

OBSCN Rabbit pAb

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Catalog # AP57887

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q5VST9
Reactivity	Rat
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	868465
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human OBSCN
Epitope Specificity	101-200/7963
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Cytoplasm > myofibril > sarcomere > M line. Cytoplasm > myofibril > sarcomere > Z line. In differentiating skeletal muscle cells, isoform 3 primarily localizes to the sarcomeric M-line and less frequently to the Z-disk. Isoform 3 colocalizes with ANK1 isoform Mu17/ank1.5 at the M-line in differentiated skeletal muscle cells.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The obscurin gene spans more than 150 kb, contains over 80 exons and encodes a protein of approximately 720 kDa. The encoded protein contains 68 Ig domains, 2 fibronectin domains, 1 calcium/calmodulin-binding domain, 1 RhoGEF domain with an associated PH domain, and 2 serine-threonine kinase domains. This protein belongs to the family of giant sacromeric signaling proteins that includes titin and nebulin, and may have a role in the organization of myofibrils during assembly and may mediate interactions between the sarcoplasmic reticulum and myofibrils. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Additional Information

Other Names	Obscurin, 2.7.11.1, Obscurin-RhoGEF, Obscurin-myosin light chain kinase, Obscurin-MLCK, OBSCN, KIAA1556, KIAA1639
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	OBSCN
Synonyms	KIAA1556, KIAA1639
Function	Structural component of striated muscles which plays a role in myofibrillogenesis. Probably involved in the assembly of myosin into sarcomeric A bands in striated muscle (PubMed: 11448995 , PubMed: 16205939). Has serine/threonine protein kinase activity and phosphorylates N-cadherin CDH2 and sodium/potassium-transporting ATPase subunit ATP1B1 (By similarity). Binds (via the PH domain) strongly to phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P2) and phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2), and to a lesser extent to phosphatidylinositol 3-phosphate (PtdIns(3)P), phosphatidylinositol 4-phosphate (PtdIns(4)P), phosphatidylinositol 5-phosphate (PtdIns(5)P) and phosphatidylinositol 3,4,5-trisphosphate (PtdIns(3,4,5)P3) (PubMed: 28826662).
Cellular Location	[Isoform 3]: Cytoplasm, myofibril, sarcomere, M line. Cytoplasm, myofibril, sarcomere, Z line. Note=In differentiating skeletal muscle cells, isoform 3 primarily localizes to the sarcomeric M-line and less frequently to the Z-disk (PubMed:12527750). Isoform 3 colocalizes with ANK1 isoform Mu17/ank1.5 at the M-line in differentiated skeletal muscle cells (PubMed:12527750)

Background

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Images



Paraformaldehyde-fixed, paraffin embedded (Rat skeletal muscle); 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 (OBSCN) Polyclonal Antibody, Unconjugated (AP57887) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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