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| <b>Catalog number</b>          | C01023-1MG  |
| <b>Package</b>                 | 1 mg  |
| <b>Description</b>             | <p>Interleukin-18 (L-18) is a cytokine that belongs to the IL-1 superfamily and is produced by macrophages and other cells. IL-18 works by binding to the interleukin-18 receptor, and together with IL-12 it induces cell-mediated immunity following infection with microbial products like lipopolysaccharide (LPS). After stimulation with IL-18, natural killer (NK) cells and certain T cells release another important cytokine called interferon-<math>\gamma</math> (IFN-<math>\gamma</math>) or type II interferon that plays an important role in activating the macrophages or other cells. The combination of this cytokine and IL12 has been shown to inhibit IL-4 dependent IgE and IgG1 production, and enhance IgG2a production in B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.</p> |
| <b>Source</b>                  | <i>Escherichia coli</i>   |
| <b>Sequence</b>                | <p>MYFGKLESKLSVIRNLNDQVLFIDQGNRPLFEDMTDSDCRDNAPRTIFIISMYKD<br/>       SQPRGMAVTISVKCEKISTLSCENKIISFKEMNPPDNIKDTKSDIIFQRSVPGHD<br/>       NKMQFESSYEGYFLACEKERDLFKLILKKEDELGDRSIMFTVQNED with<br/>       polyhistidine tag at the C-terminus</p>   |
| <b>Endotoxin level</b>         | <0.1 EU per 1 $\mu$ g of the protein by the LAL method.   |
| <b>Activity</b>                | Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED <sub>50</sub> for this effect is <5 ng/mL.   |
| <b>Purity</b>                  | >98% as determined by SDS-PAGE.   |
| <b>Form</b>                    | Lyophilized   |
| <b>Storage Buffer</b>          | Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 8.0.  |
| <b>Reconstitution</b>          | It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> O to a concentration not less than 200 $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.  |
| <b>Stability &amp; Storage</b> | <p>This product is stable after storage at:</p> <ul style="list-style-type: none"> <li>-20°C for 12 months in lyophilized state from date of receipt.</li> <li>-20°C or -80°C for 1 month under sterile conditions after reconstitution.</li> </ul> <p>Avoid repeated freeze/thaw cycles.</p>   |



SDS-PAGE analysis of recombinant human IL-18

*For research use only.*