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| Data Sheet |
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| Product Information |
| **Product Name** | **:** | **Recombinant Human Interleukin 2 (rhIL-2)** |
| **Synonyms** | **:**  | IL2, TCGF, lymphokine, interleukin 2  |
| **Description** | **:** | Interleukin-2 (IL-2) is an interleukin, a type of cytokine signaling molecule in the immune system. It is a protein that regulates the activities of white blood cells that are responsible for immunity. In the thymus, where T cells mature, it prevents autoimmune diseases by promoting the differentiation of certain immature T cells into regulatory T cells, which suppress other T cells that are otherwise primed to attack normal healthy cells in the body. IL-2 also promotes the differentiation of T cells into effector T cells and into memory T cells when the initial T cell is also stimulated by an antigen, thus helping the body fight off infections. (Ref. From Wikipedia) |
| **NCBI Accession No.** | **:** | NM\_000586.3 |
| **Amino acid sequence** | **:** | **MAPTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPKLTRMLTFKFYMPKKATELKHLQCLEEELKPLEEVLNLAQSKNFHLRPRDLISNINVIVLELKGSETTFMCEYADETATIVEFLNRWITFCQSIISTLT** |
| **Molecular Mass** | **:** | 15.5 kDa (134 a.a) |
| **Protein Tags** | **:** | No tagging |
| **Source** | **:** | *E. coli.* |
| **Cat. No.** | **:** | JW-H031-0010, JW- H031-0025, JW-H031-0100, JW-H031-0250, JW-H031-0500, JW-H031-1000 |
| **Storage** | **:** | Should be at ≤ -70 ℃ as undiluted aliquots of handy size. Avoid repeated freezing and thawing. |
| **Cross Reactivity** | **:** | Human, Mouse, Rat, Monkey |

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| Quality Control |
| **Test items** |  | **Specifications** |
| **Appearance** | **:** | Clear, colorless liquid |
| **Purity** | **:** | Greater than 98 % by RP-HPLC and SDS-PAGE |
| **Specificity** | **:** | Using Western blot, detection | Z:\신약연구팀\배일근(20151004)\업무-my\4. 활성시험\22년\220822 hIL-2 R 2003\hIL-2 R 2203 G-DS.jpg |
| **Concentration** | **:** | 0.1 mg/㎖, Bradford method |
| **Biological Activity** | **:** | Determined by proliferation of CTLL-2 indicator cells. The ED50 is ≤ 0.05 ng/ml, corresponding to a specific activity of ≥ 2.0 x 107 IU/mg  |
| **Endotoxin** | **:** | Less than 0.1 EU/㎍ as determined by the LAL method |
| **Formulation** | **:** | 50mM Tris, 10% Glycerol (pH 8.0) 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 |
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