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Tel: 858.875.1900 Fax: 858.875.1999

Anti-TMEM107 Picoband Antibody
Catalog # ABO10315

Specification

Anti-TMEM107 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q6UX40
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Transmembrane protein 107(TMEM107) detection. Tested with WB, IHC-P in Human.

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

Anti-TMEM107 Picoband Antibody - Additional Information

Gene ID 84314

Other Names
Transmembrane protein 107, TMEM107

Calculated MW
15503 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Membrane ; Multi-pass membrane protein .

Protein Name
Transmembrane protein 107

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human TMEM107 (22-57aa VITLFWSRDSNIQACLPLTFTPEEYDKQDIQLVAAL), different from the related mouse and rat sequences by four amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-TMEM107 Picoband Antibody - Protein Information

Name TMEM107 (HGNC:28128)

Function
Plays a role in cilia formation and embryonic patterning. Requires for normal Sonic hedgehog (Shh) signaling in the neural tube and acts in combination with GLI2 and GLI3 to pattern ventral and intermediate neuronal cell types (By similarity). During ciliogenesis regulates the ciliary transition zone localization of some MKS complex proteins (PubMed:26518474).

Cellular Location
Membrane; Multi-pass membrane protein. Cell projection, cilium. Note=Localizes at the transition zone, a region between the basal body and the ciliary axoneme

Anti-TMEM107 Picoband Antibody - 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-TMEM107 Picoband Antibody - Images

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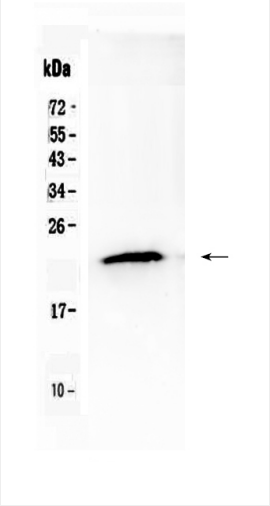

Figure 1. Western blot analysis of TMEM107 using anti- TMEM107 antibody (ABO10315). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: MCF-7 whole 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 rabbit anti- TMEM107 antigen affinity purified polyclonal antibody (Catalog # ABO10315) at 0.5 Î¼g/mL overnight at 4Â°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 1:10000 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 TMEM107 at approximately 22KD. The expected band size for TMEM107 is at 16KD.

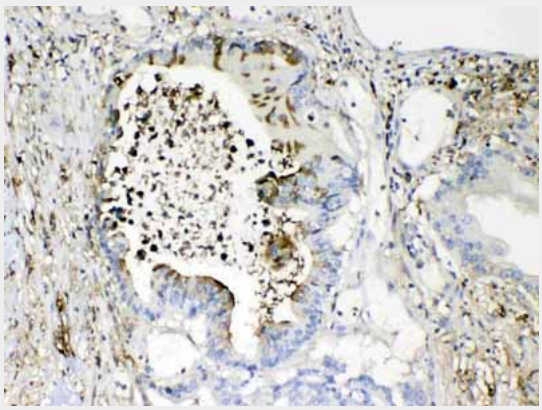

Figure 2. IHC analysis of TMEM107 using anti- TMEM107 antibody (ABO10315).TMEM107 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- TMEM107 Antibody (ABO10315) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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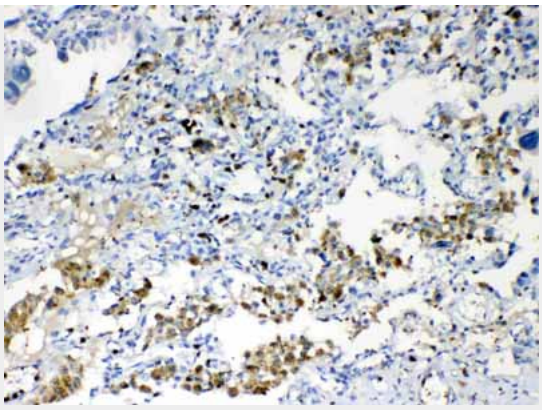

Figure 3. IHC analysis of TMEM107 using anti- TMEM107 antibody (ABO10315).TMEM107 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- TMEM107 Antibody (ABO10315) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-TMEM107 Picoband Antibody - Background

Cilia are dynamic signaling organelles essential for developmental patterning, including left-right specification, skeletal formation, neural development, and organogenesis. TMEM107 is predicted to be critical for cilia formation and signaling in a subset of embryonic tissues. Based on an alignment of theTMEM107 sequence with the genomic sequence (GRCh38), the TMEM107 gene was mapped to chromosome 17p13.1.