

Anti-SLC1A5/ASCT2 antibody [CAL33] ab237704

敲除验证 重组 RabMAb

15 References 12 图像

概述	
产品名称	Anti-SLC1A5/ASCT2抗体[CAL33]
描述	兔单克隆抗体[CAL33] to SLC1A5/ASCT2
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), IHC-P, WB, ICC/IF, IP
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	IHC-P: Human colon carcinoma and lung carcinoma tissue. WB: HeLa, HEK-293T and Jurkat whole cell lysate. ICC/IF: Jurkat and HeLa cells. Flow Cyt (intra): Jurkat and HeLa cells. IP: Jurkat and HeLa whole cell lysate.
性能	
形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.05% Sodium azide Constituent: PBS
纯度	Protein A purified
纯化说明	Purity is greater than 99%.
克隆	单克隆
克隆编号	CAL33
同种型	IgG
应用	

The Abpromise guarantee **Abpromise™**承诺保证使用ab237704于以下的经测试应用

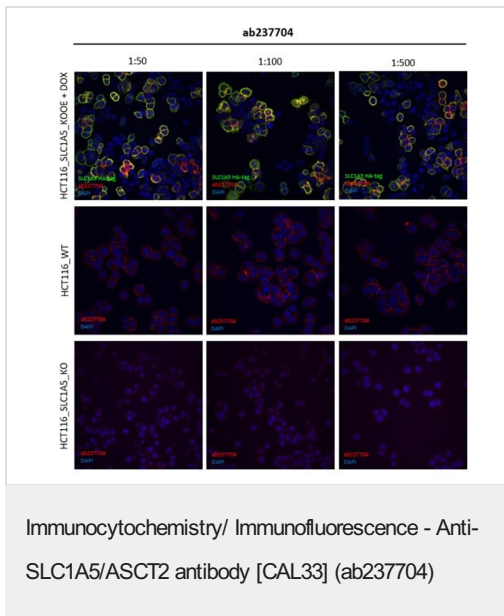
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/40.
IHC-P		1/1600. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 56 kDa.
ICC/IF		1/50.
IP		1/30.

靶标

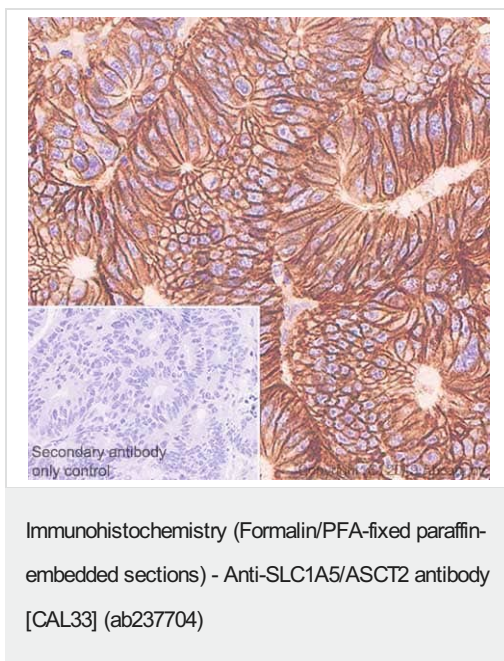
功能	Sodium-dependent amino acids transporter that has a broad substrate specificity, with a preference for zwitterionic amino acids. It accepts as substrates all neutral amino acids, including glutamine, asparagine, and branched-chain and aromatic amino acids, and excludes methylated, anionic, and cationic amino acids. May also be activated by insulin. Through binding of the fusogenic protein syncytin-1/ERVW-1 may mediate trophoblasts syncytialization, the spontaneous fusion of their plasma membranes, an essential process in placental development (PubMed:10708449, PubMed:23492904). Acts as a cell surface receptor for feline endogenous virus RD114, baboon M7 endogenous virus and type D simian retroviruses (PubMed:10051606, PubMed:10196349).
组织特异性	Placenta, lung, skeletal muscle, kidney, pancreas, and intestine.
序列相似性	Belongs to the dicarboxylate/amino acid:cation symporter (DAACS) (TC 2.A.23) family. SLC1A5 subfamily.
细胞定位	Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

