



# Polyclonal Anti-Growth Associated Protein 43, GAP43 (Sepharose Bead Conjugate)

Catalogue No. PA1037-S

Lot No. 06L01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity Human, mouse, rat. No cross reactivity with other proteins.

**Recommended application** 

(Immunoprecipitation(IP)

# Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of the human GAP-43, different to the related mouse and rat sequence by single amino acid.

# Purification

Immunogen affinity purified.

## Formulation

50% slurry in PBS pH 7.2 with 0.01mg  $NaN_3a_3$  preservative.

Storage

Store at 4°C for frequent use.

#### Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

## BACKGROUND

Growth Associated Protein-43(GAP-43), also known as nerve growth-related growth peptide GAP43, shares a high degree of homology between the sequence of the human gene and the rat gene. GAP-43 is considered a crucial component of an effective regenerative response in the nervous system. Somatic cell hybrids demonstrate localization of the GAP-43 gene to human chromosome 3 and to mouse chromosome 16. GAP-43 has been termed a "growth" or "plasticity" protein because it is expressed at high levels in neuronal growth cones during development and during axonal regeneration. GAP-43 regulates growth of axons and modulates the formation of new connections. thyroid carcinoma.

## REFERENCE

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.
Chen, B.; Wang, J.-F.; Sun, X.; Young, L. T. : Regulation of GAP-43 expression by chronic desipramine treatment in rat cultured hippocampal cells. *Biol. Psychiat.* 53: 530-537, 2003.