Anti-Human CD151 Functional Grade Purified

Catalog Number: 16-1519
Also known as: PETA-3, PETA3
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD151 Functional Grade Purified
REF **Catalog Number:** 16-1519
Clone: 50-6
Concentration: 1 mg/mL
Host/Isotype: Mouse IgG1, kappa
Handling Conditions: Use in sterile environment.
Endotoxin: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

Description

The monoclonal antibody 50-6 recognizes human CD151 also known as PETA-3 (platelet-endothelial cell tetraspan antigen-3). CD151 has a molecular weight of 29 kDa and like other tetraspanin family members, CD151 contains four hydrophobic transmembrane domains, two short cytoplasmic tails, and one small and one large extracellular loop. CD151 is expressed on platelets, megakaryocytes, endothelial cells, at the cell-cell junctions, as well as epithelial cells where it localizes to basolateral surfaces exposed to extracellular matrix. The tetraspanins play a role in cell adhesion and migration; CD151 interacts with integrinα3 β1 and integrinα6 β4. In particular CD151 forms a functional complex with c-Met and integrin α3 and α6 in human salivary gland cancer cells. Additionally it can interact with CD46. Together these interactions are thought to play a role during early metastasis as a potential positive effector. The 50-6 monoclonal antibody inhibits *in vivo* metastasis of a human epidermal carcinoma cell line, HEp-3.

Applications Reported

This 50-6 antibody has been reported for use in flow cytometric analysis, functional assays, immunoblotting (WB), immunohistology staining of paraffin embedded tissue sections, and immunocytochemistry.

Applications Tested

This 50-6 antibody has been tested by flow cytometric analysis of human platelets. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (ug) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Met and integrin alpha3/alpha6 in human salivary gland cancer cells Biochem Biophys Res Commun. 2009 Feb 20;379(4):1097-100.

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Testa JE, Brooks PC, Lin JM, Quigley JP. Eukaryotic expression cloning with an antimetastatic monoclonal antibody identifies a tetraspanin (PETA-3/CD151) as an effector of human tumor cell migration and metastasis. Cancer Res. 1999 Aug 1;59(15):3812-20. (50-6, IHC, FC, WB PubMed)

Sincock PM, Mayrhofer G, Ashman LK. Localization of the transmembrane 4 superfamily (TM4SF) member PETA-3 (CD151) in normal human tissues: comparison with CD9, CD63, and alpha5beta1 integrin. J Histochem Cytochem. 1997; 45(4):515-525.(Biology) 556057

Fitter S, Tetaz TJ, Berndt MC, Ashman LK. Molecular cloning of cDNA encoding a novel platelet-endothelial cell tetra-span antigen, PETA-3. Blood. 1995; 86(4):1348-1355.

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Related Products
11-0418 Anti-Human CD41b FITC (HIP2)
12-4317 Streptavidin PE
16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.8.1)

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