

## DESCRIPTION

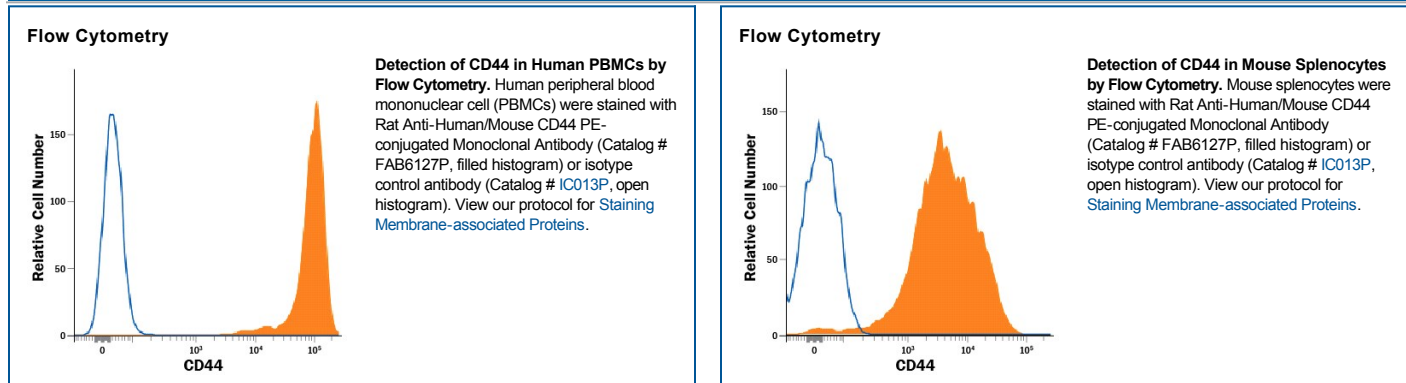
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse CD44 in flow cytometry.
<b>Source</b>	Recombinant Monoclonal Rat IgG <sub>2B</sub> Clone # IM7.8.1R
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Myeloid leukemia M1 cells induced with Dexamethasone
<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>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

CD44, also known as ECMR-III, Hermes Antigen, Pgp1, Ly-24, GP90, and HUTCH-I, is a ubiquitously expressed protein that is the major receptor for hyaluronic acid (HA). CD44 mediates cell-cell and cell-matrix interaction through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagen, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. In cancer cells, may play an important role in invadopodia formation. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Mouse CD44 has a 22 amino acid (aa) signal sequence, an extracellular domain (ECD) with a 100 aa hyaluronan-binding disulfide-stabilized link region and a 48-463 aa stem region, a 21 aa transmembrane domain, and a 72 aa cytoplasmic domain. CD44 exists as a large number of different isoforms due to alternative RNA splicing. Clone IM7.8.1 has been reported to recognize all isoforms of CD44. In the ECD, human and mouse CD44 share about 65% aa sequence identity.