

p21-Arc

Cat.No. 303 011; 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 ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 100 up to 1 : 500 (AP staining) IP: not tested yet ICC: yes IHC: not tested yet IHC-P/FFPE: not tested yet ELISA: yes
Clone	24A6
Subtype	IgG2b (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 178 from human p21-Arc (UniProt Id: O15145)
Epitop	Epitop: AA 109 to 120 from human p21-Arc (UniProt Id: O15145)
Reactivity	Reacts with: human (O15145), rat (Q4V7C7), mouse (Q9JM76), hamster. Other species not tested yet.
Specificity	Specific for p21-Arc.

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

Actin polymerization is a necessary event for cell motility. Spontaneous actin oligomerization is slow at given monomeric actin concentrations in cells. The **Arp 2/3 complex** which is about 220 kDa in size has turned out to initiate the polymerization of new actin filaments. This complex consists of two actin like proteins Arp2 and Arp3 and five additional proteins: **p16-Arc** (ArpC5), p20-Arc (ArpC4), **p21-Arc** (ArpC3), **p34-Arc** (ArpC2) and p41-Arc (ArpC1). Expression of partial complexes revealed that a heterodimer of p20-Arc and p34-Arc constitutes the core of the complex whereas the remaining subunits are peripherally located.

Selected References SYSY Antibodies

Antiparkinsonian trophic action of glial cell line-derived neurotrophic factor and transforming growth factor β1 is enhanced after co-infusion in rats.

Gonzalez-Aparicio R, Flores JA, Fernandez-Espejo E
Experimental neurology (2010) 226(1): 136-47. **WB**

Effects of acute and repeated cocaine on markers for neural plasticity within the mesolimbic system in rats.

Rodriguez-Espinosa N, Fernandez-Espejo E
Psychopharmacology (2015) 232(1): 57-62. **WB**

Molecular anatomy of a trafficking organelle.

Takamori S, Holt M, Stenius K, Lemke EA, Grønborg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, et al.
Cell (2006) 127(4): 831-46. **WB**

Filopodia formation in the absence of functional WAVE- and Arp2/3-complexes.

Steffen A, Faix J, Resch GP, Linkner J, Wehland J, Small JV, Rottner K, Stradal TE
Molecular biology of the cell (2006) 17(6): 2581-91. **WB**

Selected General References

Structural insights into actin-binding, branching and bundling proteins.

Winder SJ

Current opinion in cell biology (2003) 15(1): 14-22.

Cellular motility driven by assembly and disassembly of actin filaments.

Pollard TD, Borisy GG

Cell (2003) 112(4): 453-65.

Structure and function of the Arp2/3 complex.

Pollard TD, Beltzner CC

Current opinion in structural biology (2002) 12(6): 768-74.

Reconstitution of human Arp2/3 complex reveals critical roles of individual subunits in complex structure and activity.

Gournier H, Goley ED, Niederstrasser H, Trinh T, Welch MD

Molecular cell (2001) 8(5): 1041-52.