

Datasheet for ABIN988052

IL-2 Protein

2 Publications



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	IL-2 (IL2)
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Biological Activity:	Active

Product Details

Sequence:	APTSSSTSSS TAEAQQQQQ QQQQQHLEQ LLMDLQELLS RMENYRNLKL PRMLTFKFYL PKQATELKDL QCLEDELGPL RHVLDLTQSK SFQLEDAENF ISNIRVTVVK LKGSNDNTFEC QFDDESATVV DFLRRWIAFC QSIISTSP
Characteristics:	The ED50 as determined by the dose dependent stimulation of murine CTLL-2 cells is < 0.2 ng/ml, corresponding to a specific activity of > 5.0 x 10 ⁶ units/mg.
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin Level:	Level Less than 1EU/μg of rMuIL-2 as determined by LAL method

Target Details

Target:	IL-2 (IL2)
Alternative Name:	Interleukin-2 (IL-2) (IL2 Products)
Background:	Mature mouse IL-2 shares 56% and 73% aa sequence identity with human and rat IL-2, respectively. It shows strain-specific heterogeneity in an N-terminal region that contains a poly-glutamine stretch. Mouse and human IL-2 exhibit cross-species activity. The receptor for IL-2

Target Details

consists of three subunits that are present on the cell surface in varying preformed complexes. The 55 kDa IL-2 R α is specific for IL-2 and binds with low affinity. The 75 kDa IL-2 R β , which is also a component of the IL-15 receptor, binds IL-2 with intermediate affinity. The 64 kDa common gamma chain/IL-2 R γ , which is shared with the receptors for IL-4, -7, -9, -15, and -21, does not independently interact with IL-2. Upon ligand binding, signal transduction is performed by both IL-2 R β and γ . It drives resting T cells to proliferate and induces IL-2 and IL-2 R α synthesis. It contributes to T cell homeostasis by promoting the Fas-induced death of naïve CD4 $^{+}$ T cells but not activated CD4 $^{+}$ memory lymphocytes. IL-2 plays a central role in the expansion and maintenance of regulatory T cells, although it inhibits the development of Th17 polarized cells. Synonym: Interleukin-2 (IL-2), Mouse. Formulation: Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.

Molecular Weight: Approximately 17.2 kDa, a single non-glycosylated polypeptide chain containing 149 amino acids.

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

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at

Storage: 4 °C

Publications

Product cited in: Thuy, Thorsén: "Glycosylation profiling of therapeutic antibodies in serum samples using a microfluidic CD platform and MALDI-MS." in: **Journal of the American Society for Mass Spectrometry**, Vol. 24, Issue 7, pp. 1053-63, (2013) ([PubMed](#)).

Fritz, Radziwill: "CNK1 promotes invasion of cancer cells through NF-kappaB-dependent signaling." in: **Molecular cancer research : MCR**, Vol. 8, Issue 3, pp. 395-406, (2010) ([PubMed](#)).