**Selected References SYSY Antibodies**

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GABAergic malfuncion in the anterior cingulate cortex underlying maternal immune activation-induced social deficits. 
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Excitatory synaptic dysfunction cell-autonomously decreases inhibitory inputs and disrupts structural and functional plasticity. 
He HY, Shen W, Zheng L, Guo X, Cline HT 

Heperan Sulfate Organizes Neuronal Synapses through Neurexin Partnerships. 

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Glycine receptors expression in rat spinal cord and dorsal root ganglion in prostaglandin E2 intrathecal injection models. 
Wang HC, Cheng KI, Chen PR, Tseng KY, Kwan AL, Chang LL 
The European journal of neuroscience (2018) : . **IHC; tested species: rat**

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Glycine receptors expression in rat spinal cord and dorsal root ganglion in prostaglandin E2 intrathecal injection models. 
Wang HC, Cheng KI, Chen PR, Tseng KY, Kwan AL, Chang LL 

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The Cellular and Synaptic Architecture of the Mechanosensory Dorsal Horn. 
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Transient oxytocin signaling primes the development and function of excitatory hippocampal neurons. 
eLife (2017) 6: . **ICC; tested species: mouse**

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**Data Sheet**

**Cat.No. 147 021; Monoclonal mouse antibody, 300 µl hybridoma supernatant (lyophilized)**

### Reconstitution/Storage

<table>
<thead>
<tr>
<th>Applications</th>
<th>WB: yes (see remarks)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IP: yes (see remarks)</td>
</tr>
<tr>
<td></td>
<td>ICC: 1: 250 up to 1: 500</td>
</tr>
<tr>
<td></td>
<td>IHC: yes (see remarks)</td>
</tr>
<tr>
<td></td>
<td>IHC-P/FFPE: not tested yet</td>
</tr>
<tr>
<td></td>
<td>EM: yes</td>
</tr>
</tbody>
</table>

### Clone

mAb7a

### Subtype

IgG1 (κ light chain)

### Immunogen

Recombinant protein corresponding to AA 1 to 768 from rat gephyrin (UniProt Id: Q03555)

### Epitop

Epitope: AA 264 to 276 from rat gephyrin (UniProt Id: Q03555)

### Reactivity

Reacts with: human (Q9NQX3), rat (Q03555), mouse (Q8BUV3), pig, goldfish, zebrafish, frog. Other species not tested yet.

### Specificity

Specific for the brain specific 93 kDa splice variant. (K.O. verified)

### Remarks

**WB**: Clone 3B11 (cat. no. 147 111) highly recommended. 
**IP**: Clone 3B11 (cat. no. 147 111) highly recommended. 
**IHC**: Hybridoma supernatant highly recommended. For best results use the protocol of Schneider Gasser et al., 2006. Alternatively AGR (10 mM citrate, pH 6.0, over night at 60°C) can be applied.

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

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

**Gephyrin** is a bifunctional protein which is essential for both synaptic clustering of inhibitory neurotransmitter receptors in the central nervous system and the biosynthesis of the molybdenum cofactor (MoCo) in peripheral tissues. It co-purifies with the inhibitory glycine receptor (GlyR) and is expressed abundantly in all brain areas which contain synapses.