



Product Information Sheet

Polyclonal Anti-Growth Hormone Receptor, *GHR* (Magnetic Bead Conjugate)

Catalogue No. PA1206-M

Lot No. 09A01

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 human GHR, different to the related rat sequence by a single amino acid.

Purity

Immunogen affinity purified.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

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

The GHR locus to human chromosome 5p13.1-p12 and to mouse chromosome 15.¹ Additionally, its gene has 9 exons that encode the receptor and several additional exons in the 5-prime untranslated region. The coding exons span at least 87 kb.² GHR consists of an extracellular domain of 246 amino acids, a single transmembrane domain, and a cytoplasmic domain. Exons 3 to 7 encode the extracellular domain. There are 2 isoforms of GHR in humans, generated by retention or exclusion of exon 3 during splicing: a full-length isoform and an isoform that lacks exon 3 (d3GHR). Furthermore, the two isoforms of GHR are expressed in the placenta and appeared to be due to alternative splicing. In cirrhosis, there is a state of acquired GH resistance, as defined by high circulating GH levels with low IGF1 levels. Moreover, Mutations in the GHR gene have been demonstrated as the cause of Laron syndrome, also known as the growth hormone insensitivity syndrome (GHIS).³

REFERENCE

1. Barton, D. E.; Foellmer, B. E.; Wood, W. I.; Francke, U. : Chromosome mapping of the growth hormone receptor gene in man and mouse. *Cytogenet. Cell Genet.* 50: 137-141, 1989.
2. Godowski, P. J.; Leung, D. W.; Meacham, L. R.; Galgani, J. P.; Hellmiss, R.; Keret, R.; Rotwein, P. S.; Parks, J. S.; Laron, Z.; Wood, W. I. : Characterization of the human growth hormone receptor gene and demonstration of a partial gene deletion in two patients with Laron-type dwarfism. *Proc. Nat. Acad. Sci.* 86: 8083-8087, 1989.
3. Amselem, S.; Sobrier, M.-L.; Duquesnoy, P.; Rappaport, R.; Postel-Vinay, M.-C.; Gournelen, M.; Dallapiccola, B.; Goossens, M. : Recurrent nonsense mutations in the growth hormone receptor from patients with Laron dwarfism. *J. Clin. Invest.* 87: 1098-1102, 1991.

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