

TMEM107 Antibody

Catalog # ASC11701

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q6UX40
Other Accession	NP_115730 , 34101276
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	15503
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TMEM107 antibody can be used for detection of TMEM107 by Western blot at 1 - 2 µg/ml.

Additional Information

Gene ID	84314
Other Names	Transmembrane protein 107, TMEM107
Target/Specificity	TMEM107; TMEM107 antibody is human specific. At least two isoforms of TMEM107 are known to exist.
Reconstitution & Storage	TMEM107antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	TMEM107 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

Background

Transmembrane protein 107 (TMEM 107) is critical for cilia formation and embryonic patterning (1). It is a 139 amino acid transmembrane protein encoded by a gene that maps to human chromosome 17 which is associated with two key tumor suppressor genes p53 and BRCA1 (1,2). TMEM107 is required 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 (1,3). TMEM107 is also a strong candidate gene for central areolar choroidal dystrophy (CACD) (1-3).

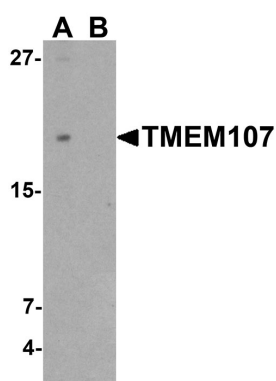
References

Christopher KJ, Wang B, Kong Y, et al. Forward genetics uncovers transmembrane protein 107 as a novel factor required for ciliogenesis and sonic hedgehog signaling. *Dev. Biol.* 2012; 368:382-92.

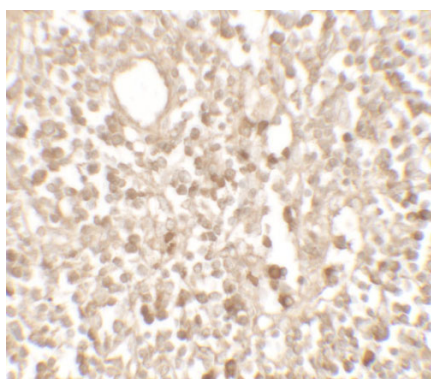
Clark HF, Gurney AL, Abaya E, et al. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. *Genome Res.* 2003; 13:2265-70.

Ho KS and Scott MP. Sonic hedgehog in the nervous system: functions, modifications and mechanisms. *Curr. Opin. Neurobiol.* 2002; 12:57-63.

Images

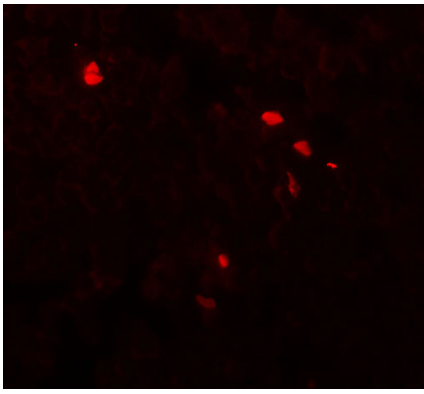


Western blot analysis of TMEM107 in THP-1 cell lysate with TMEM107 antibody at 1 μ g/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of TMEM107 in human lymph node tissue with TMEM107 antibody at 5 μ g/mL.

Immunofluorescence of TMEM107 in human lymph node tissue with TMEM107 antibody at 20 μ g/mL.



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