

Recombinant Human Interleukin-12 (Human IL-12)

Product Information

Product Name	Cat#	Size
Recombinant Human Interleukin-12 (Human IL-12)	90111ES10	10 µg
	90111ES60	100 µg
	90111ES76	500 µg

Product Description

Interleukin-12 (IL-12) is a cytokine that has regulatory effects on T and natural killer (NK) cells and is composed of two disulfide-bonded subunits, p40 and p35. It is a heterodimeric cytokine produced by macrophages, mitogen stimulated- or EBV infected-B lymphocytes, keratinocytes, and probably dendritic cells, with important immunoregulatory functions in vitro and in vivo. In its role as the initiator of cell-mediated immunity, it has been suggested that IL-12 has therapeutic potential as a stimulator of cell-mediated immune responses to microbial pathogens, metastatic cancers, and viral infections such as AIDS. Importantly, IL-12 also inhibited secondary granuloma formation in mice presensitized with eggs demonstrating a role for the cytokine in reversing established Th2-type responses.

Product Properties

Synonyms	Interleukin-12, IL-12, NKSF2, CLMF p40
Accession	P29459
GeneID	3592
Source	Sf21-derived human IL-12 protein.
Molecular Weight	Approximately 41 kDa and 29 kDa under reducing conditions.
AA Sequence	HuIL-12 p40: Ile23 - Ser328; Accession # P29460 HuIL-12 p35: Arg23 - Ser219; Accession # P29459
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE.
Biological Activity	Measured in a cell proliferation assay using PHA-stimulated human T lymphoblasts. The ED ₅₀ for this effect is 0.01-0.05 ng/mL. The specific activity of rH IL-12 is approximately 1.1×10^4 units/µg, which is calibrated against rHuIL-12 WHO Standard (NIBSC code: 95/544).
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.2. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile PBS to a concentration of 0.1 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriately buffered solutions.
Reconstitution	

Storage and Stability

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.