**Bassoon** is a large protein which consists of an N-terminal Zn²⁺ finger and several piccolo-bassoon homology domains (PBH-domains). It is generally found together with piccolo, a related huge multi-domain protein of the CAZ (cytoskeletal matrix assembled at active zones). Bassoon was suggested to be a scaffolding element of the presynapse but deletion experiments in mice have shown that bassoon is also involved in synaptic vesicle cycling. Probably bassoon interacts with other protein factors via its Zn²⁺ domain but the potential partners have not been determined yet.

### Selected References SYSY Antibodies

Critical role for piccolo in synaptic vesicle retrieval.
Ackermann F, Schink KO, Bruns C, Izsvák Z, Hamra FK, Rosenmund C, Garner CC

*eLife* (2019) **8**: WB, ICC; tested species: rat

Photoreceptor calcium channels: insight from night blindness.
Morgans CW, Bayley PR, Desch NW, Ren G, Akleswaran L, Taylor WR


Sonic hedgehog expression in the postnatal brain.
Rivell A, Petralia RS, Wang YK, Clawson E, Moehl K, Mattson MP, Yao PJ

*Biology open* (2019) **9**: ICC; tested species: rat

Expression and secretion of synaptic proteins during stem cell differentiation to cortical neurons.

*Neurochemistry International* (2018) **8**: ICC; tested species: mouse

Astrocyte-Secreted Chordin-like 1 Drives Synapse Maturation and Limits Plasticity by Increasing Synaptic GluA2 AMPA Receptors.
Blanco-Suarez E, Liu TF, Kopeleivich A, Allen NJ


Dual-color STED microscopy reveals a sandwich structure of Bassoon and Piccolo in active zones of adult and aged mice.
Nishimune H, Badawi Y, Mori S, Shigemoto K


Astrocyte-Secreted G plus C-rich RNA 1 Regulates Release of Neuronal Pentraxin 1 from Astrocytes to Induce Functional Synapse Formation.
Farhy-Tselnicker I, van Casteren ACM, Lee A, Chang VT, Aricescu AR, Allen NJ


**Cat.No. 141 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)**

**Data Sheet**

| Reconstitution/Storage | 200 µl antiserum, lyophilized. For reconstitution add 200 µl H₂O, then aliquot and store at -20°C until use.
| --- | --- |
| Applications | WB: 1: 100 up to 1: 1000 (AP staining) (see remarks)
IP: not tested yet
ICC: 1: 200 up to 1: 2000
IHC: yes
IHC-P/FFPE: not tested yet
| Immunogen | Recombinant protein corresponding to AA 3608 to 3938 from rat Bassoon (UniProt Id: O88778)
| Reactivity | Reacts with: rat (O88778), mouse (O88737).
No signal: chicken.
Other species not tested yet.
| Specificity | Specific for bassoon.
| matching control | 141-0P
| Remarks | WB: Due to its large size, bassoon requires special gel-electrophoresis and Western blot protocols for visualization by immunoblotting. Excellent results can be obtained with the 4-12% TRIS-glycine gradient gels from anamed or NuPAGE Western blot protocols for visualization by immunoblotting. Excellent results can be obtained with the 4-12% TRIS-glycine gradient gels from invitrogen.
Be obtained with the 4-12% TRIS-glycine gradient gels from anamed or NuPAGE Western blot protocols for visualization by immunoblotting. Excellent results can be obtained with the 4-12% TRIS-glycine gradient gels from invitrogen.

**TO BE USED IN VITRO / FOR RESEARCH ONLY**

**NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

**Bassoon** is a large protein which consists of an N-terminal Zn²⁺ finger and several piccolo-bassoon homology domains (PBH-domains). It is generally found together with piccolo, a related huge multi-domain protein of the CAZ (cytoskeletal matrix assembled at active zones). Bassoon was suggested to be a scaffolding element of the presynapse but deletion experiments in mice have shown that bassoon is also involved in synaptic vesicle cycling. Probably bassoon interacts with other protein factors via its Zn²⁺ domain but the potential partners have not been determined yet.

**Selected General References**

Functional regions of the presynaptic cytomatrix protein bassoon: significance for synaptic targeting and cytomatrix anchoring.
Dresbach T, Hempelmann A, Spiller C, tom Dieck S, Altrock WD, Zschatter W, Garner CC, Gundelfinger ED


Unitary assembly of presynaptic active zones from Piccolo-Bassoon transport vesicles.
Shapira M, Zhai RG, Dresbach T, Bresler T, Torres VI, Gunelfinger ED, et al.


Localisation of the presynaptic cytomatrix protein Piccolo at ribbon and conventional synapses in the rat retina: comparison with Bassoon.
Dick O, Hack I, Altrock WD, Garner CC, Gundelfinger ED, Brandstätter JH


Membrane association of presynaptic cytomatrix protein bassoon.