

## GFH204 Recombinant Human IL-31

### Description

Interleukin-31 (IL-31) is an immunoregulatory cytokine that is expressed by activated type 2 T helper (Th2) cells. IL-31 signals through a heterodimer receptor consisting of the IL-31 Receptor A (IL-31RA) and the oncostatin M receptor (OSMR), which are expressed on monocytes, epithelial cells, and keratinocytes. IL-31 promotes allergic reactions and inflammatory skin diseases.

|                         |   |
|-------------------------|---|
| <b>Length</b>           | 141 aa  |
| <b>Molecular Weight</b> | 15.8 kDa  |
| <b>Source</b>           | E. coli   |
| <b>Accession Number</b> | Q6EBC2  |
| <b>Purity</b>           | ≥95% determined by reducing and non-reducing SDS-PAGE |

### Specifications

|                            |  |
|----------------------------|--|
| <b>Alternative Names</b>   | Interleukin-31, interleukin 31, IL31, IL 31  |
| <b>Biological Activity</b> | Human IL-31 is fully biologically active when compared to standard. The activity is determined by the ability to induce STAT3 activation in U-87 MG cells detectable at lower than 25 ng/ml. |
| <b>Endotoxin Level</b>     | ≤1.00 EU/μg as measured by kinetic LAL   |
| <b>Formulation</b>         | Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 20 mM sodium phosphate, 50 mM sodium chloride, pH 7.5   |
| <b>AA Sequence</b>         | SHTLPVRLLR PSDDVQKIVE ELQSLSKMLL KDVEEEKGVL VSQNYTLPCPL SPDAQPPNNI HSPAIRAYLK<br>TIRQLDNKSV IDEIIEHLDK LIFQDAPETN ISVPTDTHC KRFLITISQQ FSECMDLALK SLTSGAQQAT<br>T                            |

### Preparation and Storage

|                              |   |
|------------------------------|---|
| <b>Reconstitution</b>        | Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions. |
| <b>Stability and Storage</b> | 12 months from date of receipt when stored at -20°C to -80°C as supplied.<br>1 month when stored at 4°C after reconstituting as directed.<br>3 months when stored at -20°C to -80°C after reconstituting as directed.   |