图片

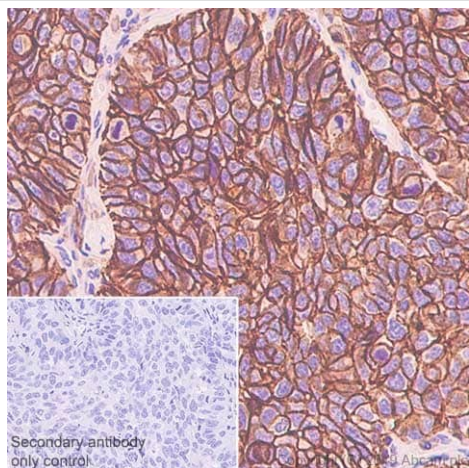


HCT116 WT, SLC1A5 KO were labelled with a green dye. SLC1A5 KOOE cells were labelled with a green and a red dye. SLC1A5 expression was induced with doxycycline in KOOE cells. WT and KO cells were stained with ab237704 and with Alexa-fluor 594 coupled secondary antibody. KOOE cells were stained with: i) ab237704 and with Alexa-fluor 594 coupled secondary antibody; ii) anti-HA-Tag antibody and with Alexa-fluor 488 antibody. Acquisition of the green (HA-Tag in KOOE) and red (antibody staining in WT, KO and KOOE) channels was performed. Representative images of the green and red channel are shown. Antibodies used and tested dilutions are as follows: ab237704 at 1/50, 1/100 and 1/500.

This image was provided, with thanks, by RESOLUTE (re-solute.eu)

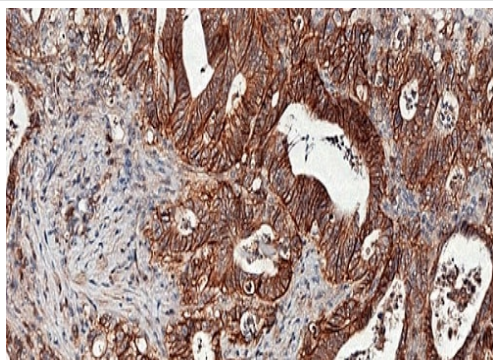


Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue labeling SLC1A5/ASCT2 with ab237704 at 1/1600 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Mainly membranous staining on the human colon carcinoma is observed. The section was incubated with ab237704 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



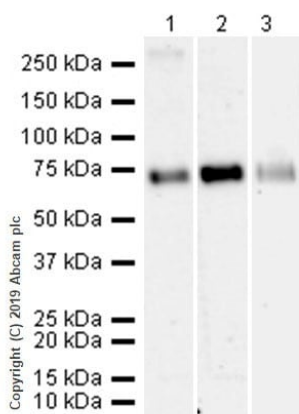
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue labeling SLC1A5/ASCT2 with ab237704 at 1/1600 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Mainly membranous staining on the human lung carcinoma is observed. The section was incubated with ab237704 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for SLC1A5/ASCT2 using ab237704 at 0.5 µg/ml in immunohistochemical analysis.



Western blot - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

All lanes : Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 3 : Jurkat (human T cell leukemia T lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

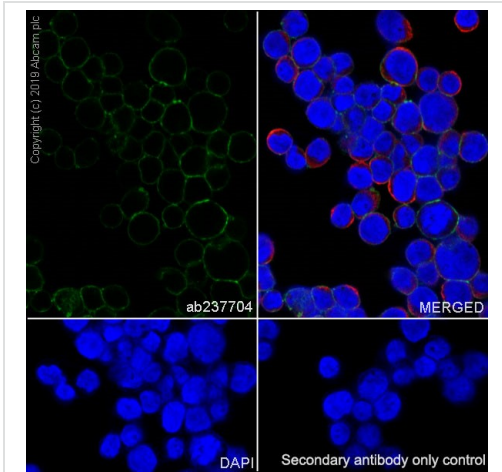
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 56 kDa

Exposure time: 3 minutes

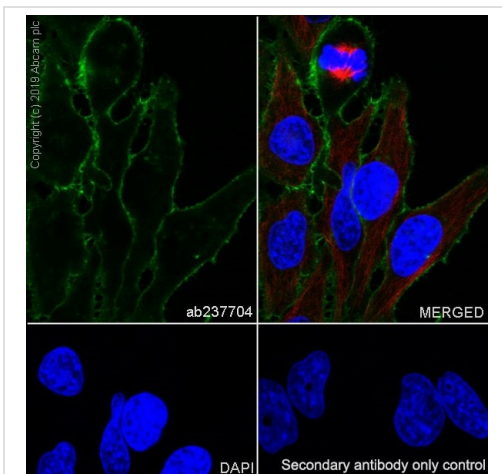
Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

Immunofluorescent analysis of 100% methanol fixed Jurkat (human T cell leukemia T lymphocyte) cells labeling SLC1A5/ASCT2 with ab237704 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in Jurkat cells. The nuclear counter stain is DAPI (blue).

