## Recombinant murine Interleukin-2 (rm IL-2)

Catalog No: #72102

Description



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| Description        |  |
|--------------------|--|
| Product Name       | Recombinant murine Interleukin-2 (rm IL-2)   |
| Brief Description  | Recombinant Protein  |
| Host Species       | E.coli   |
| Purification       | > 95 % by SDS-PAGE and HPLC analyses.  |
| Species Reactivity | Ms   |
| Target Name        | rm IL-2  |
| Other Names        | T-cell growth factor, TCGF, Aldesleukin  |
| Accession No.      | accession:P04351 GeneID:16183  |
| Uniprot            | P04351   |
| GeneID             | 16183;   |
| Calculated MW      | Approximately 17.2 kDa, a sing   |
| SDS-PAGE MW        | Sterile Filtered White lyophil   |
| Target Sequence    | APTSSSTSSS TAEAQQQQQQ QQQQQHLEQ LLMDLQELLS RMENYRNLKL PRMLTFKFYL   |
|                    | PKQATELKDL QCLEDELGPL RHVLDLTQSK SFQLEDAENF ISNIRVTVVK LKGSDNTFEC QFDDESATVV                                     |
|                    | DFLRRWIAFC QSIISTSPQ   |
| Formulation        | Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.  |
| 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.  |
|                    |  |

## Background

IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4+ and CD8+ T cells,  $\gamma\delta$  T cells, B cells, dendritic cells, and eosinophils. IL-2 IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL2 consists of three subunits (55 kDa IL2R $\alpha$ , 75 kDa IL2R $\beta$ , 64 kDa common gamma chain  $\gamma$ c IL2R $\gamma$ ) that are present on the cell surface in varying preformed complexes; Mature mouse IL2 shares 56 % and 73 % amino acid sequence identity with human and rat IL2 respectively. Mouse and human IL2 exhibit cross-species activity. Mouse IL2 has a specific N-terminal region that contains a poly glutamine (contain 12 glutamines) stretch.

## References

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- 2. Taniguchi, T., H. Matsui, T. Fujita, et al. 1983. Nature, 302: 305-10.
- 3. Liparoto, S.F., D.G. Myszka, Z. Wu, et al. 2002. Biochemistry, 41: 2543-51.
- 4. Bodnar, A., E. Nizsaloczki, G. Mocsar, et al. 2008. Immunol Lett, 116: 117-25.
- 5. Mosmann, T.R., T. Yokota, R. Kastelein, et al. 1987. J Immunol, 138: 1813-6.
- 6. Matesanz, F., A. Alcina, and A. Pellicer. 1993. Immunogenetics, 38: 300-3.

Note: This product is for in vitro research use only