

Mouse NFIB/NF1B2 Monoclonal Antibody | anti-NFIB antibody

Anti-NFIB/NF1B2 Antibody Picoband (monoclonal, 4D6E4)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126894	Mouse	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

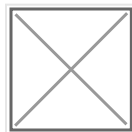
PRODUCT SYNONYMS

NFIB/NF1B2; Monoclonal Antibody; Anti-NFIB/NF1B2 Antibody Picoband (monoclonal; 4D6E4); anti-NFIB antibody

PRODUCT SPECIFICATIONS

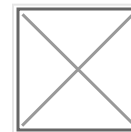
Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	4D6E4
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-NFIB antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	A synthetic peptide corresponding to a sequence of human NFIB/NF1B2 (ELVRVS RTPITQGTGVNFPIGEIPSPYYHDMNSGVNLQR).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of Neuro-2a cells using anti-NFIB/NF1B2 antibody (AAA126894). Overlay histogram showing Neuro-2a cells stained with AAA126894 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-NFIB/NF1B2 Antibody (AAA126894, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



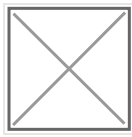
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of C6 cells using anti-NFIB/NF1B2 antibody (AAA126894). Overlay histogram showing C6 cells stained with AAA126894 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-NFIB/NF1B2 Antibody (AAA126894, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



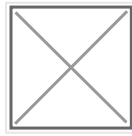
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of A431 cells using anti-NFIB/NF1B2 antibody (AAA126894).Overlay histogram showing A431 cells stained with AAA126894 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-NFIB/NF1B2 Antibody (AAA126894, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of NFIB/NF1B2 using anti-NFIB/NF1B2 antibody (AAA126894).NFIB/NF1B2 was detected in an 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 5 ug/mL mouse anti-NFIB/NF1B2 Antibody (AAA126894) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of NFIB/NF1B2 using anti-NFIB/NF1B2 antibody (AAA126894).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 Hela whole cell lysates,Lane 2: human MCF-7 whole cell lysates,Lane 3: human HepG2 whole cell lysates,Lane 4: human 293T 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 mouse anti-NFIB/NF1B2 antigen affinity purified monoclonal antibody (#AAA126894) at 0.5 ug/mL overnight at 4 degree 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 with Tanon 5200 system. A specific band was detected for NFIB/NF1B2 at approximately 68 kDa. The expected band size for NFIB/NF1B2 is at 68 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-NFIB antibody	Nuclear factor 1 B-type is a protein that in humans is encoded by the NFIB gene. The NFIB gene is a part of the NFI gene complex that includes three other genes (NFIA, NFIC and NFIX). The NFIB gene is a protein coding gene that also serves as a transcription factor. This gene is essential in embryonic development and it works together with its gene complex to initiate tissue differentiation in the fetus. Through knockout experiments, researchers found that mice without the NFIB gene have severely underdeveloped lungs. This mutation does not seem to cause spontaneous abortions because in utero the fetus does not use its lungs for respiration. However, this becomes lethal once the fetus is born and has to take its first breath. It is thought that NFIB plays a role in down regulating the transcription factors TGF-beta1 and Shh in normal gestation because they remained high in knockout experiments. The absence of NFIB also leads to insufficient amounts of surfactant being produced which is one reason why the mice cannot breathe once it is born. The knockout experiments demonstrated that NFIB has a significant role in fore-brain development. NFIB is typically found in pontine nuclei of the CNS, the cerebral cortex and the white matter of the brain and without NFIB these areas are dramatically affected.
Product Categories/Family for anti-NFIB antibody	Primary Antibodies , Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	45644934
NCBI GeneID	4781
UniProt Accession #	O00712 ; O00166 ; Q12858 ; Q5VW29 ; Q63HM5 ; Q6ZNF9 ; Q96J45 ; G3V1P1 ; H7BYE8
Molecular Weight	420
NCBI Official Full Name	Nuclear factor 1 B-type
NCBI Official Synonym Full Names	nuclear factor I/B

NCBI Official Symbol	NFIB
NCBI Official Synonym Symbols	CTF; NF1-B; NFI-B; NFIB2; NFIB3; NF-I/B; NFI-RED; HMGIC/NFIB
NCBI Protein Information	nuclear factor 1 B-type; nuclear factor 1/B; TGGCA-binding protein; CCAAT-box-binding transcription factor
UniProt Protein Name	Nuclear factor 1 B-type
UniProt Gene Name	NFIB
UniProt Synonym Gene Names	NF1-B; Nuclear factor 1/B; CTF; NF-I/B; NFI-B
UniProt Entry Name	NFIB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/nfib-nf1b2-antibody-clone-4d6e4-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/126894>