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4F2hc/SLC3A2 (D3F9D) XP[®] Rabbit mAb (PE Conjugate)

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: FC-FP, FC-L	Reactivity: H	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #P08195	Entrez-Gene Id: 6520
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Product Usage Information

Application

Flow Cytometry (Fixed/Permeabilized)
Flow Cytometry (Live)

Dilution

1:50
1:50

Storage

Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

Specificity/Sensitivity

4F2hc/SLC3A2 (D3F9D) XP[®] Rabbit mAb (PE Conjugate) recognizes endogenous levels of total 4F2hc/SLC3A2 protein. This antibody is predicted to detect multiple isoforms of 4F2hc/SLC3A2.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val509 of human 4F2hc/SLC3A2 protein.

Description

This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated 4F2hc/SLC3A2 (D3F9D) XP[®] Rabbit mAb #47213.

Background

4F2hc is a transmembrane protein that belongs to the solute carrier family. 4F2hc forms heterodimeric complexes with various amino acid transporters such as LAT1 and LAT2 and regulates uptake of amino acids (1-5). 4F2hc is one of the earliest expressed antigens on the surface of activated human lymphocytes (6), hence it is also named CD98. 4F2hc is expressed in all cell types with the exception of platelets, and is expressed at highest levels in the tubules of the kidney and the gastrointestinal tract (7,8). It is localized at the plasma membrane when associated with LAT1 or LAT2 (9) and at the apical membrane of placenta (10). Research studies have shown that 4F2hc is highly expressed in various tumors including glioma (11), ovarian cancer (12), and astrocytomas (13), and it has been implicated in tumor progression and correlated with poor outcome in patients with pulmonary neuroendocrine tumors (14). 4F2hc is also involved in integrin trafficking through association with β 1 and β 4 integrins, and regulates keratinocyte adhesion and differentiation (15).

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

FC-FP: Flow Cytometry (Fixed/Permeabilized) **FC-L:** Flow Cytometry (Live)

Cross-Reactivity Key

H: Human

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