

## DESCRIPTION

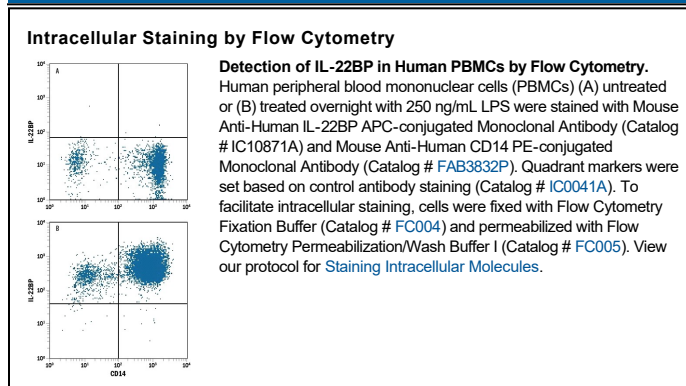
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-22BP in direct ELISAs. In direct ELISAs, no cross-reactivity with mouse IL-22BP is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 875504
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human IL-22BP Thr22-Pro263 Accession # Q969J5
<b>Conjugate</b>	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 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
Intracellular Staining by Flow Cytometry	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> ● 12 months from date of receipt, 2 to 8 °C as supplied.

## BACKGROUND

Interleukin 22 Binding Protein (IL-22BP), also known as Cytokine Receptor Family (CRF) 2-10, CRF2-X, and IL-22 RA2, is a secreted glycoprotein belonging to the type II cytokine receptor family. It encodes a precursor protein of 231 amino acid (aa) residues with a 21 aa putative signal peptide and five potential N-linked glycosylation sites. IL-22BP lacks a transmembrane and cytoplasmic domain and is most closely related to the extracellular domains of IL-22 R (CRF2-9) and IL-20 R (CRF2-8), sharing 33% and 34% aa sequence identity, respectively. It also shares sequence homology with the extracellular domains of IL-10 R (29%), IL-10 R $\beta$  (30%), the IFN receptors (23-25%) and tissue factor (26%). IL-22BP antagonizes IL-22 activity by specifically binding IL-22 with high affinity and blocking its interaction with the cell surface IL-22 receptor heteromeric complex composed of IL-22 R and IL-20 R. IL-22BP is expressed in multiple tissues. The highest levels of expression are found in breast, lungs and colon. The major cell types producing IL-22BP are monocytes, activated B cells and epithelial cells (1). IL-22BP is constitutively expressed by a subset of conventional dendritic cells (2). IL-22BP is regulated by the inflammasome and it has been suggested to modulate tumorigenesis in the intestine (3).

### References:

- Xu, W. *et al.* (2001) Proc. Natl. Acad. Sci. USA **98**:9511.
- Martin, J. *et al.* (2014) Mucosal Immunol. **7**:101.
- Huber, S. *et al.* (2012) Nature **491**:259.