

## Product datasheet for **AP08066PU-S**

### Synaptotagmin 1 (SYT1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	Western blot: 1/500~1/1000. Immunofluorescence: 1/100~1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized non-phosphopeptide derived from human Synaptotagmin I/II around the phosphorylation site of Threonine 202/199 (R-K-Tp-L-N).
Specificity:	This antibody detects endogenous levels of total Synaptotagmin I/II protein.
Formulation:	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	synaptotagmin 1
Database Link:	<a href="#">Entrez Gene 20979 Mouse</a> <a href="#">Entrez Gene 25716 Rat</a> <a href="#">Entrez Gene 6857 Human P21579</a>



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**Background:**

Synaptotagmin 1 is a 60kDa member of the synaptotagmin family, expressed in membranes of synaptic vesicles in rostral, phylogenetically younger brain regions and in some endocrine tissues. Ca<sup>2+</sup> is bound by synaptotagmin whose C2 domains then bind phospholipids, trafficking vesicles to the synaptic membrane and exocytosis. This results in fast synchronous neurotransmitter release. Synaptotagmin also binds neurexins, syntaxin and AP2 independently of Ca<sup>2+</sup> binding. Phosphorylation of synaptotagmin by protein kinases is thought to modulate its activity.

Synaptotagmin 2 belongs to the synaptotagmin family of multi-domained, integral membrane proteins of synaptic vesicles which are thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone.

**Synonyms:**

Synaptotagmin I/II, SYT1/SYT2

**Protein Families:**

Secreted Protein, Transmembrane

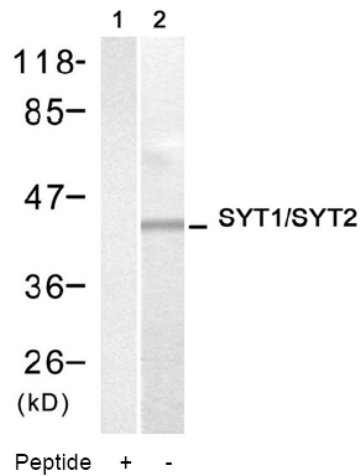
**Product images:**


Figure 1. Western blot analysis of extract from HeLa cells using Synaptotagmin I/II Antibody (Lane 1 and 2).

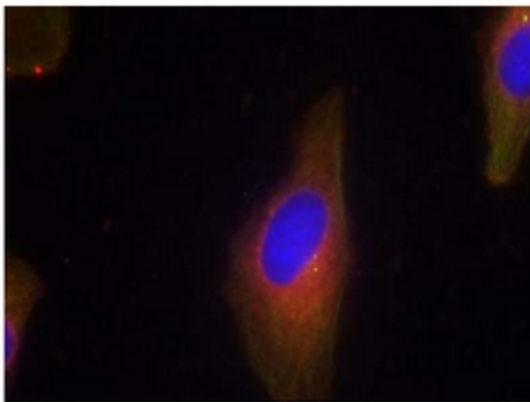


Figure 2. Immunofluorescence staining of methanol-fixed HeLa cells using Synaptotagmin I/II antibody (Red).