

## Birch Profilin

**Cat.No. 308 111; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)**

### Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. 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> 1 : 500 up to 1 : 10000 <b>IP:</b> yes <b>ICC:</b> yes <b>IHC:</b> not tested yet <b>IHC-P/FFPE:</b> not tested yet
Clone	4A6
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 140 from bovine Profilin1 (UniProt Id: P02584)
Epitop	Epitop: AA 42 to 47 from bovine Profilin1 (UniProt Id: P02584)
Specificity	Specific for birch profilin.
Remarks	This antibody has been used successfully with eucaryotic and procaryotic expression vectors using the epitope as a tag (Rudiger et al. 1997).

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

**Profilins** are small proteins (14-17 kDa) which are involved in the regulation of the cellular microfilament system. They are associated with highly dynamic microfilament structures present at cellular membranes. Profilins have been found together with lamellipodia, focal adhesions, surface ruffles and on intracellular vesicles and have been shown to interact with different cytoskeleton proteins like actin, gephyrin and the Arp 2/3 complex. Recently a tumor suppression activity has been described for profilin.

### Selected References SYSY Antibodies

Molecular and structural analysis of a continuous birch profilin epitope defined by a monoclonal antibody. Wiedemann P, Giehl K, Almo SC, Fedorov AA, Girvin M, Steinberger P, Rüdiger M, Ortner M, Sippl M, Dolecek C, Kraft D, et al. The Journal of biological chemistry (1996) 271(47): 29915-21.

### Selected General References

The actin-binding protein profilin I is localized at synaptic sites in an activity-regulated manner. Neuhoﬀ H, Sassoè-Pognetto M, Panzanelli P, Maas C, Witke W, Kneussel M. The European journal of neuroscience (2005) 21(1): 15-25.

Tumor suppressor activity of profilin requires a functional actin binding site. Wittenmayer N, Jandrig B, Rothkegel M, Schlüter K, Arnold W, Haensch W, Scherneck S, Jockusch BM. Molecular biology of the cell (2004) 15(4): 1600-8.