

Rabbit Synaptopodin Polyclonal Antibody | anti-SYNPO2 antibody

Synaptopodin Antibody

CATALOG # AAA322997	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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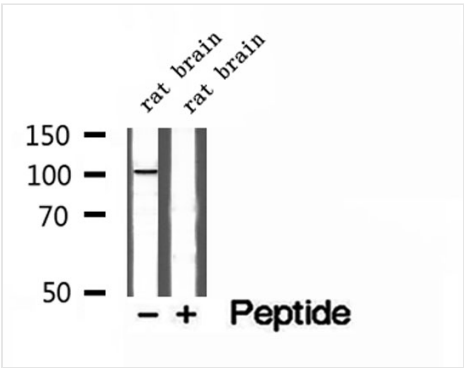
PRODUCT SYNONYMS

Synaptopodin; Polyclonal Antibody; Synaptopodin Antibody; DKFZp686G051; Genethonin 2; Genethonin-2; Myopodin; striated muscle specific; Synaptopodin-2; SYNPO2_HUMAN; SYNPO 2; Synpo2; anti-SYNPO2 antibody

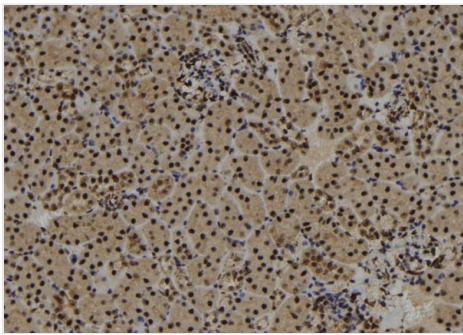
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Synaptopodin antibody detects endogenous levels of Synaptopodin.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1093
Applicable Applications for anti-SYNPO2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Synaptopodin.
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	Expressed in heart muscle. Isoform 5 is specifically expressed in skeletal muscle.
Predicted Cross Reactivity	Bovine, Horse
Similarity	Bovine (100%), Horse (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of extracts of rat brain tissue, using Synaptopodin antibody.



IHC (Immunohistochemistry)
AAA322997 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-SYNPO2 antibody	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 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). Subunit Structure: May self-associate in muscle cells under oxidative stress. Binds F-actin (PubMed:23225103). Interacts with ACTN2; ACTN2 is proposed to anchor SYOP2 at Z lines in mature myocytes (PubMed:20554076). Interacts with AKAP6, PPP3CA and CAMK2A. Interacts (phosphorylated form) with YWHAB; YWHAB competes with ACTN2 for interaction with SYNPO2. Interacts with KPNA2; mediating nuclear import of SYNOP2; dependent on interaction with YWHAB (By similarity). Interacts with IPO13; may be implicated in SYNOP2 nuclear import (PubMed:17828378). Interacts with ZYX, FLNC, ILK (PubMed:16885336, PubMed:20554076, PubMed:21643011). Interacts with BAG3 (via WW 1 domain). May associate with the CASA complex consisting of HSPA8, HSPB8 and BAG3. Interacts with VPS18 (PubMed:23434281). Post-translational Modifications: Phosphorylated by PKA, and by CaMK2 at multiple sites. Dephosphorylated by calcineurin; abrogating interaction with YWHAB and impairing nuclear import (By similarity). Phosphorylated by ILK. Similarity: The PPPY motif interacts with the WW domain 1 of BAG3. Belongs to the synaptopodin family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	193083185
NCBI GeneID	171024
NCBI Accession #	NP_001122405.1
NCBI GenBank Nucleotide #	NM_001128933.2
UniProt Accession #	Q9UMS6; Q9UK89; B2RWP6; B2Y8J9; C6H0M7; S5XAM4
Molecular Weight	Observed: 99-115 kDa Predicted: 118 kDa
NCBI Official Full Name	synaptopodin-2 isoform b
NCBI Official Synonym Full Names	synaptopodin 2
NCBI Official Symbol	SYNPO2
NCBI Protein Information	synaptopodin-2
UniProt Protein Name	Synaptopodin-2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/synaptopodin-antibody-immunohistochemistry-western-blot-elisa/322997>