



## Product Information Sheet

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

**Catalogue No.** PA1037-M

**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.

**Purity**

Immunogen affinity purified.

**Contents**

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN<sub>3</sub>.

**Storage**

Store at 4°C for frequent use.

**Description**

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

### **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**

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.

3 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.