

Recombinant Human Interleukin-12 (rHuIL-12)

PrimeGene Technical Data Sheet

Catalog Number:	101-12
Source:	<i>Spodoptera frugiperda</i> , Sf21 (baculovirus)
Molecular Weight:	Apparent molecular mass of 60 kDa in SDS-PAGE under non-reducing conditions, 41 kDa and 29 kDa under reducing conditions, a disulfide-linked heterodimer consisting of the 306 amino acid rHuIL-12 p40 and the 197 amino acid rHuIL-12 p35 subunits.
Quantity:	2µg/10µg/100µg
AA Sequence:	HuIL-12 p40: Ile23 - Ser328; Accession # P29460 HuIL-12 p35: Arg23 - Ser219; Accession # P29459
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 rHuIL-12 is approximately 1.1×10^4 units/µg, which is calibrated against rHuIL-12 WHO Standard (NIBSC code: 95/544).
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.2.
Endotoxin:	Less than 1.0 EU/µg of rHuIL-12 as determined by LAL method.
Reconstitution:	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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Interleukin-12

IL-12 is a heterodimeric cytokine of disulfide-linked p35 and p40 subunits. It is secreted by monocytes, macrophages, dendritic cells, neutrophils, Langerhans cells, keratinocytes, microglia, and peripheral B cells. In humans, the p40 subunit can also associate with a p19 subunit to form IL-23. IL-12 signals through a receptor complex consisting of IL-12 R beta 1 and IL-12 R beta 2. It promotes Th1 immune responses by inducing IFN-gamma secretion from NK cells, T cells, and macrophages and by enhancing NK cell and T cell mediated cytotoxicity. It also cooperates with IL-18 in the generation of Th1 memory cells.