

Anti-MED15 Antibody Picoband™ (monoclonal, 6F4)

Catalog # ABO14861

Product Information

Application	WB, IF, ICC, FC
Primary Accession	Q96RN5
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-MED15 Antibody Picoband™ (monoclonal, 6F4) . Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Additional Information

Gene ID	51586
Other Names	Mediator of RNA polymerase II transcription subunit 15, Activator-recruited cofactor 105 kDa component, ARC105, CTG repeat protein 7a, Mediator complex subunit 15, Positive cofactor 2 glutamine/Q-rich-associated protein, PC2 glutamine/Q-rich-associated protein, TPA-inducible gene 1 protein, TIG-1, Trinucleotide repeat-containing gene 7 protein, MED15, ARC105, CTG7A, PCQAP, TIG1, TNRC7
Calculated MW	86753
Application Details	Western blot, 0.1-0.5 µg/ml Immunocytochemistry/Immunofluorescence, 2 µg/ml Flow Cytometry, 1-3 µg/1x10 ⁶ cells
Subcellular Localization	Nucleus. Cytoplasm.
Source	Eukaryota
Protein Name	Mediator of RNA polymerase II transcription subunit 15
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Clone Names	Clone: 6F4
Immunogen	E. coli-derived human MED15 recombinant protein (Position: M1-A285).
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.

Protein Information

Name MED15

Synonyms ARC105, CTG7A, PCQAP, TIG1, TNRC7

Function Component of the Mediator complex, a coactivator involved in the regulated transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors. Required for cholesterol-dependent gene regulation. Positively regulates the Nodal signaling pathway.

Cellular Location Cytoplasm. Nucleus.

Tissue Location Expressed in all tissues examined, including heart, brain, lung, spleen, thymus, pancreas, blood leukocyte and placenta. However, the level of expression varied, with highest expression in the placenta and peripheral blood and lowest in the pancreas and kidney.

Background

Mediator of RNA polymerase II transcription subunit 15, also known as Gal11, Spt13 in yeast and PCQAP, ARC105, or TIG-1 in humans is a protein encoded by the MED15 gene. The protein encoded by this gene is a subunit of the multiprotein complexes PC2 and ARC/DRIP and may function as a transcriptional coactivator in RNA polymerase II transcription. This gene contains stretches of trinucleotide repeats and is located in the chromosome 22 region which is deleted in DiGeorge syndrome.

Images

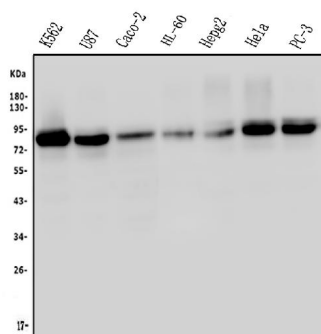


Figure 1. Western blot analysis of MED15 using anti-MED15 antibody (M03568).

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 50µg of sample under reducing conditions.

Lane 1: human K562 whole cell lysates,
Lane 2: human U87 whole cell lysates,
Lane 3: human CACO-2 whole cell lysates,
Lane 4: human HL-60 whole cell lysates,
Lane 5: human HepG2 whole cell lysates,
Lane 6: human Hela whole cell lysates,
Lane 7: human PC-3 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-MED15 antigen affinity purified monoclonal antibody (Catalog # M03568) 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 MED15 at approximately 86KD. The expected band size for MED15 is at 86KD.

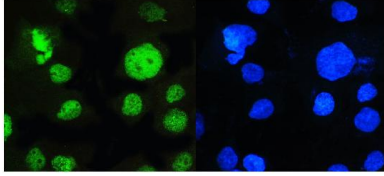


Figure 2. IF analysis of MED15 using anti-MED15 antibody (M03568).

MED15 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-MED15 Antibody (M03568) 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.

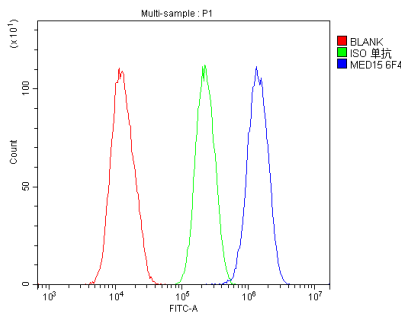


Figure 3. Flow Cytometry analysis of U2OS cells using anti-MED15 antibody (M03568).

Overlay histogram showing U2OS cells stained with M03568 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-MED15 Antibody (M03568, 1 µg/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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