

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CEACAM-7 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 962703
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived recombinant human CEACAM-7 Thr36-Asn233 Accession # Q14002
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 Human Cell Line Transfected with Human CEACAM-7 and eGFP

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

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:

1. Tchoupa, A.K. *et al.* (2014) *Cell Commun. Signal.* **12**:27.
2. Thompson, J. *et al.* (1994) *J. Biol. Chem.* **269**:32924.
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.
6. Nollau, P. *et al.* (1997) *Am. J. Pathol.* **151**:521.
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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.