

GAP 43

Cat.No. 344 004; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: 1 : 500 IHC: 1 : 500 IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 1 to 226 from rat GAP43 (UniProt Id: P07936)
Reactivity	Reacts with: rat (P07936), mouse (P06837). Other species not tested yet.
Specificity	Specific for GAP 43.

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

The neuronal growth-associated protein **GAP 43** plays an important role in nerve growth and is a major component of the motile "growth cones" that form the tips of elongating axons. It is the major substrate for protein kinase C and is associated with axonal and dendritic filopodia induction. GAP 43 is also known as **Neuromodulin**, **B-50**, **P-57**, **pp46**, and **F1**.

Selected General References

Growth associated protein (GAP-43): cloning and the development of a sensitive ELISA for neurological disorders.
Gnanapavan S, Yousaf N, Heywood W, Grant D, Mills K, Chernajovsky Y, Keir G, Giovannoni G
Journal of neuroimmunology (2014) 276(1-2): 18-23.

Axonally synthesized β -actin and GAP-43 proteins support distinct modes of axonal growth.
Donnelly CJ, Park M, Spillane M, Yoo S, Pacheco A, Gomes C, Vuppalandhi D, McDonald M, Kim HH, Kim HK, Merianda TT, et al.
The Journal of neuroscience : the official journal of the Society for Neuroscience (2013) 33(8): 3311-22.

Impaired sprouting and axonal atrophy in cerebellar climbing fibres following in vivo silencing of the growth-associated protein GAP-43.
Grasselli G, Mandolesi G, Strata P, Cesare P
PloS one (2011) 6(6): e20791.

GAP-43, a protein associated with axon growth, is phosphorylated at three sites in cultured neurons and rat brain.
Spencer SA, Schuh SM, Liu WS, Willard MB
The Journal of biological chemistry (1992) 267(13): 9059-64.

Primary structure and mRNA localization of protein F1, a growth-related protein kinase C substrate associated with synaptic plasticity.
Rosenthal A, Chan SY, Henzel W, Haskell C, Kuang WJ, Chen E, Wilcox JN, Ullrich A, Goeddel DV, Routtenberg A
The EMBO journal (1987) 6(12): 3641-6.