

Product datasheet

Anti-SLC34A2 antibody [SP322] - N-terminal ab228474

Recombinant **RabMAb**

★★★★★ 1 Abreviews 10 Images

Overview

Product name	Anti-SLC34A2 antibody [SP322] - N-terminal
Description	Rabbit monoclonal [SP322] to SLC34A2 - N-terminal
Host species	Rabbit
Tested applications	Suitable for: IHC-P, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human SLC34A2 aa 1-100 (N terminal). The exact sequence is proprietary. Database link: O95436
Positive control	IHC-P: Human lung adenocarcinoma, ovarian adenocarcinoma, endometrial adenocarcinoma, fallopian tube and uterus tissues. ICC/IF: NIH:OVCAR-3 cells FC: NIH:OVCAR-3 cells

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.6 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP322
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab228474** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★	1/100. Perform heat mediated antigen retrieval with EDTA buffer pH 8.0 before commencing with IHC staining protocol. Primary antibody incubation for 10 minutes at room temperature.
ICC/IF		1/100.
Flow Cyt		1/20.

Target

Function

May be involved in actively transporting phosphate into cells via Na(+) cotransport. It may be the main phosphate transport protein in the intestinal brush border membrane. May have a role in the synthesis of surfactant in lungs' alveoli.

Tissue specificity

Highly expressed in lung. Also detected in pancreas, kidney, small intestine, ovary, testis, prostate and mammary gland. In lung, it is found in alveolar type II cells but not in bronchiolar epithelium.

Involvement in disease

Defects in SLC34A2 are a cause of pulmonary alveolar microlithiasis (PALM) [MIM:265100]. Pulmonary alveolar microlithiasis is a rare disease characterized by the deposition of calcium phosphate microliths throughout the lungs. Most patients are asymptomatic for several years or even for decades and generally, the diagnosis is incidental to clinical investigations unrelated to the disease. Cases with early onset or rapid progression are rare. A 'sandstorm-appearing' chest roentgenogram is a typical diagnostic finding. The onset of this potentially lethal disease varies from the neonatal period to old age and the disease follows a long-term, progressive course, resulting in a slow deterioration of lung functions. Pulmonary alveolar microlithiasis is a recessive monogenic disease with full penetrance.

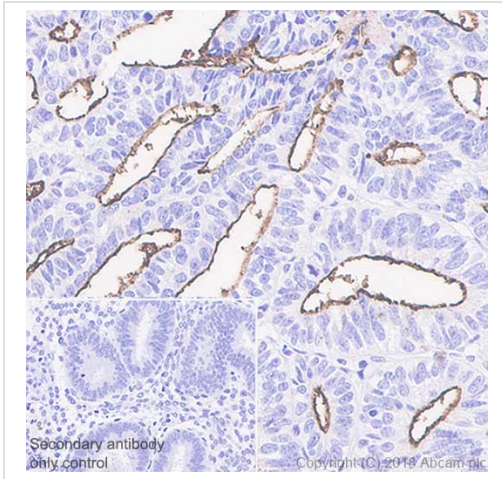
Sequence similarities

Belongs to the SLC34A transporter family.

Cellular localization

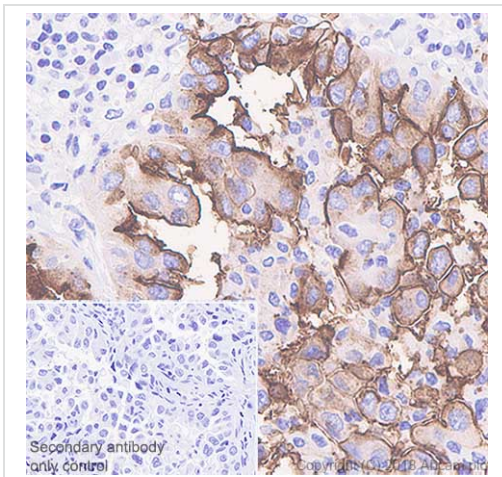
Membrane.

