

Product Information

Anti-Growth Hormone Receptor

produced in goat, affinity isolated antibody

Catalog Number **G8919**

Product Description

Anti-Growth Hormone Receptor is produced in goat using as immunogen a purified, NSO-derived, recombinant mouse growth hormone receptor (GHR), extracellular domain as immunogen. Mouse growth hormone receptor specific IgG is purified by mouse GHR affinity chromatography.

Anti-Growth Hormone Receptor detects mouse growth hormone receptor by immunoblotting and immunohistochemistry. In immunoblotting, the antibody shows ~50% cross-reactivity with recombinant rat growth hormone receptor and 20% cross-reactivity with recombinant human growth hormone receptor.

Growth hormone (GH), also known as somatotropin, exerts its biological actions by binding to the growth hormone receptor (GHR). GHR is present in many cell types.^{1,2} An alternatively spliced secreted isoform of mouse GHR also exists.³ This variant corresponds to the serum GH-binding protein (GHBP). Ligation of GHR by GH results in receptor dimerization and activation of the JAK/STAT signaling cascade.⁴ The soluble GHBP interferes with GH signaling by competing with the transmembrane receptor of GH.

Reagent

Supplied as a lyophilized powder from a 0.2 µm filtered solution of phosphate buffered saline (PBS) with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Prior to reconstitution, store at -20 °C. Reconstituted product may be stored at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots. Avoid repeated freezing and thawing. Do not store in frost-free freezer.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of 0.2 µm filtered solution of phosphate buffered saline to produce a 0.1 mg/ml stock solution of antibody.

Product Profile

Immunoblotting: a working antibody concentration of 0.1-0.2 µg/ml is recommended. The detection limit for recombinant mouse growth hormone receptor is ~5 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry: a working antibody concentration of 5-15 µg/ml is recommended using cells and tissues in a chromogenic detection system.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Goffin, V. et al., *Endocrine Rev.*, **17**, 385-410 (1996).
2. Le Roith, D., et al., *Endocrine Rev.*, **22**, 53-74 (2001).
3. Edens, A., et al., *Endocrinol.*, **135**, 2802-2805 (1994)..
4. Carter-Su, C. et al., *Annu. Rev. Physiol.*, **58**, 187-207 (1996).

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