Revision 4

Store at -20C

#94274

4F2hc/SLC3A2 (D5U4G) XP® Rabbit mAb

Cell Signaling TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IHC-P, IF-IC	H	Endogenous	75-120	Rabbit IgG	#P08195	6520

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:300
Immunofluorescence (Immunocytochemistry)	1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

4F2hc/SLC3A2 (D5U4G) XP® Rabbit mAb 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 Ala629 of human 4F2hc/SLC3A2 protein.

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 β1 and β4 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).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human

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