

Snapin

Cat.No. 148 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 100 up to 1 : 5000 IP: yes ICC: 1 : 500 IHC: 1 : 500 IHC-P/FFPE: 1 : 500
Immunogen	Recombinant protein corresponding to AA 1 to 136 from rat Snapin (UniProt Id: P60192)
Reactivity	Reacts with: human (O95295), rat (P60192), mouse (Q9Z266), rabbit. No signal: zebrafish. Other species not tested yet.
Specificity	Specific for snapin.
matching control	148-0P
Remarks	Since snapin is present in very low concentrations long exposure time is recommended.

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

Snapin, also referred to as **Snapap**, was initially identified as a SNAP 25 interacting protein which enhances the binding of synaptotagmin 1 to SNAREs in a phosphorylation dependent manner. Later an ubiquitous expression pattern in neuronal and non-neuronal cells and interaction with SNAP 23 was described. The protein contains heptad repeats typical for coiled coils in its C-terminal part. The role of this protein in SNARE mediated fusion is still under discussion.

Selected References SYSY Antibodies

Snapin, positive regulator of stimulation- induced Ca²⁺ release through RyR, is necessary for HIV-1 replication in T cells. Kinoshita SM, Kogure A, Taguchi S, Nolan GP
PloS one (2013) 8(10): e75297. **WB, IP, ICC; tested species: human**

The SNARE-associated component SNAPIN binds PUMILIO2 and NANOS1 proteins in human male germ cells. Ginter-Matuszewska B, Spik A, Rembiszewska A, Koyias C, Kupryjanczyk J, Jaruzelska J
Molecular human reproduction (2009) 15(3): 173-9. **WB, IHC-P; tested species: human,mouse**

LRRK2 phosphorylates Snapin and inhibits interaction of Snapin with SNAP-25. Yun HJ, Park J, Ho DH, Kim H, Kim CH, Oh H, Ga I, Seo H, Chang S, Son I, Seol W, et al.
Experimental & molecular medicine (2013) 45: e36. **IP, WB; tested species: mouse**

Snapin interacts with the Exo70 subunit of the exocyst and modulates GLUT4 trafficking. Bao Y, Lopez JA, James DE, Hunziker W
The Journal of biological chemistry (2008) 283(1): 324-31. **WB, ICC**

The UT-A1 urea transporter interacts with snapin, a SNARE-associated protein. Mistry AC, Mallick R, Fröhlich O, Klein JD, Rehm A, Chen G, Sands JM
The Journal of biological chemistry (2007) 282(41): 30097-106. **WB, ICC; tested species: rabbit**

A novel role for snapin in dendrite patterning: interaction with cypin. Chen M, Lucas KG, Akum BF, Balasingam G, Stawicki TM, Provost JM, Riefler GM, Jörnsten RJ, Firestein BL
Molecular biology of the cell (2005) 16(11): 5103-14. **ICC, WB; tested species: rat**

Mice deficient in transmembrane prostatic acid phosphatase display increased GABAergic transmission and neurological alterations. Nousiainen HO, Quintero IB, Myöhänen TT, Voikar V, Mijatovic J, Segerstråle M, Herrala AM, Kuleskaya N, Pulkka AE, Kivinummi T, Abo-Ramadan U, et al.
PloS one (2014) 9(5): e97851. **IHC; tested species: mouse**

The TRPM7 ion channel functions in cholinergic synaptic vesicles and affects transmitter release. Krapivinsky G, Mochida S, Krapivinsky L, Cibulsky SM, Clapham DE
Neuron (2006) 52(3): 485-96. **WB**

Selected General References

Identification and characterization of Snapin as a ubiquitously expressed SNARE-binding protein that interacts with SNAP23 in non-neuronal cells.

Buxton P, Zhang XM, Walsh B, Sriratana A, Schenberg I, Manickam E, Rowe T
The Biochemical journal (2003) 375(Pt 2): 433-40.

Phosphorylation of Snapin by PKA modulates its interaction with the SNARE complex. Chheda MG, Ashery U, Thakur P, Rettig J, Sheng ZH
Nature cell biology (2001) 3(4): 331-8.

Snapin: a SNARE-associated protein implicated in synaptic transmission. Ilardi JM, Mochida S, Sheng ZH
Nature neuroscience (1999) 2(2): 119-24.