

## Piccolo

Cat.No. 142 111; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

### Data Sheet

Reconstitution/Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> not tested yet <b>IP:</b> not tested yet <b>ICC:</b> 1 : 100 up to 1 : 500 <b>IHC:</b> 1 : 500 <b>IHC-P/FFPE:</b> 1 : 500
Clone	68G2
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 2012 to 2351 from rat Piccolo (UniProt Id: Q9JKS6)
Reactivity	Reacts with: rat (Q9JKS6), mouse (Q9QYX7). No signal: zebrafish. Other species not tested yet.
Specificity	Specific for piccolo.

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

**Piccolo**, also referred to as **Aczonin**, is a large protein which consists of an N-terminal Zn<sup>2+</sup> finger, several piccolo-bassoon homology domains (PBH-domains) and C-terminal PDZ and C2 domains. In general it is found together with bassoon, a related huge multi-domain protein of the CAZ (cytoskeletal matrix assembled at active zones). Piccolo is supposed to be a scaffolding protein for proteins involved in endo- and exocytosis of synaptic vesicles. Recently piccolo has been shown to interfere with clathrin mediated endocytosis by binding to the F-actin and dynamin binding protein Abp1.

### Selected References SYSY Antibodies

In vivo knockdown of Piccolo disrupts presynaptic ribbon morphology in mouse photoreceptor synapses. Regus-Leidig H, Fuchs M, Löhner M, Leist SR, Leal-Ortiz S, Chiodo VA, Hauswirth WW, Garner CC, Brandstätter JH *Frontiers in cellular neuroscience* (2014) 8: 259. **IHC**

### Selected General References

Unitary assembly of presynaptic active zones from Piccolo-Bassoon transport vesicles. Shapira M, Zhai RG, Dresbach T, Bresler T, Torres VI, Gundelfinger ED, Ziv NE, Garner CC *Neuron* (2003) 38(2): 237-52.

Interactions between Piccolo and the actin/dynamin-binding protein Abp1 link vesicle endocytosis to presynaptic active zones. Fenster SD, Kessels MM, Qualmann B, Chung WJ, Nash J, Gundelfinger ED, Garner CC *The Journal of biological chemistry* (2003) 278(22): 20268-77.

Localization of the presynaptic cytomatrix protein Piccolo at ribbon and conventional synapses in the rat retina: comparison with Bassoon.

Dick O, Hack I, Altmann WD, Garner CC, Gundelfinger ED, Brandstätter JH *The Journal of comparative neurology* (2001) 439(2): 224-34.

An unusual C(2)-domain in the active-zone protein piccolo: implications for Ca(2+) regulation of neurotransmitter release. Gerber SH, Garcia J, Rizo J, Südhof TC *The EMBO journal* (2001) 20(7): 1605-19.

Piccolo, a presynaptic zinc finger protein structurally related to bassoon. Fenster SD, Chung WJ, Zhai R, Cases-Langhoff C, Voss B, Garner AM, Kaempf U, Kindler S, Gundelfinger ED, Garner CC *Neuron* (2000) 25(1): 203-14.

Piccolo, a novel 420 kDa protein associated with the presynaptic cytomatrix. Cases-Langhoff C, Voss B, Garner AM, Appeltauer U, Takei K, Kindler S, Veh RW, De Camilli P, Gundelfinger ED, Garner CC *European journal of cell biology* (1996) 69(3): 214-23.

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