

Product datasheet for PH309608

OriGene Technologies, Inc.

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Growth Hormone (GH1) (NM_022559) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: GH1 MS Standard C13 and N15-labeled recombinant protein (NP_072053)

Species: Human Expression Host: HEK293

Expression cDNA Clone or AA Sequence:

RC209608

Predicted MW: 23 kDa

Protein Sequence: >RC209608 protein sequence

Red=Cloning site Green=Tags(s)

 ${\tt MATGSRTSLLLAFGLLCLPWLQEGSAFPTIPLSRLFDNAMLRAHRLHQLAFDTYQEFNPQTSLCFSESIPTSNREETQQKSNLELLRISLLLIQSWLEPVQFLRSVFANSLVYGASDSNVYDLLKDLEEGIQTLMGRLE}$

DGSPRTGQIFKQTYSKFDTNSHNDDALLKNYGLLYCFRKDMDKVETFLRIVQCRSVEGSCGF

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 072053

RefSeq Size: 815 RefSeq ORF: 606

Synonyms: GH; GH-N; GHB5; GHN; hGH-N; IGHD1A; IGHD1B; IGHD2

Locus ID: 2688

UniProt ID: <u>P01241</u>, <u>B1A4G7</u>





Cytogenetics: 17q23.3

Summary: The protein encoded by this gene is a member of the somatotropin/prolactin family of

hormones which play an important role in growth control. 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. This particular family member is expressed in the pituitary but not in placental tissue as is the case for the other four genes in the growth hormone locus. Mutations in or deletions of the gene lead to

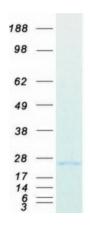
growth hormone deficiency and short stature. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-

receptor interaction

Product images:



Coomassie blue staining of purified GH1 protein (Cat# [TP309608]). The protein was produced from HEK293T cells transfected with GH1 cDNA clone (Cat# [RC209608]) using MegaTran 2.0 (Cat# [TT210002]).