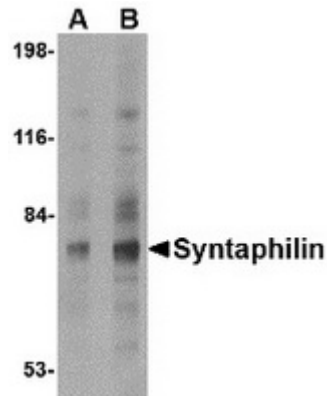


## Polyclonal Antibody to Syntaphilin / SNPH - Aff - Purified

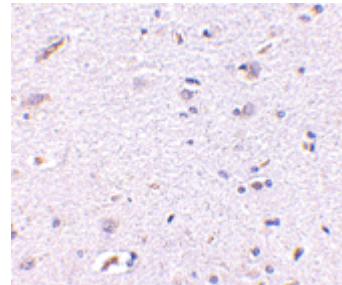
<b>Alternate names:</b>	KIAA0374
<b>Catalog No.:</b>	TA306581
<b>Quantity:</b>	0.1 mg
<b>Background:</b>	Syntaphilin was initially identified in a yeast two-hybrid screen with the carboxy terminal region of Syntaxin-1 as bait. Syntaxin-1 is a key component of the synaptic vesicle docking machinery that forms the SNARE complex with synaptobrevin and SNAP-25. Syntaphilin competes with SNAP-25 for binding to syntaxin-1 and inhibits the formation of the SNARE complex, thereby potentially regulating synaptic vesicle exocytosis. Syntaphilin also binds dynamin-1 and inhibits dynamin-dependent endocytosis. Mice lacking syntaphilin show an increased level of mitochondrial motility and a reduced density of axonal mitochondria. This correlates with an enhanced short-term facilitation and significant impairments in motor ability, suggesting syntaphilin plays a major role in presynaptic function. Despite its predicted molecular weight, Syntaphilin usually migrates at higher molecular weight in SDS-PAGE. Multiple isoforms are known to exist.
<b>Uniprot ID:</b>	<a href="#">O15079</a>
<b>NCBI:</b>	<a href="#">O15079</a>
<b>GeneID:</b>	<a href="#">9751</a>
<b>Host / Isotype:</b>	Rabbit / IgG
<b>Immunogen:</b>	Syntaphilin antibody was raised against a 18 amino acid peptide from near the amino terminus of human Syntaphilin.
<b>Format:</b>	<b>State:</b> Liquid Ig fraction <b>Purification:</b> Peptide affinity chromatography <b>Buffer System:</b> PBS containing 0.02% sodium azide
<b>Applications:</b>	ELISA. Western blot: 2 – 4 µg/ml. Immunohistochemistry on paraffin sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody detects Syntaphilin.
<b>Species Reactivity:</b>	<b>Tested:</b> Human, mouse, rat
<b>Add. Information:</b>	Blocking peptide available: AP30849CP-N
<b>Storage:</b>	Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

- General Readings:**
1. Lao G, Scheuss V, Gerwin CM, Su Q, Mochida S, Rettig J, et al. Syntaphilin: a syntaxin-1 clamp that controls SNARE assembly. *Neuron*. 2000 Jan;25(1):191-201. PubMed PMID: 10707983.
  2. Sørensen JB. SNARE complexes prepare for membrane fusion. *Trends Neurosci*. 2005 Sep;28(9):453-5. PubMed PMID: 15996765.
  3. Das S, Gerwin C, Sheng ZH. Syntaphilin binds to dynamin-1 and inhibits dynamin-dependent endocytosis. *J Biol Chem*. 2003 Oct 17;278(42):41221-6. Epub 2003 Aug 1. PubMed PMID: 12896979.
  4. Kang JS, Tian JH, Pan PY, Zald P, Li C, Deng C, et al. Docking of axonal mitochondria by syntaphilin controls their mobility and affects short-term facilitation. *Cell*. 2008 Jan 11;132(1):137-48. doi: 10.1016/j.cell.2007.11.024. PubMed PMID: 18191227.

**Pictures:** Western blot analysis of Syntaphilin in human brain tissue lysate with Syntaphilin antibody at (A) 2 and (B) 4 ug/ml.



Immunohistochemistry of Syntaphilin in human brain with Syntaphilin antibody at 5 ug/ml.



Immunofluorescence of Syntaphilin in Human Brain cells with Syntaphilin antibody at 20 ug/mL.

