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TENM3 Antibody

Catalog # ASC11914

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9P273
Other Accession	NP_001073946, 122937400
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	300950
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TENM3 antibody can be used for detection of TENM3 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	55714
Other Names	Teneurin-3, Ten-3, Protein Odd Oz/ten-m homolog 3, Tenascin-M3, Ten-m3, Teneurin transmembrane protein 3, TENM3, KIAA1455, ODZ3, TNM3
Target/Specificity	TENM3; TENM3 antibody is human, mouse and rat reactive. TENM3 antibody is predicted to not cross-react with other members of the TENM family.
Reconstitution & Storage	TENM3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	TENM3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TENM3 (HGNC:29944)
Function	Involved in neural development by regulating the establishment of proper connectivity within the nervous system. Acts in both pre- and postsynaptic neurons in the hippocampus to control the assembly of a precise topographic projection: required in both CA1 and subicular neurons for the precise targeting of proximal CA1 axons to distal subiculum, probably by promoting homophilic cell adhesion. Required for proper dendrite morphogenesis and axon targeting in the vertebrate visual system, thereby playing a key role in the development of the visual pathway. Regulates the formation in ipsilateral retinal mapping to both the dorsal lateral geniculate nucleus (dLGN) and the superior colliculus (SC). May also be involved in the differentiation of the

	fibroblast-like cells in the superficial layer of mandibular condylar cartilage into chondrocytes.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q9WTS6}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q9WTS6}. Cell projection, axon {ECO:0000250|UniProtKB:Q9WTS6}
Tissue Location	Expressed in adult and fetal brain, slightly lower levels in testis and ovary, and intermediate levels in all other peripheral tissues examined. Not expressed in spleen or liver Expression was high in brain, with highest levels in amygdala and caudate nucleus, followed by thalamus and subthalamic nucleus

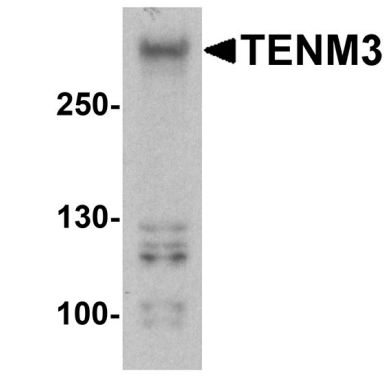
Background

The teneurin transmembrane protein 3 (TENM3) is a member of a family of four neuronal cell surface proteins homologous to the Drosophila pair-rule gene Ten-m (1,2). TENM3 is expressed in cartilaginous cells during postnatal growth in mice (3), as well as the adult eye and optic stalk (4). Homozygous null mutations in TENM3 causes microphthalmia in humans (5).

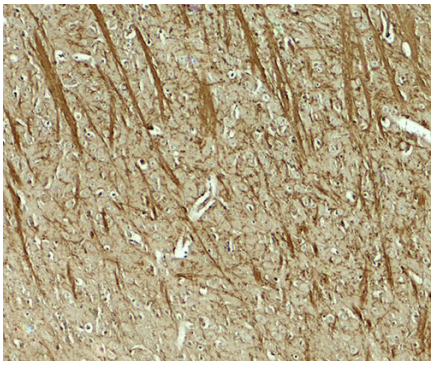
References

Ben-Zur T and Wides R. Mapping homologs of Drosophila odd oz (odz): Doc4/Odz to mouse chromosome 7, Odz1 to mouse chromosome 11; and ODZ3 to human chromosome Xq25. Genomics 1999; 58:102-3.
Rubin BP, Tucker RP, Martin D, et al. Tenurins: a novel family of neuronal cell surface proteins in vertebrates, homologous to the Drosophila pair-rule gene Ten-m. Dev. Biol. 1999; 216:195-209.
Murakami T, Fukunaga T, Takeshita N, et al. Expression of Ten-m/Odz3 in the fibrous layer of madibular condylar cartilage during postnatal growth in mice. J. Anat. 2010; 217:236-44.
Ben-Zur T, Feige E, Motro B, et al. The mammalian Odz gene family: homologs of a Drosophila pair-rule gene with expression implying distinct yet overlapping developmental roles. Dev. Biol. 2000; 217:107-20.

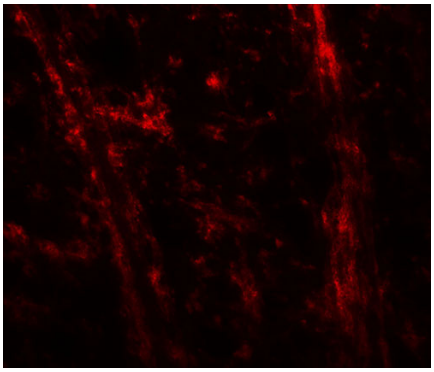
Images



Western blot analysis of TENM3 in 293 cell lysate with TENM3 antibody at 1 µg/ml.



Immunohistochemistry of TENM3 in mouse brain tissue with TENM3 antibody at 5 µg/mL.



Immunofluorescence of TENM3 in mouse brain tissue with TENM3 antibody at 20 µg/mL.

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