HB221019

Recombinant Porcine IL-2 Protein

Product Information

Product Name	Cat#	Size
Recombinant Porcine IL-2 Protein	90183ES10	10 μg
	90183ES60	100 μg
	90183ES76	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. Since then, it has been shown that in addition to its T cell growth factor activity, IL-2 can also stimulate the growth and differentiation of B cells, natural killer (NK) cells, lymphocyte activated killer (LAK) cells, monocytes/macrophages and oligodendrocytes. At the amino acid sequence level, there is approximately 72% similarity between mature porcine and human IL-2.

The biological activity of IL-2 is mediated by the binding of IL-2 to cell surface receptor complexes. The functional high-affinity receptor of IL-2 is composed of three distinct polypeptide chains, the IL-2 receptor alpha, beta and gamma subunits. The intermediate-affinity IL-2 receptor complex, which lacks the alpha subunit, but contains both the beta and gamma subunits, is also capable of transducing the IL-2 signal. In T cells, the beta and gamma subunits are shared with the IL-15 receptor complex. The gamma chain of the IL-2 receptor complex has also been shown to be a subunit of the receptor complexes of IL-4, IL-7, and IL-9.

Product Properties

Synonyms	T-cell Growth Factor, TCGF
Accession	P26891
GeneID	396868
Source	E.coli-derived Porcine IL-2, Ala21-Thr154.
Molecular Weight	Approximately 15.2 kDa.
AA Sequence	APTSSSTKNT KKQLEPLLLD LQLLLKEVKN YENADLSRML TFKFYMPKQA TELKHLQCLV EELKALEGVL NLGQSKNSDS ANIKESMNNI NVTVLELKGS ETSFKCEYDD ETVTAVEFLN KWITFCQSIY STLT
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 96% 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 0.5 ng/mL, corresponding to a specific activity of > 2.0×10^6 IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1μg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 1 × PBS, pH 7.4.
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 ≤ -20°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℃ for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

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!