

## DESCRIPTION

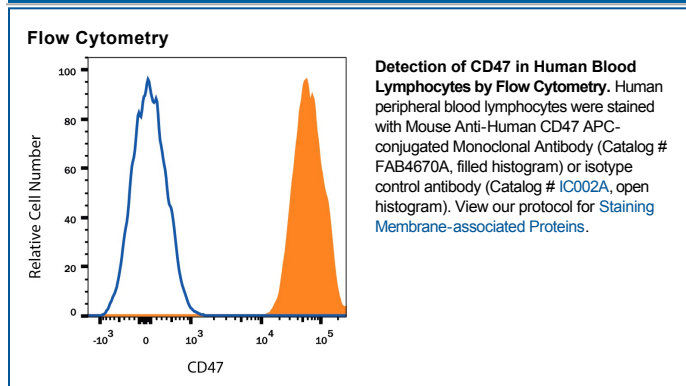
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CD47 in flow cytometry. Stains human CD47 transfectants but not irrelevant transfectants.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 472603
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human CD47 Gln19-Pro139 Accession # Q08722
<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
<b>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

CD47, also known as Integrin-associated Protein (IAP), is a ubiquitous 50 kDa multipass transmembrane protein with a single V-type Ig-like domain at its N-terminus. CD47 binding to SIRP $\alpha$  prevents the phagocytic engulfment of viable cells. It also binds to VEGFR2, inducing VEGFR2 signaling in both T cells and endothelial cells. Thrombospondin interaction with CD47 on T cells reduces T cell proliferation and inflammatory reactions. Alternative splicing generates isoforms with truncated cytoplasmic domains. Within the N-terminal ECD, human CD47 shares 63% aa sequence identity with mouse and rat CD47.