Datasheet for ABIN7278702

IL-18 Protein (AA 37-193) (His tag)

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Overview

Quantity:	50 µg
Target:	IL-18 (IL18)
Protein Characteristics:	AA 37-193
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-18 protein is labelled with His tag.

Product Details

Purpose:	IL-18 (human) (rec.) (His)
Specificity:	Human IL-18 (aa 37-193) is fused at the N-terminus to a His-tag.
Characteristics:	Protein. Human IL-18 (aa 37-193) is fused at the N-terminus to a His-tag. Source: E. coli. Endotoxin content: <1EU/µg protein (LAL test, Lonza). Lyophilized from 0.2µm-filtered solution in PBS. Purity: >97 % (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 microbiral pathogens. IFN-gamma activates macrophages

Product Details

	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.
Purity:	>97 % (SDS-PAGE)
Endotoxin Level:	<1EU/μg 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 microbiral 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.
NCBI Accession:	NP_001553
Pathways:	Cellular Response to Molecule of Bacterial Origin, Activated T Cell Proliferation, Cancer Immune

Target Details

	Checkpoints, Inflammasome

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Concentration:	Lot specific
Buffer:	Lyophilized from 0.2μm-filtered solution in 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.