

Synaptopodin 2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59079

Specification

Synaptopodin 2 Polyclonal Antibody - Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O9UMS6
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	117514

Synaptopodin 2 Polyclonal Antibody - Additional Information

Gene ID 171024

Other Names

Synaptopodin-2, Genethonin-2, Myopodin, SYNPO2

Format

0.01M TBS(pH7.4), 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.

Synaptopodin 2 Polyclonal Antibody - Protein Information

Name SYNPO2

Function

Has an actin-binding and actin-bundling activity. Can induce the formation of F-actin networks in an isoform-specific manner (PubMed: [23225103](http://www.uniprot.org/citations/23225103), PubMed: [24005909](http://www.uniprot.org/citations/24005909)). At the sarcomeric Z lines is proposed to act as adapter protein that links nascent myofibers to the sarcolemma via ZYX and may play a role in early assembly and stabilization of the Z lines. Involved in autophagosome formation. May play a role in chaperone-assisted selective autophagy (CASA) involved in Z lines maintenance in striated muscle under mechanical tension; may link the client-processing CASA chaperone machinery to a membrane- tethering and fusion complex providing autophagosome membranes (By similarity). Involved in regulation of cell migration (PubMed: [22915763](http://www.uniprot.org/citations/22915763), PubMed: [25883213](http://www.uniprot.org/citations/25883213)). May be a tumor suppressor (PubMed: [16885336](http://www.uniprot.org/citations/16885336)).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q91YE8}. Cytoplasm {ECO:0000250|UniProtKB:Q91YE8}. Cytoplasm, cytoskeleton. Cytoplasm, myofibril, sarcomere, Z line. Cell junction, focal adhesion. Note=Shuttles between the nucleus and the cytoplasm in a differentiation-dependent and stress-induced fashion. In undifferentiated myoblasts strongly expressed in the nucleus, after induction of myotube differentiation is located to both nucleus and cytoplasm along actin filaments, and in differentiated myotubes is located at the Z lines. Upon stress redistributes from cytoplasm of myoblasts and myotubes to the nucleus. Nuclear import is KPNA2-dependent and promoted by phosphorylation by PKA and/or CaMK2, and inhibition of calcineurin. The nuclear export is XPO1-dependent (By similarity). Localized in a fiber-like pattern, partly overlapping with filamentous actin (PubMed:18371299). {ECO:0000250|UniProtKB:Q91YE8, ECO:0000269|PubMed:18371299} [Isoform 2]: Cytoplasm, cytoskeleton. Note=Localizes to induced actin bundles with punctuate staining. [Isoform 4]: Cytoplasm, cytoskeleton. Note=Localizes to induced actin bundles with punctuate staining.

Tissue Location

Expressed in heart muscle. Isoform 5 is specifically expressed in skeletal muscle

Synaptopodin 2 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Synaptopodin 2 Polyclonal Antibody - Images