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TMEM18 Antibody

Catalog # ASC10853

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96B42
Other Accession	EAX01097, 119621502
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	16265
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TMEM18 antibody can be used for detection of TMEM18 by Western blot at 0.5 - 1 □g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 □g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID	129787
Other Names	Transmembrane protein 18, TMEM18
Target/Specificity	TMEM18;
Reconstitution & Storage	TMEM18 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TMEM18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMEM18
Function	Transcription repressor. Sequence-specific ssDNA and dsDNA binding protein, with preference for GCT end CTG repeats. Cell migration modulator which enhances the glioma-specific migration ability of neural stem cells (NSC) and neural precursor cells (NPC).
Cellular Location	Cytoplasm. Nucleus membrane; Multi-pass membrane protein

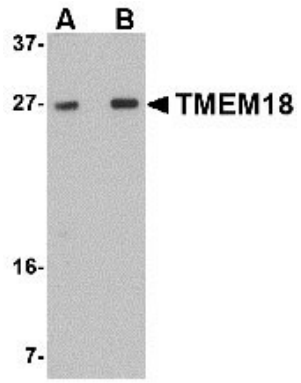
Background

TMEM18 Antibody: Recent studies have examined how overexpression of certain genes enhances the tropism of neural stem cells (NSCs) for gliomas. Overexpression of Transmembrane protein 18 (TMEM18) provides NSCs and neural precursors an increased migration capacity towards glioblastoma cells in vitro and in the rat brain, while functional inactivation of the gene resulted in an almost complete loss of migration activity, suggesting that TMEM18 could be a potential target in NSC-based glioma therapy. Other recent results suggest that among others, the TMEM18 loci is associated with higher than normal body mass index (BMI) and obesity, indicating there may be a CNS-related role in predisposition to obesity. Multiple isoforms of TMEM18 are known to exist.

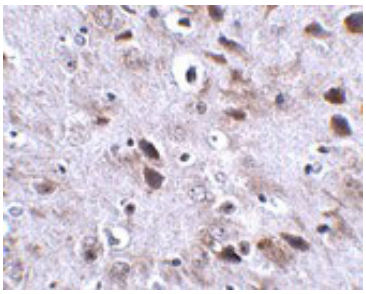
References

Jurvansuu J, Zhao Y, Leung DS, et al. Transmembrane protein 18 enhances the tropism of neural stem cells for glioma cells. Cancer Res.2008; 68:4614-22.
Willer CJ, Speliotes EK, Loos RJ, et al. Six new loci associated with body mass index highlight a neuronal influence on body weight regulation. Nat. Genet.2009; 41:25-34.
Renstrom F, Payne F, Nordstrom A, et al. Replication and extension of genome-wide association study results for obesity in 4923 adults from northern Sweden. Human Mol. Gen.2009; 18:1489-96.

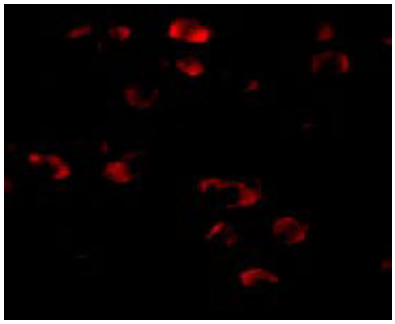
Images



Western blot analysis of TMEM18 in rat brain lysate with TMEM18 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of TMEM18 in mouse brain tissue with TMEM18 antibody at 2.5 µg/mL.



Immunofluorescence of TMEM18 in Mouse Brain cells with TMEM18 antibody at 20 µg/mL.