

Recombinant Equine Interleukin-2 Cys141Ser (Equine IL-2 Cys141Ser)

Product Information

Product Name	Cat#	Size
Recombinant Equine Interleukin-2 Cys141Ser (Equine IL-2 Cys141Ser)	90186ES10	10 µg
	90186ES60	100 µg
	90186ES76	500 µg

Product Description

Interleukin 2 was initially identified as a T cell growth factor that is produced by T cells following activation by mitogens or antigens. IL-2 has since been found to also stimulate the growth and differentiation of B cells, natural killer (NK) cells, lymphocyte activated killer (LAK) cells, monocytes/macrophages and oligodendrocytes.

The biological activity of IL-2 is mediated by the binding of IL-2 to cell surface receptor complexes. The functional high-affinity receptor that mediate IL-2 signals is composed of three polypeptide chains, the IL-2 receptor alpha, beta and gamma subunits. IL-2 also signals via the intermediate affinity receptor complex of the beta and gamma subunits. In T cells, the beta and gamma subunits are shared with the IL-15 receptor complex. The gamma subunit of the IL-2 receptor complex has also been shown to be a subunit of the receptor complexes of IL-4, IL-7, IL-9 and IL-21.

At the amino acid sequence level, equine IL-2 shares 72%, 70%, 56% and 54% sequence similarities with human, porcine, rat and mouse IL-2, respectively. It has been reported that equine IL-2 augmented proliferation in equine peripheral blood mononuclear cells, but has no effect on mouse CTLL-2 cells.

Product Properties

Synonyms	T cell growth factor; T-cell growth factor; TCGF
Accession	P37997
GeneID	100034204
Source	E.coli-derived Equine IL-2 Cys141Ser, Ala21-Thr149(C121S).
Molecular Weight	Approximately 14.9 kDa.
AA Sequence	APTSSSKRET QQQLKQLQMD LKLLLEGVNN NKNPKLSKML TFKINMPKKA TELKHLQCLE EELKPLEEML KNFLSKDIKE LMSNINVTVL GLKGSETRFT CEYDDETGTI VEFLNKWITF SQSIFSTMT
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using murine CTLL-2 cells is less than 1.0 µg/mL, corresponding to a specific activity of > 1000 IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 0.1 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 6.5.

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.

Reconstitution

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 $\leq -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!