

Product datasheet for **TP728340S**

Recombinant IL-18 (Interleukin-18), Mouse

Product data:

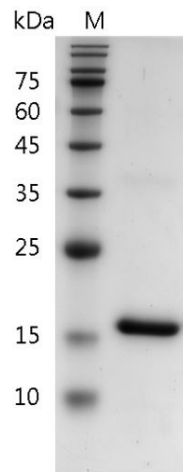
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|---------------------------------------|---|
| Product Type: | Recombinant Proteins |
| Description: | Recombinant IL-18 (Interleukin-18), Mouse |
| Species: | Mouse |
| Expression Host: | E. coli |
| Expression cDNA Clone or AA Sequence: | MNFGRLHCTTAVIRNINDQVLVFDKRQPVFEDMTDIDQSASEPQTRLIIYMYKDSEVRGLAVTLSVKDSKMSTLSCKNKIISFEEMDPPENIDDIQSDLIFFQKRVPGHNKMEFEESLYEGHFLACQKEDDAFKLILKKKIDENGDKSVMFTLTNLHQS with polyhistidine tag at the C-terminus. |
| Tag: | His Tag (C-term) |
| Predicted MW: | The protein has a calculated MW of 19.1 kDa. The protein migrates as 18 kDa under reducing condition (SDS-PAGE analysis). |
| Purity: | >98% as determined by SDS-PAGE. |
| Buffer: | The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0. |
| Bioactivity: | Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED ₅₀ for this effect is <0.5 µg/mL. |
| Endotoxin: | <0.1 EU per 1 µg of the protein by the LAL method. |
| Reconstitution Method: | Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein. |
| Applications: | Cell culture |
| Storage: | Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles. |
| UniProt ID: | P70380 |
| Synonyms: | IGIF |



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Summary:

Interleukin-18 (IL-18) belongs to the IL-1 superfamily and is constitutively produced by macrophages, dendritic cells (DCs) and other cells. IL-18 binds to the receptor of IL-18 (IL-18R) and initiate the recruitment and heterodimerization of the IL-18R α CP, leading to downstream activation of NF- κ B. After stimulation with IL-18, multiple cytokines including IFN- γ , IL-13, IL-4, IL-8, and GM-CSF and both Th1 and Th2 lymphokines could be produced by different cells. As an immunoregulatory cytokine, IL-18 can promote development of T helper 1 (Th1) cells, which maximizes the production of IFN by synergistically stimulating to mature Th1 effectors in combination with IL-12. On the contrary, it inhibits the production of the anti-inflammatory cytokine IL-10. In addition, IL-18 exhibits multiple proinflammatory functions, such as increases in cell adhesion molecules, nitric oxide synthesis, and chemokine production.

Product images:

SDS- PAGE analysis of recombinant mouse IL-18