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Anti-NFIA Antibody Picoband™ (monoclonal, 16H11)

Catalog # ABO14836

Specification

Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) - Product Information

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	Q12857
Host	**Mouse**
Isotype	**Mouse IgG2b**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) . Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) - Additional Information

Gene ID 4774

Other Names
Nuclear factor 1 A-type, NF1-A, Nuclear factor 1/A, CCAAT-box-binding transcription factor, CTF, Nuclear factor I/A, NF-I/A, NFI-A, TGGCA-binding protein, NFIA, KIAA1439

Calculated MW
62 kDa KDa

Application Details
Western blot, 0.1-0.5 µg/ml
 Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml
 Immunocytochemistry/Immunofluorescence, 2 µg/ml
 Flow Cytometry, 1-3 µg/1x10^6 cells

Subcellular Localization
Nucleus

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human NFIA, different from the related mouse sequence by one amino acid, and identical to the related rat sequence.

Cross Reactivity
No cross-reactivity with other proteins.

Storage	**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.

Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) - Protein Information

Name NFIA

Synonyms KIAA1439

Function
Recognizes and binds the palindromic sequence 5'- TTGGCNNNNNGCCAA-3' present in viral and cellular promoters and in the origin of replication of adenovirus type 2. These proteins are individually capable of activating transcription and replication.

Cellular Location
Nucleus.

Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) - Images

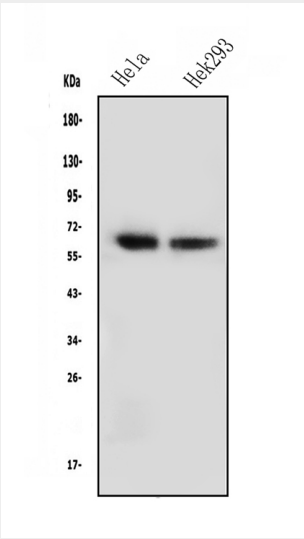

Figure 1. Western blot analysis of NFIA using anti-NFIA antibody (M03531).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving

gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates;
Lane 2: human HEK293 whole cell 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-NFIA antigen affinity purified monoclonal antibody (Catalog # M03531) at 0.5 µg/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 NFIA at approximately 62KD. The expected band size for NFIA is at 62KD.

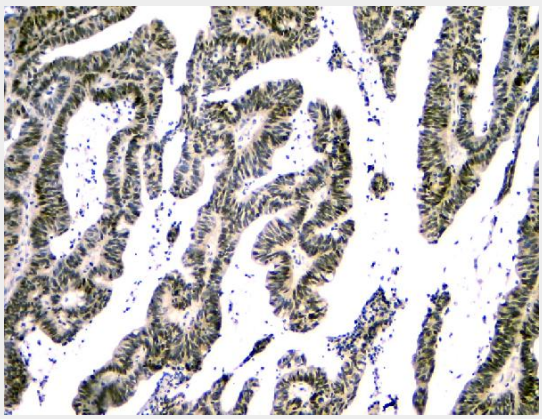

Figure 2. IHC analysis of NFIA using anti-NFIA antibody (M03531).
NFIA was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-NFIA Antibody (M03531) 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.

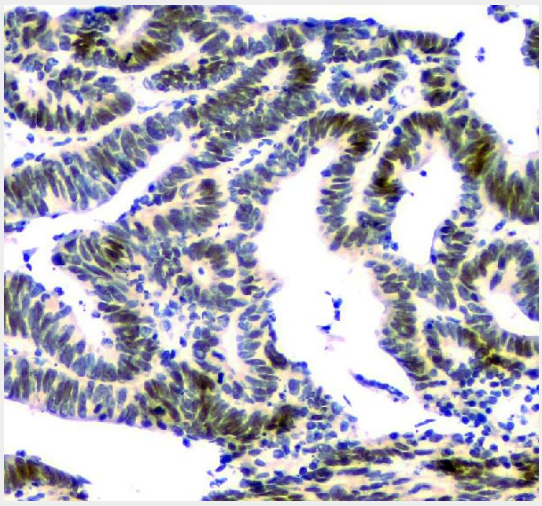

Figure 3. IHC analysis of NFIA using anti-NFIA antibody (M03531).
NFIA was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-NFIA Antibody (M03531) 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.

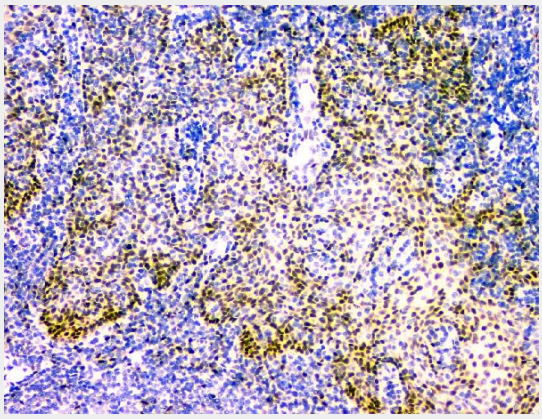

Figure 4. IHC analysis of NFIA using anti-NFIA antibody (M03531).
NFIA was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-NFIA Antibody (M03531) 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.

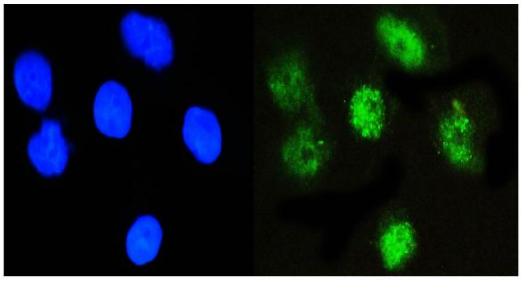

Figure 5. IF analysis of NFIA using anti-NFIA antibody (M03531).
NFIA was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 µg/mL mouse anti-NFIA Antibody (M03531) 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.

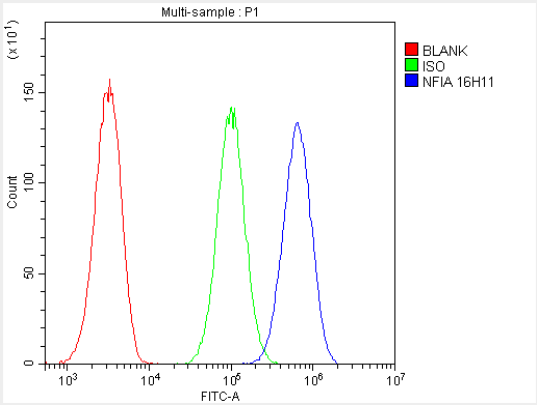

Figure 6. Flow Cytometry analysis of U20S cells using anti-NFIA antibody (M03531).

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Overlay histogram showing U20S cells stained with M03531 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-NFIA Antibody (M03531, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-NFIA Antibody Picoband™ (monoclonal, 16H11) - Background

Nuclear factor 1 A-type is a protein that in humans is encoded by the NFIA gene. Nuclear factor I (NFI) proteins constitute a family of dimericDNA-binding proteins with similar, and possibly identical, DNA-binding specificity. They function as cellular transcription factors and as replication factors for adenovirus DNA replication. Diversity in this protein family is generated by multiple genes, differential splicing, and heterodimerization.