

ChemUhot Recombinant Rhesus Macaque Interleukin-13 (rRhIL-13)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:

111-13

Source:

Escherichia coli.

Molecular Weight:

Approximately12.6 kDa, a single non-glycosylated polypeptide chain containing 114 amino acids.

Quantity:

 $2\mu g/10\mu g/1000\mu g$

AA Sequence:

SPSPVPRSTA LKELIEELVN ITQNQKAPLC NGSMVWSINL TAGVYCAALE SLINVSGCSA

IEKTQRMLNG FCPHKVSAGQ FSSLRVRDTK IEVAQFVKDL LVHLKKLFRE GRFN

Purity:

> 98 % by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation

assay using human TF-1 cells is less than 5 ng/ml, corresponding to a specific activity of $> 2.0 \times 10^5$

IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 3% trehalose.

Endotoxin:

Less than 1 EU/µg of rRhIL-13 as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and

stored at \leq -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature

recommended below.

Stability & Storage:

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

12 months from date of receipt, -20 to -70 °C as supplied.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 to -70 °C under sterile conditions after reconstitution.

Usage:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

Rhesus Macaque Interleukin-13

Interleukin-13 (IL-13) is expressed by the IL13 gene and secreted by many cell types, especially T helper type 2 (Th2) cells. The high solution from of IL-13 reported to be a monomer with two internal disulfide bonds that contribute to a bundled four α -helix configuration. Targeted deletion of IL-13 in mice resulted in impaired Th2 cell development and indicated an important role for IL-13 in the expulsion of gastrointestinal parasites. IL-13 exerts anti-inflammatory effects on monocytes and macrophages and it inhibits the expression of inflammatory cytokines such as IL-1beta, TNF-alpha, IL-6 and IL-8. IL-13 has also been shown to enhance B cell proliferation and to induce isotype switching resulting in increased production of IgE. Mature rhesus IL-13 shares 94%, 58%, and 60% amino acid sequence identity with human, mouse, and rat IL-13, respectively.

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