

## IL-19, Mouse

**Cat. No.:** Z03113-10

**Size:** 10.0 ug

**Synonyms:** Melanoma differentiation association like protein, MDA1, NG.1, ZMDA1, IL-10C, IL-19

### 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.

### Amino Acid Sequence:

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00001 MLRRCLISVD MRLIEKSFHE IKRAMQTKDT FKNVTILSLE
00041 NLRSIKPGDV CCMTNLLTF YRDRVFDHQ ERSLEVLRI
00081 SSIANSFLCV QKSLERCQVH RQCNCSEAT NATRIIHNDY
00121 NQLEVSSAAL KSLGELNILL AWIDRNHLET PAA
```

**Source:** *E. coli*

**Species:** Mouse

**Biological Activity:** ED<sub>50</sub> < 50 ng/mL, measured by a cell proliferation assay using MCF-7 cells, corresponding to a specific activity of > 2 × 10<sup>4</sup> units/mg.

**Molecular Weight:** 17.7 kDa, observed by non-reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against 50mM acetic acid.

**Reconstitution:** Reconstituted in 50 mM acetic acid at 50 µg/mL.

**Purity:** > 95% by SDS-PAGE analysis.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant mouse Interleukin-19 (rmIL-19) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmIL-19 remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.