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[Primary Antibody]

Rabbit Anti-Synaptopodin 2 antibody

Catalog Number: SL8743R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Synaptopodin 2
Immunogen:	KLH conjugated synthetic peptide derived from human Synaptopodin 2: 601-700/1093
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 1M PBS, pH 7.4 Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 ICC/IF=1:100-500 IF=1:100-500 ELISA=1:5000-10000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	(predicted: Human, Mouse, Rat, Pig, Cow)
Predicted MW.:	117kDa
Subcellular Location:	The nucleus cytoplasmic
Background:	SYNPO2 (Synaptopodin 2) is a Protein Coding gene. Diseases associated with SYNPO2 include Duchenne Muscular Dystrophy and Myopathy, Myofibrillar, 2. GO annotations related to this gene include actin binding and muscle alpha-actinin binding. An important paralog of this gene is SYNPO2L. **Function:** Has an actin-binding and actin-bundling activity. Can induce the formation of F-actin networks in an isoform-specific manner (PubMed:24005909, PubMed:23225103). 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

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	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, PubMed:25883213). May be a tumor suppressor (PubMed:16885336). **Subcellular Location:** Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm in a differentiation-dependent and stress-induced fashion. Localizes to the Z-disk in mature striated muscle. The nuclear export is XPO1-dependent (By similarity). Localized in a fiber-like pattern. partly overlapping with filamentous actin. **Tissue Specificity:** Skeletal muscle-specific. DISEASE: Down-regulated in muscle cell lines derived from patients with Duchenne muscular dystrophy (DMD). **Similarity:** Belongs to the synaptopodin family. Contains 1 PDZ (DHR) domain. **Database links:** **Entrez Gene:** 171024 Human **Entrez Gene:** 118449 Mouse **Entrez Gene:** 499702 Rat **SwissProt:** Q9UMS6 Human **SwissProt:** Q91YE8 Mouse **Unigene:** 655519 Human **Unigene:** 317009 Mouse **Unigene:** 34359 Mouse **Unigene:** 474733 Mouse

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