

## PRODUCT DATA SHEET



Bioworld Technology, Inc.

### Recombinant Murine Interleukin-13 (rMuIL-13)

Catalog Number: PR2010

Source: Escherichia coli.

Quantity: 2µg/10µg/1.0mg

#### Description

IL-13 is an immunoregulatory cytokine produced primarily by activated Th2 cells, and also by mast cells and NK cells. 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. Blocking of IL-13 activity inhibits the pathophysiology of asthma. Human and murine IL-13 is cross-species reactive.

#### Molecular Weight:

Approximately 12.3 kDa, a single non-glycosylated polypeptide chain containing 111 amino acids.

#### Purity:

>97% by SDS-PAGE and HPLC analyses.

#### Biological Activity:

The ED50 as determined by the dose-dependent proliferation of TF-1 cells was < 4.0 ng/ml, corresponding to a specific activity of > 2.5 x 10<sup>5</sup> units/mg.

#### Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

#### Formulation:

Lyophilized from a 0.2mm filtered solution in PBS, pH 7.4.

#### AA Sequence:

M P V P R S V S L P L T L K E L I E E L S N I T Q D Q T P  
L C N G S M V W S V D L A A G G F C V A L D S L T N  
I S N C N A I Y R T Q R I L H G L C N R K A P T T V S S  
L P D T K I E V A H F I T K L L S Y T K Q L F R H G P F

#### Endotoxin:

Less than 1EU/mg of rMuIL-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 <-20°C. Further dilutions should be made in appropriate buffered solutions.

#### Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

#### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

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