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Anti-ARID2 Antibody Picoband®

Catalog Number: A05064

About ARID2

AT-rich interactive domain-containing protein 2 (ARID2) is a protein that in humans is encoded by the ARID2 gene. It is mapped to 12q12. This gene encodes a member of the AT-rich interactive domain (ARID)-containing family of DNA-binding proteins. Members of the ARID family have roles in embryonic patterning, cell lineage gene regulation, cell cycle control, transcriptional regulation and chromatin structure modification. This protein functions as a subunit of the polybromo- and BRG1-associated factor or PBAF (SWI/SNF-B) chromatin remodeling complex which facilitates ligand-dependent transcriptional activation by nuclear receptors. Mutations in this gene are associated with hepatocellular carcinomas. A pseudogene of this gene is found on chromosome1.

Overview

Product Name	Anti-ARID2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-ARID2 Antibody Picoband® catalog # A05064. Tested in IP, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IP, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q68CP9

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ARID2, identical to the related mouse and rat sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml Immunoprecipitation, 0.5-2 ug/ml

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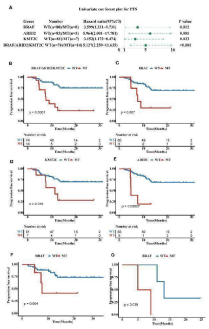
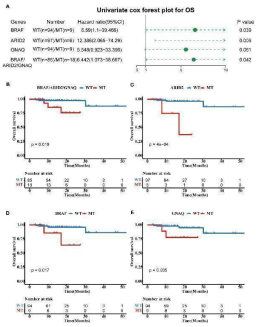
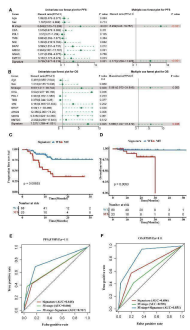
Anti-ARID2 Antibody Picoband® (A05064) Images



Prognostic associated somatic mutated genes in FPHYP CRC cohort. (A) Univariable analyses of PFS concerning somatic gene mutations in FPHYP CRC tumors. (B) Kaplan-Meier curves for PFS between three genes(BRAF , ARID2 , and KMT2C) combined MT and WT groups. (C–E) Kaplan-Meier curves for PFS based on BRAF (C) , ARID2 (D) , and KMT2C (E) mutation status. (F, G) Kaplan-Meier plots of PFS for CRC patients undergoing exclusive first-line chemotherapy (F) and chemotherapy combined with bevacizumab (G) , stratified by BRAF mutation status. PFS, progression-free survival; MT, mutation type; WT, wiled type.Index in PubMed under a CC BY license. PMID: 38023196



Prognostic associated somatic mutated genes in FPHYP CRC cohort. (A) Univariable analyses of OS concerning somatic gene mutations in FPHYP CRC tumors. (B) Kaplan-Meier curves for OS between three genes(BRAF , ARID2 , and KMT2C) combined MT and WT groups. (C–E) Kaplan-Meier curves for PFS based on BRAF (C) , ARID2 (D) , and KMT2C (E) mutation status. OS, overall survival; MT, mutation type; WT, wiled type.Index in PubMed under a CC BY license. PMID: 38023196



Construction of a four-gene mutation signature prediction disease progression and prognosis in FPHYP cohort. (A, B) Univariate and multivariate analyses were performed to assess the impact of clinicopathological features, individual somatic gene mutations, and the four-gene mutation signature on PFS (A) and OS (B) in CRC. (C) The Kaplan-Meier survival analysis for PFS in CRC patients between the four-gene combined MT and WT groups based on BRAF , ARID2 , KMT2C , and GNAQ mutation status. (D) The Kaplan-Meier survival analysis for OS in CRC cases between the four-gene combined MT and WT groups based on BRAF , ARID2 , KMT2C , and GNAQ mutation status. (E, F) ROC curves for PFS (E) and OS (F) that dependent on time were generated to evaluate the prognostic model’s performance, which is based on the gene mutation status within the FPHYP cohort. PFS, progression-free survival; OS, overall survival; MT, mutation type; WT, wiled type; ROC, receiver operating characteristic.Index in PubMed under a CC BY license. PMID: 38023196

Immunohistochemical analysis of BRAF and ARID2 in CRC. (A, B) The BRAF expression original field was acquired from tissue sections (magnification, 200x) of the BRAF -MT (A) and BRAF -WT (B) groups. (C) Comparison of the IOD/Area value between BRAF -MT and BRAF -WT groups. (D, E) The BRAF expression original field was acquired from tissue sections (magnification, 200x) of stage I (D) and stage IV (E) groups. (F) Comparison of the IOD/Area value between stage

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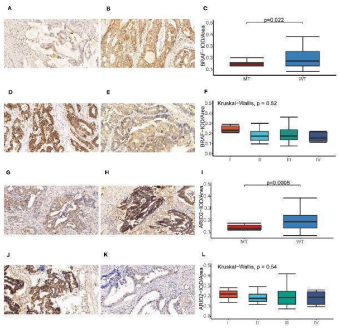
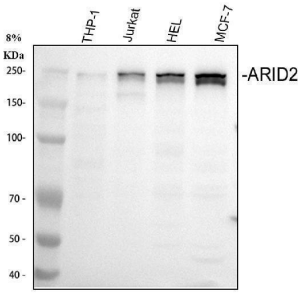
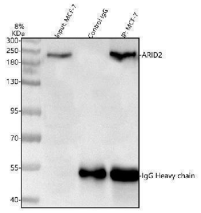


I and IV groups. (G, H) The ARID2 expression original field was acquired from tissue sections (magnification, 200x) of the ARID2 -MT (G) and ARID2 -WT (H) groups. (I) Comparison of the IOD/Area value between ARID2 -MT and ARID2 -WT groups. (J, K) The ARID2 expression original field was acquired from tissue sections (magnification, 200x) of stage I (J) and stage IV (K) groups. (L) Comparison of the IOD/Area value between stage I and IV groups. MT, mutation type; WT, wiled type; IOD, cumulative optical density.Index in PubMed under a CC BY license. PMID: 38023196



Western blot analysis of ARID2 using anti-ARID2 antibody (A05064). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human THP-1 whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human HEL whole cell lysates, Lane 4: human MCF-7 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ARID2 antigen affinity purified polyclonal antibody (A05064) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ARID2 at approximately 245 kDa. The expected band size for ARID2 is at 197 kDa.



Immunoprecipitating ARID2 in MCF-7 whole cell lysate. Western blot analysis of ARID2 using anti-ARID2 antibody (A05064). Lane 1: MCF-7 whole cell lysates (30ug), Lane 2: Rabbit control IgG instead of anti-ARID2 antibody in MCF-7 whole cell lysate, Lane 3: anti-ARID2 antibody (2ug) + MCF-7 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ARID2 antigen affinity purified polyclonal antibody (A05064) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for ARID2 at approximately 245 kDa. The expected band size for ARID2 is at 197 kDa.

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