

### DESCRIPTION

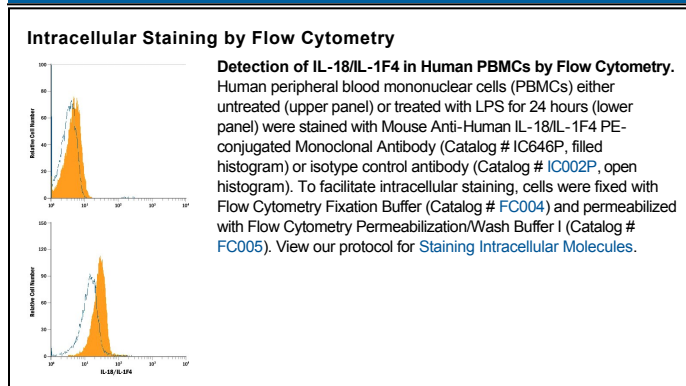
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects the pro region of human IL-18/IL-1F4 in direct ELISAs and Western blots. Does not cross-react with recombinant human IL-18, recombinant mouse IL-18 or recombinant rat IL-18.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 74801
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human IL-18/IL-1F4 Accession # Q14116
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	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 Sheet (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
<b>Intracellular Staining by Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

### DATA



### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

### BACKGROUND

Pro-IL-18 (pro-Interleukin 18; also known as pro-IGIF and pro-IL-1 $\gamma$ ) 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- $\gamma$  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  $\beta$ -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.