Human CEACAM-19 Alexa Fluor® 350-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 1042108

Catalog Number: FAB93971U

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CEACAM-19 in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 1042108
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CEACAM-19 Met1-Gly157 Accession # Q7Z692
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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 Human Cell Line Transfected with Human CEACAM-19 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.** • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Carcinoembryonic antigen-related cell adhesion molecule-19 (CEACAM-19), also known as CEA-like gene 1 (CEAL1), is a member of the CEACAM subfamily of glycoproteins in the immunoglobulin (Ig) superfamily. Mature human CEACAM-19 consists of a 125 amino acid (aa) extracellular domain, a 21 aa helical transmembrane domain, and a 122 aa cytoplasmic domain (1,2). The extracellular domain contains an Ig-like domain as well as a glycosylation site, while the cytoplasmic domain is predicted to contain at least one immunoreceptor tyrosine-based activation motif (ITAM) (3,4). The extracellular domain of human CEACAM-19 shows 71%, 72%, and 78% aa identity to mouse, rat, and bovine CEACAM-19. The CEACAM family of proteins are involved in numerous intercellular-adhesion and intracellular signaling processes including cell adhesion, cell growth, recognition and differentiation, angiogenesis, and apoptosis (5,6). CEACAM-19 expression has been identified in a wide range of tissues including prostate, uterus, fetal brain, mammary and adrenal glands, skeletal muscle, small intestine, and kidney (1). Human CEACAM-19 has been found to be overexpressed in BT-474, BT20, and T47D breast cancer cell lines as well as LNCaP prostate cancer cells, suggesting a role in tumor progression and metastasis (1,3, 7). The overexpression in breast cancer patients is associated with poor prognosis (7).

References:

1. Schorilas, A. *et al.* (2003) Gene **310**:79.
2. Estiar, M. *et al.* (2016) Clin Exp Med doi:10.1007/s10238-016-0442-1.
3. Beauchemin, N. and Arabzadeh, A. (2013) Cancer Metastasis Rev 32 **(3-4)**:643.
4. Kuespert, K. *et al.* (2006) Curr Opin Cell Biol **18**:565.
5. Obrink, B. (1997) Curr Opin Cell Biol **9**:616.
6. Horst, AK. and Wagener, C. (2004) Handb Exp Pharmacol 283.
7. Michaelidou, K. *et al.* (2013) Int J Oncol **42**:1770.

PRODUCT SPECIFIC NOTICES

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449