

## HumanKine® recombinant human IL-12 protein



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

### Product Description

Animal-free Recombinant Human IL-12 is expressed in human 293 cells as a heterodimeric cytokine composed of two glycosylated and disulfide-linked subunits (p40 cysteine-linked to p35). Production in human 293 cells uses a serum-free, chemically defined media and offers authentic glycosylation. IL-12 is a potent regulator of cell mediated immune responses and it induces IFN-gamma production by NK and T cells. It is produced by activated monocytes/macrophage cells, B lymphocytes, and connective tissue type mast cells.

**Alternative Names** CLMF, CLMF p35, IL 12 subunit p35, IL 12A, IL12, IL-12, IL12A, Interleukin 12 subunit alpha, NFSK, NKSF1, P35

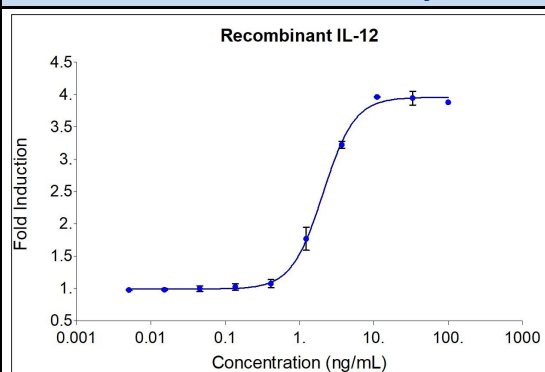
**Source** Human Embryonic Kidney cells (HEK293). HEK293-derived IL-12 protein

**Species Reactivity** human,mouse

### Specifications

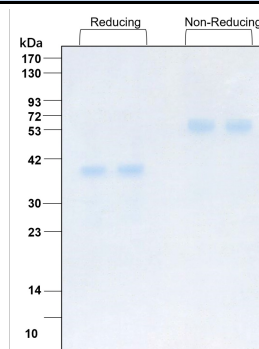
| Test           | Method  | Specification  |
|----------------|---|--|
| Activity       | Dose-dependent induction of alkaline phosphatase production in a HEK293 reporter cell line. | 0.8-4 ng/mL  |
| Molecular Mass | SDS-PAGE  | 34 and 42 kDa reduced, 57 kDa non-reduced, heterodimer, glycosylated |
| Purity         | SDS-PAGE  | >95%   |
| Endotoxin      | LAL   | <1 EU/μg   |

### Activity Data



Recombinant human IL-12 (HZ-1256) stimulates dose-dependent induction of alkaline phosphatase production in a HEK293 reporter cell line. Alkaline phosphatase production was assessed using pNPP as a chromogenic substrate. The EC<sub>50</sub> was determined using a 4-parameter non-linear regression model. The EC<sub>50</sub> values range from 1-5 ng/mL.

### SDS-PAGE



| Preparation          |  |
|----------------------|--|
| Shipping Temperature | ambient temperature  |
| Formulation          | 1x PBS, See Certificate of Analysis for details  |
| Reconstitution       | Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix. |

| Stability and Storage              | Product Form              | Temperature Conditions | Storage Time<br>(From Date of Receipt) |
|------------------------------------|---------------------------|------------------------|--|
|                                    | Lyophilized               | -20°C to -80°C         | Until Expiry Date                      |
|                                    | Lyophilized               | Room Temperature       | 2 weeks                                |
|                                    | Reconstituted as per CofA | -20°C to -80°C         | 6 months                               |
|                                    | Reconstituted as per CofA | 4°C                    | 1 week                                 |
| Avoid repeated freeze-thaw cycles. |                           |                        |  |

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