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Datasheet for ABIN7278714
IL-18 Protein (AA 37-193)

Overview

Quantity:	50 µg
Target:	IL-18 (IL18)
Protein Characteristics:	AA 37-193
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	IL-18 (human) (rec.)
Specificity:	Human IL-18 (aa 37-193).
Characteristics:	<p>Protein. Human IL-18 (aa 37-193). Source: E. coli. Endotoxin content: <0.06EU/µg purified protein (LAL test, Lonza). Lyophilized from 0.2µm-filtered solution in 1X PBS. Purity: >98 % (SDS-PAGE). Interleukin-18 (IL-18) is a costimulatory factor for production of interferon-gamma (IFN-gamma) in response to toxic shock and shares functional similarities with IL-12. IL-18 is synthesized as a precursor 24 kDa molecule without a signal peptide and must be cleaved to produce an active molecule. IL-1 converting enzyme (ICE, Caspase-1) cleaves pro-IL-18 at aspartic acid in the P1 position, producing the mature, bioactive peptide that is readily released from the cells. It is reported that IL-18 is produced from Kupffer cells, activated macrophages, keratinocytes, intestinal epithelial cells, osteoblasts, adrenal cortex cells and murine diencephalon. IFN-gamma is produced by activated T or NK cells and plays critical roles in the defense against microbial pathogens. IFN-gamma activates macrophages and enhances NK activity and B cell maturation, proliferation and Ig secretion. IFN-gamma also induces</p>

Product Details

expression of MHC class I and II antigens and inhibits osteoclast activation. IL-18 acts on T helper type-1 (Th1) T cells and in combination with IL-12 strongly induces them to produce IFN-gamma. Pleiotropic effects of IL-18 have also been reported, such as enhancement production of IFN-gamma and GM-CSF in peripheral blood mononuclear cells, production of Th1 cytokines, IL-2, GM-CSF, IFN-gamma in T cells and enhancement of Fas ligand expression by Th1 cells.

Purity: >98 % (SDS-PAGE)

Endotoxin Level: <0.06EU/μg purified protein (LAL test, Lonza).

Target Details

Target: IL-18 (IL18)

Alternative Name: IL-18 ([IL18 Products](#))

Background: Alternate Names/Synonyms: Interleukin-18, Interferon-gamma-inducing Factor, IGIF, IL-1gamma, IL1F4

Product Description: Interleukin-18 (IL-18) is a costimulatory factor for production of interferon-gamma (IFN-gamma) in response to toxic shock and shares functional similarities with IL-12. IL-18 is synthesized as a precursor 24 kDa molecule without a signal peptide and must be cleaved to produce an active molecule. IL-1 converting enzyme (ICE, Caspase-1) cleaves pro-IL-18 at aspartic acid in the P1 position, producing the mature, bioactive peptide that is readily released from the cells. It is reported that IL-18 is produced from Kupffer cells, activated macrophages, keratinocytes, intestinal epithelial cells, osteoblasts, adrenal cortex cells and murine diencephalon. IFN-gamma is produced by activated T or NK cells and plays critical roles in the defense against microbial pathogens. IFN-gamma activates macrophages and enhances NK activity and B cell maturation, proliferation and Ig secretion. IFN-gamma also induces expression of MHC class I and II antigens and inhibits osteoclast activation. IL-18 acts on T helper type-1 (Th1) T cells and in combination with IL-12 strongly induces them to produce IFN-gamma. Pleiotropic effects of IL-18 have also been reported, such as enhancement production of IFN-gamma and GM-CSF in peripheral blood mononuclear cells, production of Th1 cytokines, IL-2, GM-CSF, IFN-gamma in T cells and enhancement of Fas ligand expression by Th1 cells.

Molecular Weight: ~18kDa

NCBI Accession: [NP_001553](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [Activated T Cell Proliferation](#), [Cancer Immune Checkpoints](#), [Inflammasome](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Concentration: Lot specific

Buffer: Lyophilized from 0.2µm-filtered solution in 1X PBS.

Handling Advice: Avoid freeze/thaw cycles.

Storage: 4 °C,-20 °C

Storage Comment: Short Term Storage: +4°C

Long Term Storage: -20°C

Use & Stability: Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.