

Rev03  
Update: Dec,14,2021

**DATASHEET**

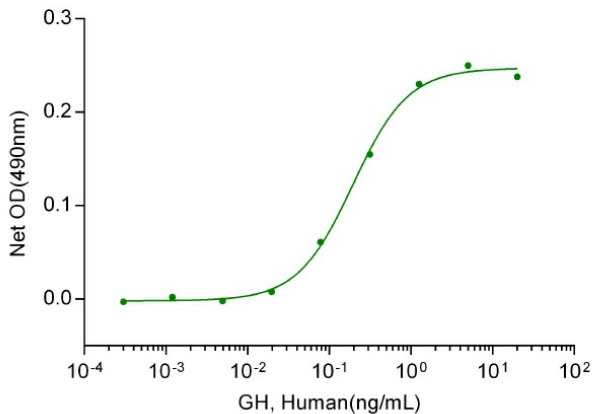
# GH, Human

Cat. No.: Z03012

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>GH (Phe27-Phe217) Accession # P01241</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 0.5 ng/ml, measured by a cell proliferation assay using Nb2-11 Cells, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> units/mg.
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~22.1 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 μg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Examples



ED<sub>50</sub> < 0.5 ng/ml, measured by a cell proliferation assay using Nb2-11 Cells, corresponding to a specific activity of > 2.0 × 10<sup>6</sup> units/mg.

## Background

**Target Background :** Growth Hormone (GH) is a member of the somatotropin/prolactin family which play an important role in growth control. The human GH cDNA encodes a 217 amino acid (aa), and the first 26 aa is a signal peptide. By alternative splicing, at least four isoforms of GH have been identified. The major role of GH in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1. GH stimulates both the differentiation and proliferation of myoblasts, and also stimulates amino acid uptake and protein synthesis in muscle and other tissues.

**Synonyms :** GH1; GH; GHN; GH-N; hGH-N; Pituitary growth hormone; Growth hormone 1; Somatotropin

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**