|  |  |  |
| --- | --- | --- |
| Data Sheet | | |
|  | | |
| Product Information | | |
| **Product Name** | **:** | **Recombinant Mouse Interleukin-4 (rmIL-4)** |
| **Synonyms** | **:** | B-cell stimulatory factor 1 (BSF-1) |
| **Description** | **:** | Recombinant mouse Interleukin-4 produced in *E. coli* is a non-glycosylated 13.5 kDa protein containing 121 amino acids. IL-4 induces the expression of class II major histocompatibility complex and Fc receptors on B-cells and monocytes. It also acts on T-lymphocytes, mast cell lines and several other haematopoietic lineage cells including granulocyte, megakaryocyte and erythroid precursors as well as macrophages. |
| **NCBI Accession No.** | **:** | NM\_021283.2 |
| **Amino acid sequence** | **:** | **MHIHGCDKNHLREIIGILNEVTGEGTPCTEMDVPNVLTATKNTTESELVCRASKVLRIFYLKHGKTPCLKKNSSVLMELQRLFRAFRCLDSSISCTMNESKSTSLKDFLESLKSIMQMDYS** |
| **Molecular Mass** | **:** | 13.65 kDa (121 aa) |
| **Protein tags** | **:** | No tagging |
| **Source** | **:** | *E. coli.* |
| **Cat. No.** | **:** | JW-M002-0010, JW-M002-0025, JW-M002-0050, JW-M002-0100, JW-M002-0250, JW-M002-0500, JW-M002-1000 |
| **Storage** | **:** | Should be at ≤ -70 ℃ as undiluted aliquots of handy size. Avoid repeated freezing and thawing. |
| **Cross Reactivity** | **:** | Rat |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Quality Control | | | | | | |
| **Test items** |  | | | **Specifications** | | |
| **Appearance** | | | **:** | | Clear, colorless liquid | |
| **Purity** | | | **:** | | Greater than 98 % by RP-HPLC and SDS-PAGE | |
| **Specificity** | | | **:** | | Using Western blot, detection |  |
| **Concentration** | | | **:** | | 0.1 mg/㎖, Bradford method |
| **Biological Activity** | | | **:** | | Determined by measuring the proliferation of murine HT-2 indicator cells.  The ED50 is < 1.0 ng/ml, corresponding to a specific activity of > 1.0 × 106 U/mg. |
| **Endotoxin** | | | **:** | | Less than 0.1 EU/㎍ as determined by the LAL method | |
| **Formulation** | | | **:** | | PBS, 5% glycerol (pH 7.4) without preservative or carrier proteins. | |
| **Stability** | | | **:** | | Stable for up to 12 months at -70 ℃. Stable for a month at 4 ℃. | |
| **Sterility** | | | **:** | | Sterilized through a 0.2 ㎛ membrane filter and packaged aseptically. Culture for 2 weeks, no growth | |
|  | |  | | |  | |