Product Information Sheet

Monoclonal Anti-Growth Associated Protein-43, *GAP43*

Catalogue No. MA1042

Lot No. 08A12

Clone: GAP-8A12

Ig type: mouse IgG2a

Size: 100µg/vial

Specificity

Human, mouse, rat, chicken, snake

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunohistochemistry(F)

To reorder contact us at:

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Immunogen

GAP-43 from neonatal rat forebrain membranes.

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Application

Western blot

At 0.5-1µg/ml with the appropriate system to detect GAP43 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect GAP43 in formalin fixed and paraffin embedded tissues.

Immunohistochemistry(F)

At 1-2µg/ml to detect GAP43 in formalin or acetone fixed tissues.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Formulation

Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg NaN_3 as preservative.

Reconstitution

1.2% sodium acetate or neutral PBS. If 1ml of PBS is used, the antibody concentration will be 100µg/ml.

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

Relative detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by SA1021 in IH; supported by chemiluminescence kit EK1001 in WB.

BACKGROUND

GAP43 is expressed by developing and regenerating neurons, and to a lesser extent, reactive glial cells. It is used widely to specifically label injured neurons and to score neuronal regeneration. GAP43 is also a neuronal growth cone protein thought to be involved in pathfinding. GAP43 is considered to be a crucial component of an effective regenerative response in the nervous system.

REFERENCE

1.Kosik, K. S.; Orecchio, L. D.; Bruns, G. A. P.; Benowitz, L. I.; MacDonald, G. P.; Cox, D. R.; Neve, R. L. : Human GAP-43: its deduced amino acid sequence and chromosomal localization in mouse and human. *Neuron* 1: 127-132, 1988.

2.Strittmatter, S. M.; Fankhauser, C.; Huang, P. L.; Mashimo, H.; Fishman, M. C. :
Neuronal pathfinding is abnormal in mice lacking the neuronal growth cone protein GAP-43. *Cell* 80: 445-452, 1995.