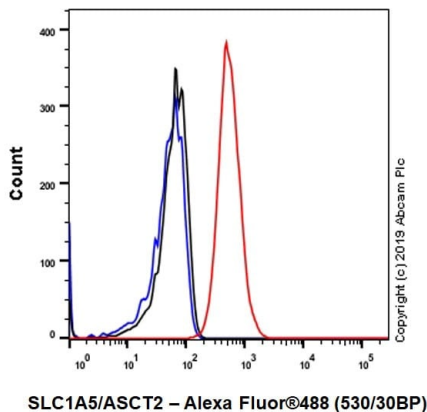
Counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at a 1/200 dilution (red). The negative control is the secondary antibody only.



Immunocytochemistry/ Immunofluorescence - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

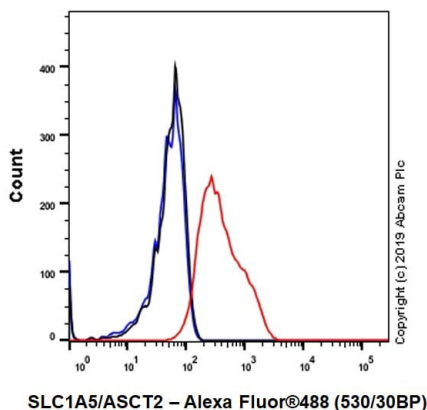
Immunofluorescent analysis of 100% methanol fixed HeLa (human cervix adenocarcinoma epithelial cell) cells labeling SLC1A5/ASCT2 with ab237704 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in HeLa cells. The nuclear counter stain is DAPI (blue).

Counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at a 1/200 dilution (red). The negative control is the secondary antibody only.



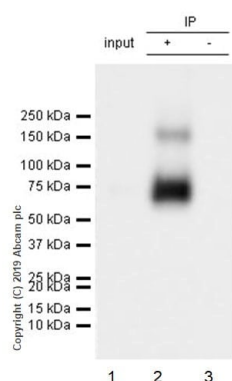
Flow Cytometry (Intracellular) - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized HeLa (human cervix adenocarcinoma epithelial cell) cell line labeling SLC1A5/ASCT2 with ab237704 at 1/400 (red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)), at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized Jurkat (human T cell leukemia T lymphocyte) cell line labeling SLC1A5/ASCT2 with ab237704 at 1/40 (red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)), at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-SLC1A5/ASCT2 antibody
[CAL33] (ab237704)

SLC1A5/ASCT2 was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate with ab237704 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab237704 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used at 1/5000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input).

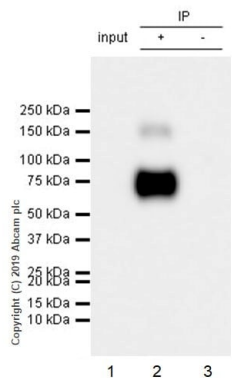
Lane 2: ab237704 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab237704 in HeLa whole cell lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 1 second.

ASCT2 (SLC1A5) can form dimers or trimers based on literature. (PMID: 23756778).



Immunoprecipitation - Anti-SLC1A5/ASCT2 antibody
[CAL33] (ab237704)

SLC1A5/ASCT2 was immunoprecipitated from 0.35 mg Jurkat (human T cell leukemia T lymphocyte) whole cell lysate with ab237704 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab237704 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used at 1/5000 dilution.

Lane 1: Jurkat whole cell lysate 10 µg (Input).

Lane 2: ab237704 IP in Jurkat whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab237704 in Jurkat whole cell lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 3 seconds.

ASCT2 (SLC1A5) can form dimers or trimers based on literature. (PMID: 23756778).

Why choose a recombinant antibody?



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Consistent and reproducible results



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Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-SLC1A5/ASCT2 antibody [CAL33] (ab237704)

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