anti-human CD66eb (CEACAM5/8) PE-conjugated

PE-conjugated monoclonal antibody 5C8C4 to human CD66eb (CEACAM5/8)

Cat-No: 21608664 500 μl

Clone: 5C8C4

Specificity: The antibody 5C8C4 recognizes the CEACAM5 (CEA) antigen, a 180 kDa GPI-anchored glycoprotein expressed on various human epithelial cells and the CEACAM8 antigen, a 95 kDa GPI-anchored glycoprotein expressed solely on human granulocytes.

Isotype subclass: Mouse IgG1 kappa.

Form: The purified antibody is conjugated with R-Phycoerythrin (R-PE) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1 % BSA and 0.09 % sodium azide (pH 7.2)

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light.

Application: Flow Cytometry

Background: CD66e, also known as CEACAM5 (Carcinoembryonic antigen-related (CEA) cell adhesion molecule 5, is a glycosyl phosphatidyl inositol- (GPI-) anchored glycoprotein. CEACAM5 and related genes make up the CEA family belonging to the immunoglobulin superfamily. CD66e is involved in cell adhesion. Additionally it serves as pathogen receptor (e.g. Helicobacter pylori, Neisseria, Moraxella, Candida albicans). Antibodies against CEACAM5 are commonly used in immunohistochemistry to identify cells expressing the glycoprotein in tissue samples. However, CEACAM5 is also found in serum where it can be used as a tumor marker. In adults, CEACAM5 is primarily expressed in epithelia of the gastrointestinal tissue commonly together with CEACAM1, CEACAM6 and CEACAM7. **CD66b**, also known as CEACAM8 is a GPI-anchored glycoprotein as well. CEACAM8 is involved cell-cell communication* but does NOT serve as pathogen receptor. In adults CEACAM8 is expressed in granulocytes together with CEACAM1, CEACAM3 and CEACAM6.

References

- 1.) Singer BB, Scheffrahn I, Kammerer R, Suttorp N, Ergun S, Slevogt H: Deregulation of the CEACAM expression pattern causes undifferentiated cell growth in human lung adenocarcinoma cells. PLoS One. 2010 Jan 18;5(1):e8747.
- 2.) Gangopadhyay A, Bajenova O, Kelly TM, Thomas P: Carcinoembryonic antigen induces cytokine expression In Kuppfer cells: implications for hepatic metastasis from colorectal cancer. Cancer Res. 1996 Oct 15;56(20):4805-10.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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