Human CEACAM-18 Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 1057633

Catalog Number: FAB9869N

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CEACAM-18 in direct ELISA.
Source	Monoclonal Mouse IgG_1 Clone # 1057633
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Human embryonic kidney cell, HEK293-derived human CEACAM-18 Gln31-His317 Accession # A8MTB9
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *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.*

Flow Cytometry	Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment was HEK293 cells transfected with Human CEACAM-18 vs Irrelevant transfectant.

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.** • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Carcinoembryonic Antigen-related Cell Adhesion Molecule 18 (CEACAM-18) is part of the CEA protein family consisting of CEACAMs and the pregnancy-specific glycoproteins (PSGs). Both CEACAM and PSG molecules have been identified in humans and belong to the much larger glycosylphosphatidylinositol (GPI)-linked immunoglobulin (Ig) superfamily (1, 2). Mature human CEACAM-18 has a 298 amino acid (aa) extracellular domain containing 2 IgC2-like and 1 IgV-like domains, a single transmembrane domain and a short cytoplasmic tail (2). CEACAM-18 is one of only five conserved CEACAMs among mouse, rat, and human (2), but mature human CEACAM-18 has low aa sequence identify with mouse and rat at 60% and 58%, respectively. Originally discovered as a biomarker for colorectal cancer (3), CEACAMs have now been associated with numerous intracellular signaling processes including cell adhesion, cell growth, recognition and differentiation, angiogenesis, and apoptosis (4-6). While the exact function of CEACAM-18 has been yet to be elucidated, it may bind pathogen receptors or other immunoregulatory members (6). CEACAM family members were identified as the major Galectin-3 receptor candidates on human neutrophils (7). Binding of carbohydrate ligands to CEACAMs may be important in the release of proinflammatory mediators (8, 9).

References:

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4. Obrink, B. (1997) Curr Opin Cell Biol **9**:616.
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8. Yoon, J. *et al.* (2007) J. Immunol. **179**:8454.
9. Schröder, A.K. *et al.* (2006) Hum Immunol. **67**:676.

PRODUCT SPECIFIC NOTICES

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