Human CEACAM-16 Alexa Fluor® 350-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2747B
Catalog Number: FAB9885U
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CEACAM-16 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2747B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese Hamster Ovary cell line CHO-derived human CEACAM-16 Met1-Gly425 Accession # Q2WEN9
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-16.

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 16 (CEACAM-16), or CEAL2, 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). Unique to the CEA family, CEACAM-16 is a secreted molecule lacking a recognizable transmembrane domain or GPI anchor (3). Mature human CEACAM-16 is 405 amino acids (aa), containing 2 IgC2-like domains and 2 IgV-like domains. CEACAM-16 is one of only five conserved CEACAMs among mice, rats, and humans (2). Mature human CEACAM-16 shares 90% and 89% aa identity with mouse and rat CEACAM-16, respectively. Originally discovered as a biomarker for colorectal cancer (4), CEACAMs have now been associated with numerous intracellular signaling processes including cell adhesion, cell growth, recognition and differentiation, angiogenesis, and apoptosis (5-7). CEACAM-16 is specifically expressed in the inner ear and has been shown to play a critical role in hearing. CEACAM-16 has been identified as a binding partner for alpha tectorin and specific mutations in CEACAM-16 have been linked to autosomal dominant nonsyndromic deafness (ADNSHL) (3, 8).

References:

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4. Gold P. and Freedman S.O. (1965) J Exp Med **122**:467.
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7. Kuespert K *et al.* (2006) Curr Opin Cell Biol. **18(5)**:565.
8. Wang, H. *et al.* (2015) J Hum Genet. **60(3)**:119.

PRODUCT SPECIFIC NOTICES

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