

## Product Datasheet

### Growth Hormone Antibody / GH1 (orb2640194)

|                            |   |
|----------------------------|---|
| <b>Description</b>         | Growth hormone (GH), also known as somatotropin (or as human growth hormone [hGH or HGH] in its human form), is a peptide hormone that stimulates growth, cell reproduction, and cell regeneration in humans and other animals. It is thus important in human development. It is a type of mitogen which is specific only to certain kinds of cells. Growth hormone is a 191-amino acid, single-chain polypeptide that is synthesized, stored, and secreted by somatotrophic cells within the lateral wings of the anterior pituitary gland. GH is a stress hormone that raises the concentration of glucose and free fatty acids. It also stimulates production of IGF-1. The major isoform of the human growth hormone is a protein of 191 amino acids and a molecular weight of 22,124 daltons. The structure includes four helices necessary for functional interaction with the GH receptor. It appears that, in structure, GH is evolutionarily homologous to prolactin and chorionic somatomammotropin. [Wiki] |
| <b>Species/Host</b>        | Mouse   |
| <b>Reactivity</b>          | Human   |
| <b>Conjugation</b>         | Unconjugated  |
| <b>Tested Applications</b> | IHC-P   |
| <b>Immunogen</b>           | Amino acids 58-187 from the human protein were used as the immunogen for this Growth Hormone antibody.  |
| <b>Preservatives</b>       | 0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium azide   |
| <b>Storage</b>             | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.   |
| <b>Note</b>                | For research use only   |
| <b>Application notes</b>   | Titration of the Growth Hormone antibody may be needed for optimal performance.   |

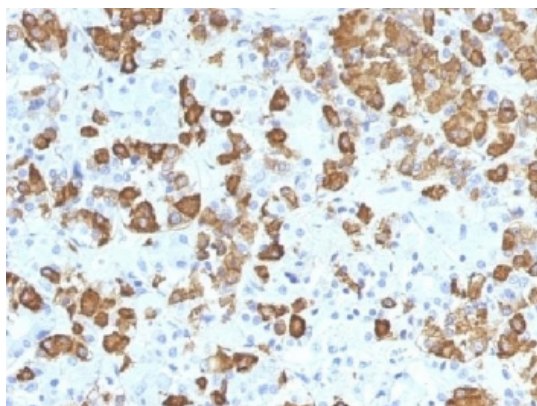
#### Biorbyt Ltd.

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44201223859353) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

#### Biorbyt LLC.

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+14159065211) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

|                           |  |
|---------------------------|--|
| <b>Formula</b>            | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide |
| <b>Isotype</b>            | Mouse IgG2b, kappa   |
| <b>Clonality</b>          | Monoclonal   |
| <b>Clone Number</b>       | GH/1371  |
| <b>Antibody Type</b>      | Primary Antibody   |
| <b>Purity</b>             | Protein G affinity chromatography  |
| <b>Uniprot ID</b>         | <b>P01241</b>  |
| <b>Hazard Information</b> | This Growth Hormone antibody is available for research use only.           |
| <b>Entrez</b>             | <b>2688</b>  |
| <b>Dilution Range</b>     | Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT                     |
| <b>Expiration Date</b>    | 12 months from date of receipt.  |



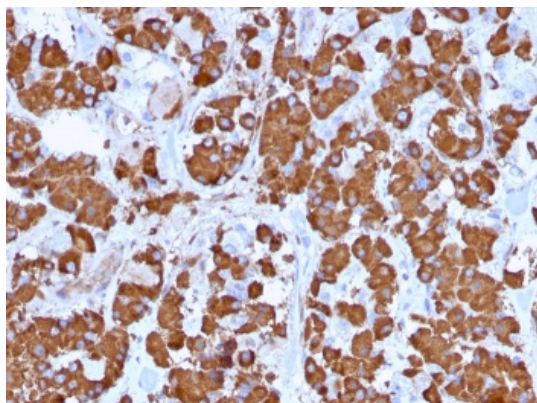
IHC testing of FFPE human pituitary gland with Growth Hormone antibody (clone GH/1371). Required HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min.

**Biorbyt Ltd.**

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44%201223859353) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

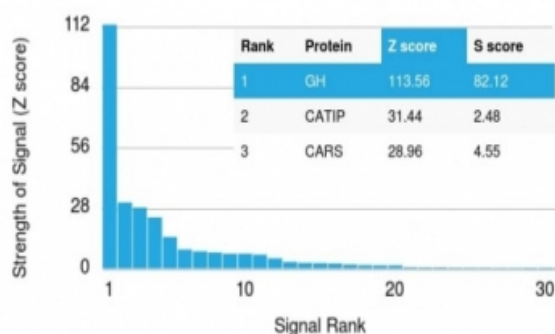
**Biorbyt LLC.**

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+14159065211) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

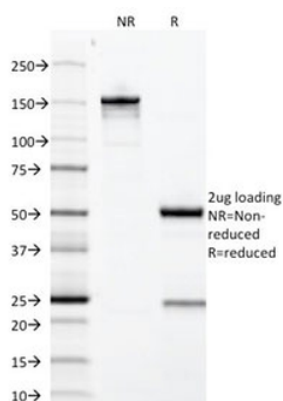


IHC testing of FFPE human pituitary gland with Growth Hormone antibody (clone GH/1371). Required HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min.

#### Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19,000 full-length human proteins using Growth Hormone antibody (clone GH/1371). These results demonstrate the foremost specificity of the GH/1371 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Growth Hormone antibody (clone GH/1371) as confirmation of integrity and purity.

#### **Biorbyt Ltd.**

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+4401223859353) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

#### **Biorbyt LLC.**

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+14159065211) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)