

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IL-19, Mouse

Catalog Number: BK0093-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

Interleukin-19 (IL-19) is a cytokine belonging to the interleukin family. Structurally, IL-19 is grouped into the IL-10 sub-family, which also includes IL-20, IL-22, IL-24, and IL-26. In contrast to IL-10, which exists as a homodimer, IL-19 is stable and active as a monomer in vivo. IL-19 functions through the receptor complex composed of IL-20 Receptor  $\alpha$  and IL-20 Receptor  $\beta$ , which is also utilized by IL-20 and IL-24. IL-19 is produced by active monocytes and stimulated synergistically by IL-17 and IL-13. The functions of IL-19 are to promote the development and function of Th2 cells and to enhance the production of Th2 cytokines. IL-19 is implicated in aging, vascular disease, Type I diabetes, and rheumatoid arthritis. Recombinant mouse Interleukin-19 (rmIL-19) produced in E.coli is a single non-glycosylated polypeptide chain containing of 153 amino acids. A fully biologically active molecule, rmIL-19 has a molecular mass of 17.7 kDa analyzed by non-reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

17.7 kDa, observed by non-reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE analysis.

### Biological Activity:

ED50 < 50 ng/mL, measured by a cell proliferation assay using MCF-7 cells, corresponding to a specific activity of  $> 2 \times 10^4$  units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against 50mM acetic acid.

### AA Sequence:

MLRRCLISVDMRLIEKS-  
FHEIKRAMQTKDTEFNVTILSLENLRSIKPGDVC  
CMTNNLLTFYRDRVFQDQHQSLEVLRRIS-  
SIANSFLCVQKSLERCQVHRQCNCQSQEAT-  
NATRIIHDNYNQLEVSSAALKSLGELNIL-  
LAWIDRNHLETPAA

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in 50 mM acetic acid at 50  $\mu$ g/mL.

### Storage:

Lyophilized recombinant mouse Interleukin-19 (rmIL-19) remains stable up to 6 months at -80  $^{\circ}$ C from date of receipt. Upon reconstitution, rmIL-19 remains stable up to 2 weeks at 4  $^{\circ}$ C or up to 3 months at -20  $^{\circ}$ C.

### Usage:

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