Synaptic Systems

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γ SNAP

Cat.No. 112 303; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 500 up to 1 : 2000 (AP staining) **IP**: yes **ICC**: not tested yet **IHC**: not tested yet **IHC-P/FFPE**: not tested yet
Immunogen	Synthetic peptide corresponding to AA 2 to 18 from rat γSNAP (UniProt Id: Q9CWZ7)
Reactivity	Reacts with: human (Q99747), rat, mouse (Q9CWZ7), cow. No signal: zebrafish. Other species not tested yet.
Specificity	Specific for γ SNAP.
matching control	112-3P

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The proteins **α/β-SNAP** are two related soluble and highly conserved proteins that bind to the fusion complex (SNARE complex), thus allowing the N-ethylmaleimide sensitive fusion protein NSF to bind to the complex. **γ-SNAP** binds directly to NSF and Gaf-1/Rip11, a protein of the Rab11 interacting family. In contrast to α/β-SNAP it does not interact directly with SNARE proteins and is not required for ER-Golgi transport. SNAP-proteins are abundantly expressed in all tissues. They are partially soluble, partially membrane-bound.

Selected References SYSY Antibodies

SNARE protein recycling by αSNAP and βSNAP supports synaptic vesicle priming.
Burgalossi A, Jung S, Meyer G, Jockusch WJ, Jahn O, Taschenberger H, O'Connor VM, Nishiki T, Takahashi M, Brose N, Rhee JS, et al.
Neuron (2010) 68(3): 473-87. **WB**

Cortical Granule Exocytosis Is Mediated by Alpha-SNAP and N-Ethilmaleimide Sensitive Factor in Mouse Oocytes.
de Paola M, Bello OD, Michaut MA
PloS one (2015) 10(8): e0135679. **WB**

Selected General References

Mapping of functional domains of gamma-SNAP.
Tani K, Shibata M, Kawase K, Kawashima H, Hatsuzawa K, Nagahama M, Tagaya M
The Journal of biological chemistry (2003) 278(15): 13531-8.

Mechanisms of synaptic vesicle exocytosis.
Lin RC, Scheller RH
Annual review of cell and developmental biology (2000) 16: 19-49.

Membrane fusion and exocytosis.
Jahn R, Südhof TC
Annual review of biochemistry (1999) 68: 863-911.

Alpha-SNAP but not gamma-SNAP is required for ER-Golgi transport after vesicle budding and the Rab1-requiring step but before the EGTA-sensitive step.
Peter F, Wong SH, Subramaniam VN, Tang BL, Hong W
Journal of cell science (1998) 111 (Pt 17): 2625-33.

The synaptic vesicle cycle: a cascade of protein-protein interactions.
Südhof TC
Nature (1995) 375(6533): 645-53.

Mechanisms of intracellular protein transport.
Rothman JE
Nature (1994) 372(6501): 55-63.