

TMEM135 Antibody

Catalog # ASC11639

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q86UB9
Other Accession	NP_075069 , 281182571
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	52291
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TMEM135 Antibody can be used for detection of TMEM135 by Western blot starting at 1 µg/mL.

Additional Information

Gene ID	65084
Other Names	Transmembrane protein 135, Peroxisomal membrane protein 52, PMP52, TMEM135
Target/Specificity	TMEM135; At least two isoforms of TMEM135 are known to exist; this antibody will detect both isoforms.
Reconstitution & Storage	TMEM135 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	TMEM135 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMEM135 (HGNC:26167)
Function	Involved in mitochondrial metabolism by regulating the balance between mitochondrial fusion and fission. May act as a regulator of mitochondrial fission that promotes DNM1L-dependent fission through activation of DNM1L. May be involved in peroxisome organization.
Cellular Location	Mitochondrion membrane {ECO:0000250 UniProtKB:Q9CYV5}; Multi-pass membrane protein {ECO:0000250 UniProtKB:Q9CYV5}. Peroxisome membrane {ECO:0000250 UniProtKB:Q9CYV5}; Multi-pass membrane protein

Background

TMEM135 Antibody: The transmembrane protein 135 (TMEM135), also known as peroxisomal membrane protein 52 (PMP52), was initially identified as a protein that might be critical for adipogenesis and osteoblastogenesis. Further studies have indicated that TMEM135 may be part of a regulatory circuit that plays an important role in fat metabolism and energy expenditure in both *C. elegans* as well as mammalian organisms. Finally, recent experiments has suggested that TMEM135 may be an additional driver of breast cancer.

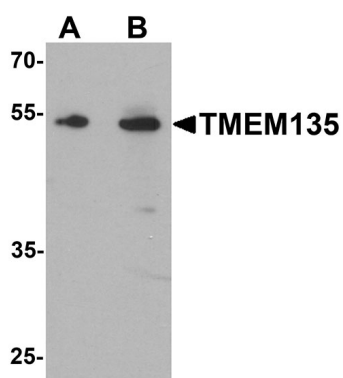
References

Scheideler M, Elabd C, Zaragosi LE, et al. Comparative transcriptomics of human multipotent stem cells during adipogenesis and osteoblastogenesis. *BMC Genomics* 2008; 9:340.

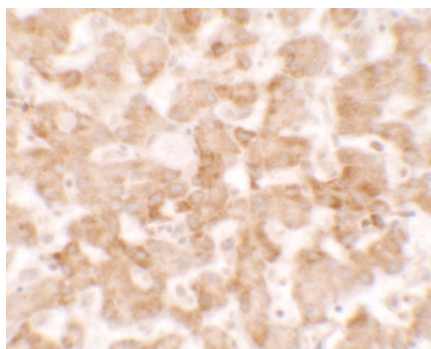
Exil VJ, Avila DS, Benedetto A, et al. Stress-induced TMEM135 protein is part of a conserved genetic network involved in fat storage and longevity regulation in *Caenorhabditis elegans*. *PLoS One* 2010; 5:e14228.

Natrajan R, Mackay A, Lambros MB, et al. A whole-genome massively parallel sequencing analysis of BRCA1 mutant oestrogen receptor-negative and -positive breast cancers. *J. Pathol.* 2012; 227:29-41.

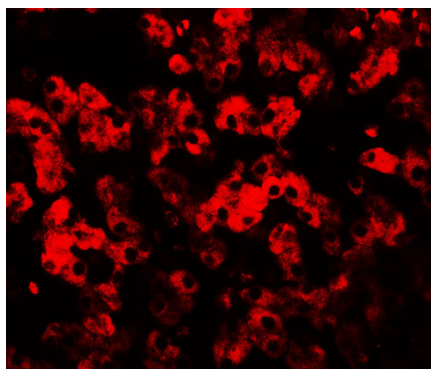
Images



Western blot analysis of TMEM135 in rat liver tissue lysate with TMEM135 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.



Immunohistochemistry of TMEM135 in human liver tissue with TMEM135 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of TMEM135 in human liver tissue with TMEM135 antibody at 20 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.