

Datasheet for ABIN2667497
IL-2 Protein (AA 22-169)



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Overview

Quantity:	20 µg
Target:	IL-2 (IL2)
Protein Characteristics:	AA 22-169
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Purity:	>98 % , as determined by Coomassie stained SDS-PAGE and HPLC analysis.
Endotoxin Level:	Less than 0.1 ng per µg of protein.

Target Details

Target:	IL-2 (IL2)
Alternative Name:	IL-2 (IL2 Products)
Background:	IL-2 was discovered through its function as a T cell growth factor (TCGF), and plays a pivotal role in immune responses against pathogenic infection. Recognition and binding of foreign antigens by T cell receptors stimulate both the secretion of IL-2 and the expression of IL-2Rs on the T cell surface. Subsequently, the IL-2/IL-2R interaction activates the intracellular Ras/Raf/MAPK, JAK/STAT, and PI3K/AKT signal pathways, and ultimately stimulates the

Target Details

growth, differentiation, and survival of the antigen-specific cytotoxic T cells. Human IL-2 acts on murine and human T cells, and its receptors are shared by others cytokines. IL-2Ra is an IL-2-specific receptor, IL-2Rb is shared with IL-15 and the γc is a common receptor shared by many cytokines including IL-2, IL-4, IL-7, IL-9, IL-15, and IL-21.

Molecular Weight: The 148 amino acid recombinant protein has a predicted molecular mass of 17.2 kDa. The predicted N-terminal amino acid is Phe.

Pathways: [JAK-STAT Signaling](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Activated T Cell Proliferation](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Biological activity: ED50 is ≤ 0.2 ng/ml, corresponding to a specific activity of $\geq 5.0 \times 10^6$ units/mg as determined by the dose-dependent stimulation of the proliferation of murine CTLL-2 cells.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: For maximum results, quick spin vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/mL. Do not vortex. It is recommended to further dilute in a buffer, such as 5 % Trehalose, and store working aliquots at -20 °C to -80 °C.

Buffer: Lyophilized, carrier-free.

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage: -20 °C

Storage Comment: Unopened vial can be stored at -20°C or -70°C.