

## **Recombinant Human GH1** Cat No:HR2R1459

For research use only

## Overview

| Quantity              | 500 ?g   |
|-----------------------|--|
| Gene Symbol           | GH1  |
| Gene ID               | 2688   |
| Accession             | P01241   |
| Alternative<br>Name   | GH, GH-N, Growth hormone 1, Pituitary growth hormone, Somatotropin<br>Recombinant Human Growth Hormone (GH1)   |
| Species               | Human  |
| Source                |  |
| Description           | The physiological activity for which growth hormone is best known is the promotion of growth of bone, cartilage, and soft tissues. Detectable levels of growth hormone are found throughout the remainder of adulthood, suggesting other functions in addition to promotion of growth. Growth hormone may be important for the maintenance of lean body mass; most growth-promoting effects of growth hormone are mediated by IGF-1 the synthesis of which is regulated by growth hormone. The biological activities of growth hormone are mediated by receptors belonging to one of the cytokine receptor families. Growth hormone has been shown to be produced by T cells, B cells, and macrophages. In human lymphocytes growth hormone appears to up-regulate its own expression. Growth hormone appears to act as an enhancer of immune responses and is produced in considerable amounts by T helper cells. |
| Functions             | The ED(50) was determined by the dose-dependent cell proliferation assay using the rat lymphoma, Nb2-11, and was found to be in the range of 0.1 ng/mL.  |
| Formulation           | Lyophilized from a 0.2 ?m filtered in Tris and NaCI (pH 7.5).  |
| Solubility            | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.   |
| Appearance            | Lyophilized Powder   |
| Molecular<br>Weight   | 22   |
| Purity                | >95% as determined by SDS-PAGE   |
| Concentration         | <1.0 EU/?g of recombinant protein as determined by the LAL method.   |
| Shipping<br>Condition | Ambient Temperature  |

The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

