

# Human IL-18/IL-1F4 Propeptide PE-conjugated Antibody

Monoclonal Mouse IgG<sub>1</sub> Clone # 74801

Catalog Number: IC646P 100 TESTS

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects the pro region of human IL-18/IL-1F4 in direct ELISAs and Western blots. Does not cross-react with recombinant human IL-18, recombinant mouse IL-18 or recombinant rat IL-18.		
Source	Monoclonal Mouse IgG <sub>1</sub> Clone # 74801		
Purification	Protein A or G purified from ascites		
Immunogen	E. coli-derived recombinant human IL-18/IL-1F4 Accession # Q14116		
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm		
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.		
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Shee (SDS) for additional information and handling instructions.		

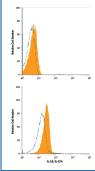
#### **APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 μL/10 <sup>6</sup> cells	See Below

#### DATA

### Intracellular Staining by Flow Cytometry



Detection of IL-18/IL-1F4 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) either untreated (upper panel) or treated with LPS for 24 hours (lower panel) were stained with Mouse Anti-Human IL-18/IL-1F4 PE-conjugated Monoclonal Antibody (Catalog # IC046P, filled histogram) or isotype control antibody (Catalog # IC002P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

## PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below

Stability & Storage

Protect from light. Do not freeze.

• 12 months from date of receipt, 2 to 8 °C as supplied

# BACKGROUND

Pro-IL-18 (pro-Interleukin 18; also known as pro-IGIF and pro-IL-1γ) is a 24 kDa member of the IL-1 family of molecules. It is widely expressed, being produced by keratinocytes, intestinal epithelium, T cells, macrophages and osteoblasts. Human Pro-IL-18 is 193 amino acids (aa) in length. Although mature IL-18 induces IFN-γ secretion by NK and T cells, Pro-IL-18 appears to have little intrinsic activity. Generally, active IL-18 is considered to arise from caspase-1 cleavage of Pro-IL-18 between Asp36-Tyr37. This generates an 18 kDa mature C-terminal fragment, and a 4 kDa (predicted) N-terminal prosegment that runs at 6 kDa in SDS-PAGE. Other proteases are known to process Pro-IL-18. Caspase-3 cleavage after Asp68 generates an inactive 14 kDa mature segment, Merpin β-subunit cleavage after Asn52 generates a marginally active 17 kDa mature segment, while parasite Cys protease cleavage after Val47 generates an inactive 17 kDa mature molecule. One splice variant shows a deletion of aa 27-30. Over aa 2-36, human Pro-IL-18 shares 63% aa identity with mouse Pro-IL-18.

