

PRG 1

Cat.No. 282 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: 1 : 500 up to 1 : 1000 IHC: 1 : 200 up to 1 : 500 IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 571 to 766 from mouse PRG1 (UniProt Id: Q7TME0)
Reactivity	Reacts with: rat (Q7TMB7), mouse (Q7TME0). Other species not tested yet.
Specificity	Specific for PRG 1.

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

Plasticity related gene 1 (**PRG 1**), also referred to as **Lppr4**, is a brain-specific membrane protein with lipid phosphatase activity that is involved in axonal outgrowth and neuron sprouting. It has also been shown to interact with calmodulin, a multifunctional Ca²⁺-signal transducer.

Selected General References

Synaptic PRG-1 modulates excitatory transmission via lipid phosphate-mediated signaling.
Trimbuch T, Beed P, Vogt J, Schuchmann S, Maier N, Kintscher M, Breustedt J, Schuelke M, Streu N, Kieselmann O, Brunk I, et al. Cell (2009) 138(6): 1222-35.

Identification and characterization of PRG-1 as a neuronal calmodulin-binding protein.
Tokumitsu H, Hatano N, Tsuchiya M, Yurimoto S, Fujimoto T, Ohara N, Kobayashi R, Sakagami H The Biochemical journal (2010) 431(1): 81-91.

A new phospholipid phosphatase, PRG-1, is involved in axon growth and regenerative sprouting.
Bräuer AU, Savaskan NE, Kühn H, Prehn S, Ninnemann O, Nitsch R Nature neuroscience (2003) 6(6): 572-8.