

## DATA SHEET

Versions: 01

Revision date: 25/11/2023

### 1. Identification

Product name: Recombinant Protein human interleukin 12

Reactions: 20 micrograms

Cat. No.: PRA-ReHIL12

### 2. Description

IL-12 is an important inflammatory cytokine produced by innate immunity cells, such as macrophages and DCs. This is an important innate immunity cytokine to induce adaptive immunity. Hence, it is the most important linker between two arms of immune system. The cytokine has a molecular mass each of 59 kilo Daltons. Recombinant human IL-12P40 can be intended for use in in vivo and in vitro applications. Recombinant human IL-12P40 is produced in E. coli BL21 transfected with the full-length sequence for the human IL-12P40 gene in the PET21b+.

### 3. Kit Contents

Component	Cat. no	Quantity
lyophilized recombinant human IL-12	PRA-ReHIL12	20 µg

### 4. Storage specifications

- Recombinant human IL-12 is shipped and stored at -20C.
- Upon receipt, add 1 mL sterile distilled water and prepare aliquots of recombinant human IL-12 and store at -20°C for 12 months.

**Note:** Avoid repeated freeze-thaw cycles.



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### 5. Applications

All molecular biology applications, such as:

### 6. Assay Procedure

Purity greater than 98% as determined by SDS-PAGE.

- Endotoxin levels  $<0.1$  EU/ $\mu$ g as determined using a kinetic chromogenic LAL assay.
- Biological activity was not tested.
- Did not Sterile. Please sterile after reconstitution using  $0.22 \mu\text{m}$  filter.
- Expression system: E. coli BL21 strain
- Accession: Q6ICR7
- Protein length: Full length protein
- Animal free: Yes
- Carrier free: Yes
- Nature: Recombinant
- Predicted molecular weight: 8.7 kDa

### CHARACTERISTICS

Source: Bacteria; E. coli BL21

Predicted molecular mass: $\approx 8.7$  kDa (as determined by SDS-PAGE)

Formulation:

Recombinant human IL-12 needs to be sterilized by filtered from  $0.22 \mu\text{m}$  filter.

Solubility: 20  $\mu\text{g/ml}$  in water



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### 7. Safety

- The solutions used in the kit have oxidizing and acidic properties.
- Avoid direct contact with skin and eyes.
- In case of contact with the mentioned tissues, wash with plenty of water and go to the nearest medical center.

### 8. Quality Certifications

### 9. Further information

- This product is developed, designed, and sold exclusively only for research purposes use.
- The product was not tested for use in diagnostics or for drug development.
- It is not suitable for administration to humans or animals.

### 10. Other Kits

Recombinant Human TNF- $\alpha$ , Recombinant Human IL-1,  
Recombinant Human IL-2, Recombinant Human IL-4  
Recombinant Human IL-6, Recombinant Human IL-8  
Recombinant Human IL-10, Recombinant Human IL-12  
Recombinant Human IL-13, Recombinant Human IL-17A  
Recombinant Human IL-18, Recombinant Human IL-29  
Recombinant Human IFN, Recombinant Human TGF  
Recombinant Human VEGF, Recombinant Human CXCL10  
Recombinant Human CXCL12, Recombinant Human CCL2  
Recombinant Human CCL3

### NOTE

All products have been manufactured by Karmania Pars Gene Company in the Iran.

