

## Product datasheet for **SM6016**

### Growth Hormone (GH1) (21-217) Mouse Monoclonal Antibody [Clone ID: g3H5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	g3H5
Applications:	ELISA, IHC, Neutralize, WB
Recommended Dilution:	<b>ELISA.</b> <b>Western blot</b> (1/500-1/1,000). <b>Immunohistochemistry on Paraffin sections</b> (10 µg/ml). This GH antibody was validated for use in immunohistochemistry on a panel of 21 formalin-fixed, paraffin-embedded (FFPE) human tissues after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with the primary antibody, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen. <b>Neutralization.</b>
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Recombinant human Growth hormone (27 - 217 aa) purified from E. coli
Specificity:	The antibody recognizes Growth Hormone (hGH) at aa 27-217.
Formulation:	PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein-G affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	growth hormone 1



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Database Link: [Entrez Gene 2688 Human P01241](#)

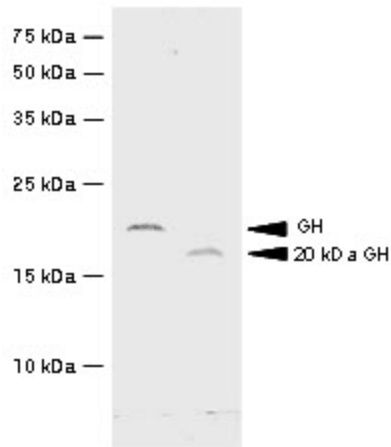
**Background:** Human growth hormone (hGH, somatotropin), a protein hormone from the anterior lobe of the pituitary gland, comprises a single polypeptide chain of 191 amino acid residues. The 20KDa variant form of human growth hormone (20KDa hGH) presents in extracts from pituitary glands and it differs from the major form of hGH (22KDa, 191 amino acid) by the deletion of amino acid residues 32-46. The growth hormone amino acid sequence varies considerably between species, and non-primate growth hormones have little activity in man. Main functions of hGH and 20KDa hGH are the stimulation of somatic and bone growth, as well as an increase in the size and mass of organs and tissues. The gene, along with four other related genes, is located at the growth hormone locus on chromosome 17 where they are interspersed in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. The five genes share a remarkably high degree of sequence identity. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. Mutations in or deletions of the gene lead to growth hormone deficiency and short stature.

**Synonyms:** Pituitary growth hormone, Growth hormone 1, HGH

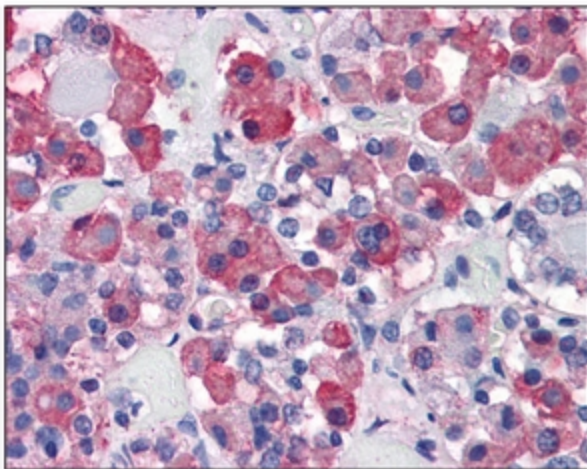
### Product images:



Recombinant hGH and 20kDa hGH were resolved by electrophoresis, transferred to PVDF membrane and probed with anti-hGH (1:500). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and a DAB detection system. Arrows indicate recombinant hGH (22kDa) and 20kDa hGH, respectively.



Immunoblot analysis: Recombinant hGH and 20kDa hGH were resolved by electrophoresis, transferred to PVDF membrane and probed with anti-Human GH antibody (1/500). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and a DAB detection system. Arrows indicate recombinant hGH (22 kDa) and 20 kDa hGH, respectively.



Immunohistochemistry: GH antibody staining of Formalin-Fixed, Paraffin-Embedded Human Anterior Pituitary.