anti□ARID5B CUT&Tag at the LINC01128 promoter in the scrambled negative control (shNC)□ and shARID5B□THP□1 cells. (H) Schematic representation of the mutated sequences of potential ARID5B□binding sites on the LINC01128 promoter; luciferase activity after transfection with a reporter containing wild□type (WT□LINC01128) or mutant LINC01128 (Mut□LINC01128) promoter constructs in 293T cells. (I) RNA fluorescence in situ hybridisation (FISH) assay showing the subcellular localisation of LINC01128 in THP□1 cells; U6 was used as a nuclear localisation control; green, LINC01128; red, U6; blue, DAPI. (J) Nuclear fractionation and RT□qPCR analysis of LINC01128 expression in the nucleus and cytoplasm. Data information: error bars represent the mean +/- SD of at least three independent experiments. ns, not significant; *p < .05; **p < .01; ***p < .001. β2GPI, beta2□glycoprotein I. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/38224186), licensed under a CC-BY license. Not internally tested by Novus Biologicals.





ARID5B suppresses the expression of CCR2, MCP-1, and TNF-α and the migration and adhesion of THP-1 cells. A The protein and mRNA expression of ARID5B in wild-type, ARID5B-overexpressing and ARID5B-knockout THP-1 cells. B Relative mRNA expression levels of CCR2, MCP-1, and TNF-α in THP-1 cells. C The migration capacity of THP-1 cells was assessed by Transwell migration assays with an inverted microscope (magnification × 100). D The adhesion of THP-1 cells to HUVECs was assessed using a fluorescence microscope (magnification × 100). All plotted values are the mean +/- SE values of at least three independent experiments. WT, wild type; OE, overexpression; KO, knockout. *p < 0.05, **p < 0.01, ***p < 0.001, ****p < 0.0001 Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/35227297), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Publications

Tan Y, Qiao J, Yang S et Al. ARID5B-mediated LINC01128 epigenetically activated pyroptosis and apoptosis by promoting the formation of the BTF3/STAT3 complex in ?2GPI/anti-?2GPI-treated monocytes Clin Transl Med 2024-01-15 [PMID: 38224186]

Tagawa Y, Saito T, Iwai H et al. ARID5B is a negative modulator of IL-6 production in rheumatoid arthritis synovial fibroblasts. Immunological medicine 2024-08-22 [PMID: 38747454]

Deng Y, Dong Y, Wu L et al. ARID5B promoted the histone demethylation of SORBS2 and hampered the metastasis of Ovarian cancer Pathology - Research and Practice 2023-11-01 [PMID: 37948999] (Immunohistochemistry-Paraffin, Chromatin Immunoprecipitation (ChIP), Immunocytochemistry/ Immunofluorescence, Human)

Xiang Y, Liang B, Zhang X et al. Atheroprotective mechanism by which folic acid regulates monocyte subsets and function through DNA methylation Clinical epigenetics 2022-02-28 [PMID: 35227297] (WB, Human)

Xu H, Zhao X, Bhojwani D et al. ARID5B influences anti-metabolite drug sensitivity and prognosis of acute lymphoblastic leukemia Clin. Cancer Res. 2019-10-01 [PMID: 31573954] (Chemotaxis, Human)

Cichocki F, Wu CY, Zhang B et al. ARID5B regulates metabolic programming in human adaptive NK cells J. Exp. Med. 2018-07-30 [PMID: 30061358] (WB, Chemotaxis, Human)

Nestor CE, Ottaviano R, Reinhardt D et al. Rapid reprogramming of epigenetic and transcriptional profiles in mammalian culture systems Genome Biol. 2015-02-04 [PMID: 25648825] (ICC/IF, Mouse)

Hata K, Takashima R, Amano K et al. Arid5b facilitates chondrogenesis by recruiting the histone demethylase Phf2 to Sox9-regulated genes. Nat Commun. 2013-11-26 [PMID: 24276541] (IHC-P, Mouse)

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NBP1-83622PEP	ARID5B Recombinant Protein Antigen
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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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