anti-human CD66ecb (CEACAM5/6/8) APC-conjugated

APC-conjugated monoclonal antibody ivi 4/27 to human CD66ecb (CEACAM5/6/8)

Cat-No: 21604666 500 μl

Clone: ivi 4/27

Specificity: The antibody ivi 4/27 recognizes the CEACAM5, CEACAM6 and CEACAM8 antigens, with a molecular weight of 180 kDa, 90 kDa and 95 kDa, respectively. These proteins are highly glycosylated and expressed on various human cell types.

Isotype subclass: Mouse IgG1 kappa

Form: The purified antibody is conjugated with cross-linked Allophycocyanin (APC) 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: CEACAMs are highly glycosylated membrane anchored proteins. CEACAM genes make up the CEA family belonging to the immunoglobulin superfamily. CEACAMs are involved in cell adhesion and cell-cell communication processes. CEACAM5 and 6 but NOT CEACAM8 serve as pathogen receptor (e.g. for Helicobacter pylori, Neisseria, Moraxella, Candida albicans). Immunologically they are characterized as members of the CD66 cluster of differentiation. Antibodies to CEACAMs are commonly used in immunohistochemistry and flow cytometry to identify cells expressing the glycoproteins. However, CEACAM5 and 6 are also found in serum where they can serve as tumor markers. In adults, CEACAM5 and 6 are expressed in epithelia and CEACAM6 and 8 in granulocytes.

References

Hammarström S (April 1999). "The carcinoembryonic antigen (CEA) family: structures, suggested functions and expression in normal and malignant tissues*1". Seminars in Cancer Biology. 9 (2): 67–81. Gebauer F et al.: Carcinoembryonic antigen-related cell adhesion molecules (CEACAM) 1, 5 and 6 as biomarkers in pancreatic cancer. PLoS One. 2014 Nov 19;9(11):e113023.

Singer BB: CEACAMs. Encyclopedia of Signaling Molecules 01/2016.

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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