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## Агс

Cat.No. 156 011; 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	WB: not recommended IP: yes ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not tested yet ELISA: yes (see remarks)
Clone	48B2
Subtype	IgG2b (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 396 from mouse Arc (UniProt Id: Q9WV31)
Epitop	Epitop: AA 1 to 214 from mouse Arc (UniProt Id: Q9WV31)
Reactivity	Reacts with: rat (Q63053), mouse (Q9WV31). Other species not tested yet.
Specificity	Specific for Arc.
matching control	156-0P
Remarks	<b>ELISA</b> : Suitable as capture antibody for sandwich-ELISA with cat. no. 156 003 as detector antibody (protocol for sandwich-ELISA).

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

Immediate-early genes (IEGs) are rapidely induced after patterned synaptic activity. Genes that are involved in this complex response code for transcription and growth factors, metabolic and signaling enzymes, small GTP binding proteins and structural proteins. Some of these proteins may play a crucial role in long term plasticity which is important for learning processes.

The activity regulated cytoskeleton associated protein Arc or Arg 3.1 is enriched in dendrites and colocalizes with F-Actin. Direct interaction of Arc with actin has also been demonstrated by biochemical studies.

### **Selected References SYSY Antibodies**

Synapsin-dependent reserve pool of synaptic vesicles supports replenishment of the readily releasable pool under intense synaptic transmission.

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#### **Selected General References**

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Memory-influencing intra-basolateral amygdala drug infusions modulate expression of Arc protein in the hippocampus. McIntyre CK, Miyashita T, Setlow B, Marjon KD, Steward O, Guzowski JF, McGaugh JL

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Synaptic activation causes the mRNA for the IEG Arc to localize selectively near activated postsynaptic sites on dendrites. Steward O, Wallace CS, Lyford GL, Worley PF

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