

Datasheet for ABIN7566205  
**IL-2 Protein (AA 21-153) (His tag)**



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## Overview

|                               |                                             |
|-------------------------------|---------------------------------------------|
| Quantity:                     | 10 µg                                       |
| Target:                       | IL-2 (IL2)                                  |
| Protein Characteristics:      | AA 21-153                                   |
| Origin:                       | Human                                       |
| Source:                       | HEK-293 Cells                               |
| Protein Type:                 | Recombinant                                 |
| Biological Activity:          | Active                                      |
| Purification tag / Conjugate: | This IL-2 protein is labelled with His tag. |

## Product Details

|                              |                                                                                                                                                                                                    |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose:                     | IL-2 (C145S Mutant) (human) (rec.) (His)                                                                                                                                                           |
| Cross-Reactivity:            | Human, Mouse                                                                                                                                                                                       |
| Characteristics:             | Human IL-2 (aa 21-153) (mutation C145S) is fused at the C-terminus to a His-tag.                                                                                                                   |
| Purity:                      | >95 % (SDS-PAGE)                                                                                                                                                                                   |
| Sterility:                   | Sterile filtered                                                                                                                                                                                   |
| Endotoxin Level:             | <0.01EU/µg protein (LAL test, Lonza).                                                                                                                                                              |
| Biological Activity Comment: | Measured by its ability to stimulate the proliferation of mouse CTLL-2 cells. The ED50 for this effect is typically 0.1ng/mL, corresponding to a specific activity of 1x 10 <sup>7</sup> units/mg. |

## Target Details

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|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target:           | IL-2 (IL2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Alternative Name: | IL-2 ( <a href="#">IL2 Products</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Background:       | <p>Interleukin-2, Aldesleukin</p> <p>Interleukin-2 (IL-2) is a 133 amino acid glycoprotein with one intramolecular disulfide bond and variable glycosylation. It is secreted by activated T cells and induces proliferation and maturation of activated T cells, natural killer cells, and lymphokine activated killer cells. IL-2 also stimulates proliferation of antibody-producing B cells, activates neutrophils, and induces mononuclear cells to secrete IFN-gamma and TNF-alpha and -beta. Moreover, studies have shown that IL-2 is required for activation-induced apoptosis, an important hemeostatic mechanism in the immune system, which is involved in the maintenance of peripheral tolerance to self-antigens. The modified IL-2 protein containing a substitution at position C145S retains full biological activity, suggesting that the cysteine at this position is not involved in a disulfide bond and that a free sulfhydryl group at that position is not necessary for receptor binding. Additionally, the C145S mutation insertion avoids non-specific disulfides and improves the physical properties of the protein.</p> |
| Molecular Weight: | ~19kDa (SDS-PAGE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NCBI Accession:   | <a href="#">NP_000577</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Pathways:         | <a href="#">JAK-STAT Signaling</a> , <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a> , <a href="#">Production of Molecular Mediator of Immune Response</a> , <a href="#">Activated T Cell Proliferation</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Application Details

|               |                       |
|---------------|-----------------------|
| Restrictions: | For Research Use only |
|---------------|-----------------------|

## Handling

|                  |                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format:          | Lyophilized                                                                                                                                                      |
| Buffer:          | Lyophilized from 0.2µm-filtered solution in PBS.                                                                                                                 |
| Handling Advice: | Avoid freeze/thaw cycles. Centrifuge lyophilized vial before opening and reconstitution. PBS containing at least 0.1 % BSA should be used for further dilutions. |
| Storage:         | 4 °C, -20 °C                                                                                                                                                     |
| Storage Comment: | Short Term Storage: +4°C<br>Long Term Storage: -20°C                                                                                                             |

Use & Stability: Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.