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ODZ3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59126

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9P273
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	300950
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TENM3
Epitope Specificity	1721-1850/2699
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type II membrane protein.Cell projection, axon (By similarity).
SIMILARITY	Contains 8 EGF-like domains. Contains 5 NHL repeats. Contains 1 teneurin N-terminal domain. Contains 23 YD repeats.
SUBUNIT	Homodimer; disulfide-linked (Probable).
DISEASE	Note=Defects in TENM3 are a cause of microphthalmia, isolated, with coloboma (MCOPCB). Microphthalmia is a disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Ocular abnormalities like opacities of the cornea and lens, scaring of the retina and choroid, cataract and other abnormalities like cataract may also be present. Ocular colobomas are a set of malformations resulting from abnormal morphogenesis of the optic cup and stalk, and the fusion of the fetal fissure (optic fissure). [SIMILARITY] Belongs to the tenascin family. Teneurin subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the teneurin transmembrane protein family. The encoded protein may be involved in the regulation of neuronal development including development of the visual pathway. Mutations in this gene have been associated with microphthalmia and developmental dysplasia of the hip. [provided by RefSeq, Jan 2023]

Additional Information

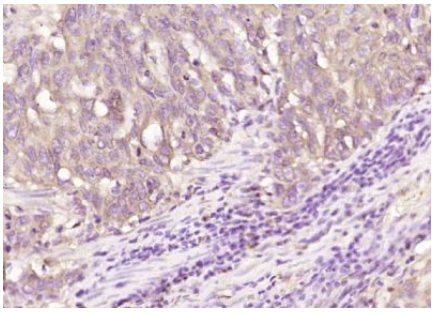
Gene ID	55714
Other Names	Teneurin-3, Ten-3, Protein Odd Oz/ten-m homolog 3 {ECO:0000303|Ref.5}, Tenascin-M3, TENM3 (HGNC:29944)

Target/Specificity	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.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:50-200,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Images



Paraformaldehyde-fixed, paraffin embedded (Human esophageal cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ODZ3) Polyclonal Antibody, Unconjugated (AP59126) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.