

## IL-18

### Interleukin 18

human, recombinant, *E. coli*

Cat. No.	Amount
PR-235	25 µg

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

#### Avoid freeze / thaw cycles

#### Form

Lyophilized. IL-18 was lyophilized from a concentrated (1 mg/ml) solution in water containing 0.5x PBS pH 7.3.

#### Solubility

It is recommended to reconstitute the lyophilized IL-12 in bidest H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

#### Activity

The ED<sub>50</sub> as determined by the dose-dependant stimulation of the IFN-gamma by human PBMC co-stimulated with IL-12 was found to be 5ng/ml.

#### Molecular Weight

18.3 kDa

#### Purity

≥ 95% by SDS-PAGE and RP-HPLC

#### Description

Human recombinant Interleukin 18 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 157 amino acids and having a molecular mass of 18.3 kDalton.

IL-18 is a proinflammatory cytokine. This cytokine can induce the IFN-gamma production of T cells. The combination of this cytokine and IL-12 has been shown to inhibit IL-4 dependent IgE and IgG1 production and enhance IgG2a production of B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.

The IL-18 is purified by proprietary chromatographic techniques.

#### Selected References:

- Schneider *et al.* (2010) A role for IL-18 in protective immunity against *Mycobacterium tuberculosis*. *Eur J Immunol.* **40**:396.  
Torre *et al.* (2002) Transforming growth factor-beta, interleukin (IL)-18, and IL-12: effect on the clinical course and complications of *Plasmodium falciparum* malaria. *J Infect Dis.* **187**:338.  
Fassbender *et al.* (1999) Interferon-gamma-inducing factor (IL-18) and interferon-gamma in inflammatory CNS diseases. *Neurology* **53**:1104.