

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CEACAM-7 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 962720
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese Hamster Ovary cell line, CHO-derived recombinant human CEACAM-7 Thr36-Asn233 Accession # Q14002
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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	HEK293 Human Cell Line Transfected with Human CEACAM-7 and eGFP

#### 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

Carcinoembryonic antigen-related cell adhesion molecule 7 (CEACAM-7), also known as CGM2, is an approximately 40 kDa GPI-anchored glycoprotein in the CEACAM family of adhesion molecules (1). Mature human CEACAM-7 consists of two Ig-like domains followed by the GPI anchor (2). Alternative splicing generates a short isoform that lacks the second Ig-like domain. CEACAM-7 is preferentially expressed on the luminal surface of epithelial cells near the mouth of colonic crypts and on pancreatic ductal epithelial cells (3, 4). It is down-regulated during colorectal adenoma progression (2-6) but can be up-regulated during the development of gastric carcinoma (7). R&D Systems in-house testing indicates that CEACAM-7 binds to CEACAM-1, consistent with the heterophilic interaction of CEACAM-1 with other CEACAM family members (1, 8, 9).

#### References:

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3. Thompson, J. *et al.* (1997) *Cancer Res.* **57**:1776.
4. Scholzel, S. *et al.* (2000) *Am. J. Pathol.* **156**:595.
5. Nollau, P. *et al.* (1997) *Cancer Res.* **57**:2354.
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7. Zhou, J. *et al.* (2011) *World J. Surgical Oncol.* **9**:172.
8. Markel, G. *et al.* (2004) *J. Immunol.* **173**:3732.
9. Oikawa, S. *et al.* (1992) *Biochem. Biophys. Res. Commun.* **186**:881.

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