

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CEACAM-1/CD66a in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human CEACAM-1, -3, -5, or -6 is observed. In Western blots, no cross-reactivity with rhCEACAM-1, -3, -4, -5, -6, or -7 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>1</sub> Clone # 723629
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse CEACAM-1/CD66a Glu35-Gly428 Accession # P31809
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2 mg/mL 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Mouse splenocytes

#### 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

CEACAM-1 (Carcinoembryonic antigen-related cell adhesion molecule 1; also BGP-1, CD66a and MHVR1) is a 110-120 kDa member of the CEACAM subfamily, CEA family of proteins. It has a wide expression pattern, being found on neutrophils, dendritic cells, endothelial cells, colonic epithelium and hepatocytes. It mediates cell adhesion, and appears to regulate insulin levels and signaling by interacting with the insulin receptor. It also demonstrates proangiogenic effects by inducing endothelial cells to proliferate and form capillary-like tubules. Finally, CEACAM-1 is a known receptor for mouse hepatitis virus. Mature mouse CEACAM-1 is a 487 amino acid (aa) type I transmembrane glycoprotein. Its contains a 394 aa extracellular region (aa 35-428) that shows one V-type (aa 35-142) and three C2-type (aa 147-411) Ig-like domains, plus a 74 aa cytoplasmic domain. Three alternate splice forms exist. One contains a four aa substitution for aa 455-521, a second shows a Gln substitution for aa 142-322, and a third possesses a combination of the first two splice patterns. CEACAM-1 forms homodimers. Over aa 35-428, mouse CEACAM-1 shares 56% and 70% aa identity with human and rat CEACAM-1, respectively.

#### PRODUCT SPECIFIC NOTICES

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