10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TENM1 Antibody

Catalog # ASC11913

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UKZ4
Other Accession	NP_001156750, 253970444
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	305011
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TENM1 antibody can be used for detection of TENM1 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	10178
Other Names	Teneurin-1, Ten-1, Protein Odd Oz/ten-m homolog 1, Tenascin-M1, Ten-m1, Teneurin transmembrane protein 1, Ten-1 intracellular domain, IDten-1, Ten-1 ICD, Teneurin C-terminal-associated peptide, TCPA-1, Ten-1 extracellular domain, Ten-1 ECD, TENM1, ODZ1, TNM1
Target/Specificity	TENM1; TENM1 antibody is human, mouse and rat reactive. TENM1 antibody is predicted to not cross-react with other members of the TENM family.
Reconstitution & Storage	TENM1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	TENM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TENM1
Synonyms	ODZ1, TNM1
Function	Involved in neural development, regulating the establishment of proper connectivity within the nervous system. May function as a cellular signal transducer (By similarity).
Cellular Location	Cell membrane; Single-pass membrane protein [Teneurin C-terminal-associated peptide]: Nucleus. Cytoplasm. Cell membrane

Note=Colocalizes with the dystroglycan complex at the cell membrane in hippocampal cells. Binds hippocampal cell membranes and is incorporated in the cytoplasm by endocytosis in a caveoli-dependent manner. Upon cell internalization is transported arround and in the nucleus (By similarity).

Tissue Location Expressed in fetal brain.

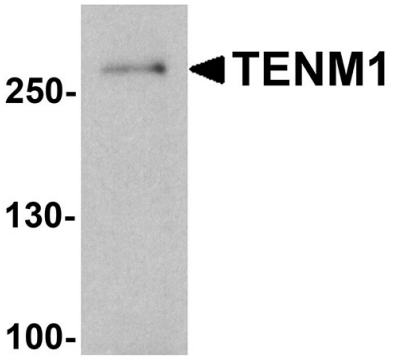
Background

The teneurin transmembrane protein 1 (TENM1) is a member of a family of four neuronal cell surface proteins homologous to the Drosophila pair-rule gene Ten-m (1,2). TENM1 is expressed primarily in the developing central nervous system and may be proteolytically cleaved with the intracellular domain translocating to the nucleus (3). TENM1 is a direct target of the homeobox transcription factor EMX2, a transcription factor thought to be important for area specification in the developing cortex (4).

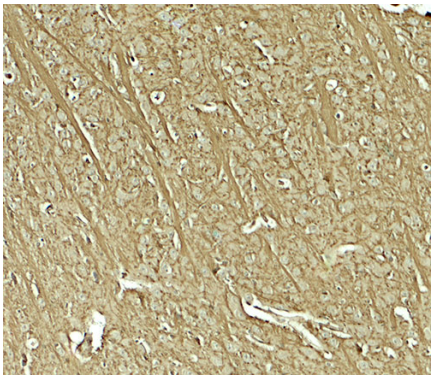
References

Minet AD, Rubin BP, Tucker RP, et al. Teneurin-1, a vertebrate homologue of the Drosophila pair-rule gene ten-m, is a neuronal protein with a novel type of heparin-binding domain. J. Cell Sci. 1999; 112:2019-32.
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.
Kenzelmann D, Chiquet-Ehrismann R, Leachman NT, et al. Teneurin-1 is expressed in interconnected regions of the developing brain and processed in vivo. BMC Dev. Biol. 2008; 8:30.
Beckmann J, Vitobello A, Ferralli J, et al. Human teneruin-1 is a direct target of the homeobox transcription factor EMX2 at a novel alternate promoter. BMC Dev. Biol. 2011; 11:35.

Images

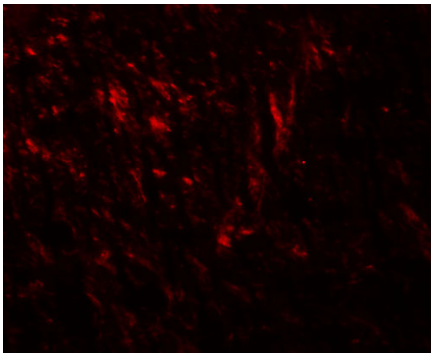


Western blot analysis of TENM1 in human brain tissue lysate with TENM1 antibody at 1 µg/ml.



Immunohistochemistry of TENM1 in mouse brain tissue with TENM1 antibody at 5 µg/mL.

Immunofluorescence of TENM1 in mouse brain tissue with TENM1 antibody at 20 µg/mL.



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