

TENM1 Antibody

Catalog # ASC11913

Specification

TENM1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC-P, IF, E <u>O9UKZ4</u> <u>NP_001156750</u>, <u>253970444</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 301 kDa

Observed: 280 kDa KDa TENM1 antibody can be used for detection of TENM1 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

TENM1 Antibody - Additional Information

Gene ID Target/Specificity 10178

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°C for three months and -20°C, stable for up to one year.

Precautions TENM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TENM1 Antibody - 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.

TENM1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TENM1 Antibody - Images



Western blot analysis of TENM1 in human brain tissue lysate with TENM1 antibody at $1 \mu g/ml$.





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.

TENM1 Antibody - 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).

TENM1 Antibody - 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.