

DESCRIPTION

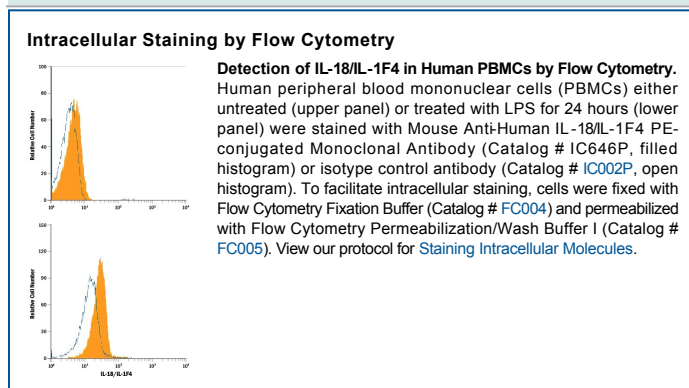
Species Reactivity	Human
Specificity	Detects the pro region of human IL-18/IL-1F4 in direct ELISAs and Western blots. Does not cross-react with recombinant human IL-18, recombinant mouse IL-18 or recombinant rat IL-18.
Source	Monoclonal Mouse IgG ₁ Clone # 74801
Purification	Protein A or G purified from ascites
Immunogen	<i>E. coli</i> -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 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
Intracellular Staining by Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA



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. <ul style="list-style-type: none"> ● 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.