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Anti-hnRNP D/AUF1/HNRNPD Antibody Picoband® (monoclonal, 2B12)

Catalog Number: M09982

About HNRNPD

Heterogeneous nuclear ribonucleoprotein D0 (HNRNPD) also known as AU-rich element RNA-binding protein 1 (AUF1) is a protein that in humans is encoded by the HNRNPD gene. It is mapped to 4q21.22. This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are nucleic acid binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. While all of the hnRNPs are present in the nucleus, some seem to shuttle between the nucleus and the cytoplasm. The hnRNP proteins have distinct nucleic acid binding properties. The protein encoded by this gene has two repeats of quasi-RRM domains that bind to RNAs. It localizes to both the nucleus and the cytoplasm. This protein is implicated in the regulation of mRNA stability. Alternative splicing of this gene results in four transcript variants.

Overview

Product Name	Anti-hnRNP D/AUF1/HNRNPD Antibody Picoband® (monoclonal, 2B12)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-hnRNP D/AUF1/HNRNPD Antibody Picoband® (monoclonal, 2B12) catalog # M09982. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. 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	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal 2B12
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
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	Mouse
Uniprot ID	Q14103

Technical Details

Immunogen	E.coli-derived human hnRNP D/AUF1/HNRNPD recombinant protein (Position: E88-N246).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG2a

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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, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 4ug/ml, Human Immunofluorescence, 4ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10^6 cells, Human

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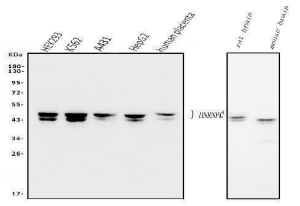
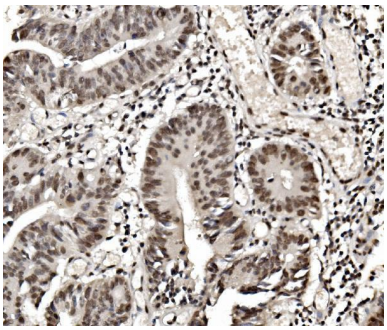
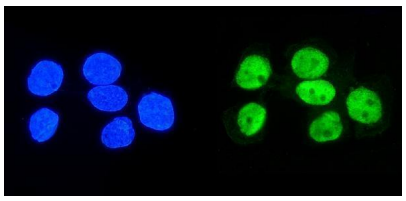
Anti-hnRNP D/AUF1/HNRNPD Antibody Picoband® (monoclonal, 2B12) (M09982) Images



Western blot analysis of hnRNP D/AUF1/HNRNPD using anti-hnRNP D/AUF1/HNRNPD antibody (M09982). 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 50ug of sample under reducing conditions. Lane 1: human HEK293 whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human A431 whole cell lysates, Lane 4: human HEPG2 whole cell lysates, Lane 5: human placenta tissue lysates, Lane 6: rat brain tissue lysates, Lane 7: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-hnRNP D/AUF1/HNRNPD antigen affinity purified monoclonal antibody (Catalog # M09982) 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-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for hnRNP D/AUF1/HNRNPD at approximately 43-45KD. The expected band size for hnRNP D/AUF1/HNRNPD is at 38KD.



IHC analysis of hnRNP D/AUF1/HNRNPD using anti-hnRNP D/AUF1/HNRNPD antibody (M09982). hnRNP D/AUF1/HNRNPD was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-hnRNP D/AUF1/HNRNPD Antibody (M09982) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.



IF analysis of hnRNP D/AUF1/HNRNPD using anti-hnRNP D/AUF1/HNRNPD antibody (M09982). hnRNP D/AUF1/HNRNPD was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 4ug/mL mouse anti-hnRNP D/AUF1/HNRNPD Antibody (M09982) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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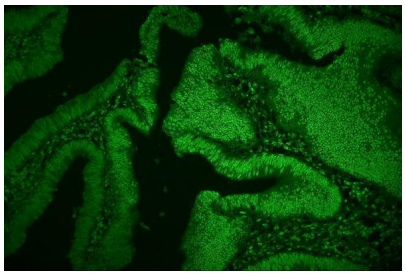
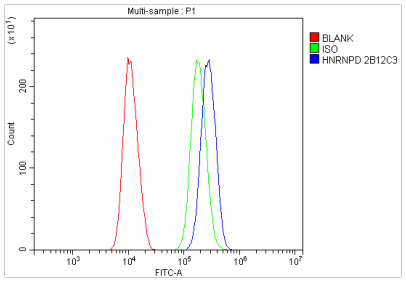
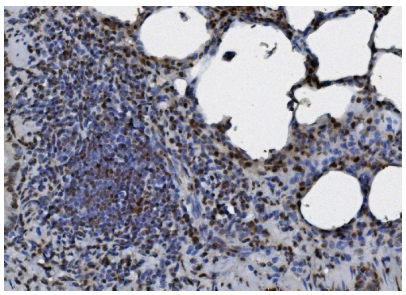


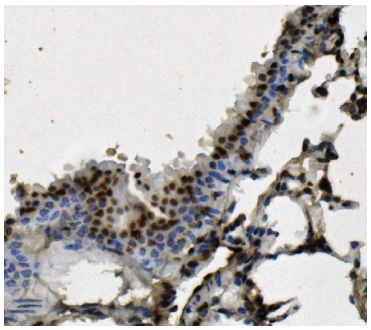
IF analysis of hnRNP D/AUF1/HNRNPD using anti-hnRNP D/AUF1/HNRNPD antibody (M09982). hnRNP D/AUF1/HNRNPD was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 4ug/mL mouse anti-hnRNP D/AUF1/HNRNPD Antibody (M09982) overnight at 4°C. Biotin conjugated goat anti-mouse IgG (BA1001) was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using DyLight®488 Conjugated Avidin (BA1128). The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of SiHa cells using anti- hnRNP D/AUF1/HNRNPD antibody (M09982). Overlay histogram showing SiHa cells stained with M09982 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-hnRNP D/AUF1/HNRNPD Antibody (M09982, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IHC analysis of hnRNP D/AUF1/HNRNPD using anti-hnRNP D/AUF1/HNRNPD antibody (M09982). hnRNP D/AUF1/HNRNPD was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-hnRNP D/AUF1/HNRNPD Antibody (M09982) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.



IHC analysis of hnRNP D/AUF1/HNRNPD using anti-hnRNP D/AUF1/HNRNPD antibody (M09982). hnRNP D/AUF1/HNRNPD was detected in paraffin-embedded section of mouse lung tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-hnRNP D/AUF1/HNRNPD Antibody (M09982) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C.

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The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

Anti-hnRNP D/AUF1/HNRNPD Antibody (monoclonal, 2B12)

For Research Use Only. Not for use in diagnostic procedures.