Images



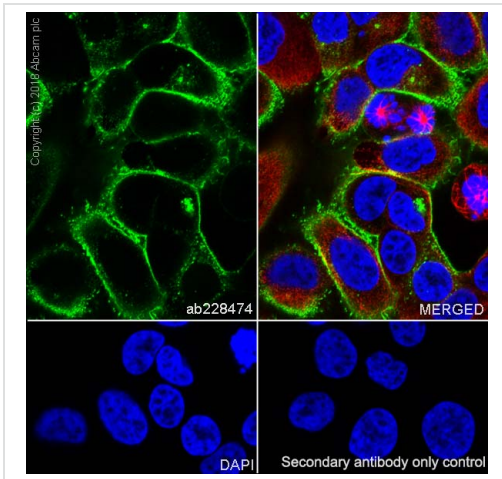
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human endometrial carcinoma tissue sections labeling SLC34A2 with ab228474 at 1/100 dilution (2.37 µg/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the luminal surface of human endometrial carcinoma, performed on a Leica Biosystems BOND™ RX instrument. The section was incubated with ab228474 for 10 mins at room temperature.



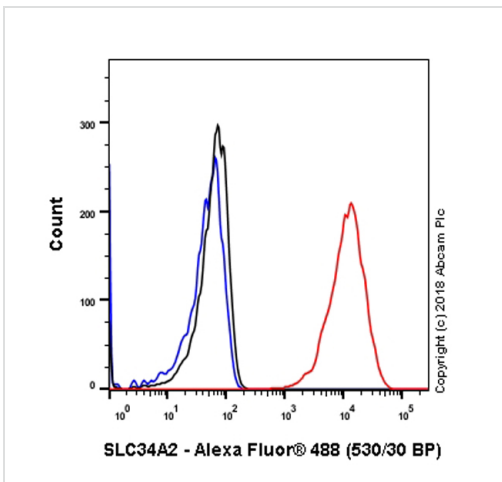
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling SLC34A2 with ab228474 at 1/100 dilution (2.37 µg/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the human lung carcinoma, performed on a Leica Biosystems BOND™ RX instrument. The section was incubated with ab228474 for 10 mins at room temperature.



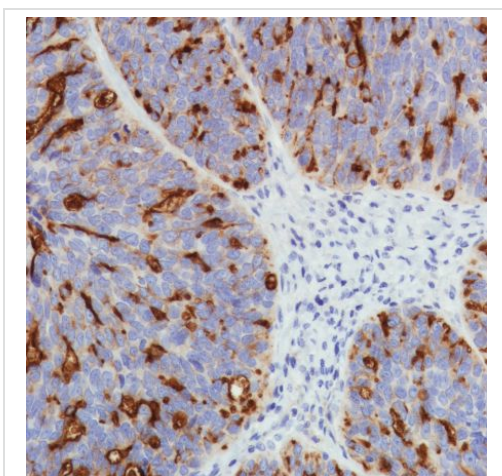
Immunocytochemistry/ Immunofluorescence - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)

Immunocytochemistry/ Immunofluorescence analysis of NIH:OVCAR-3 (human ovary adenocarcinoma epithelial cell) cells labeling SLC34A2 with purified ab228474 at 1/100 (2.4 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor[®] 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



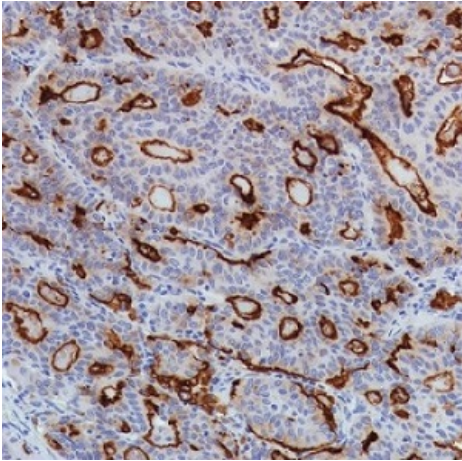
Flow Cytometry - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)

Flow cytometry analysis of OvCAR-3 (human ovary adenocarcinoma) labeling SLC34A2 with purified ab228474 at 1/20 dilution (11.85 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor[®] 488, ab150077) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG (ab172730) (Black). Unlabeled control -Unlabelled cells (blue).



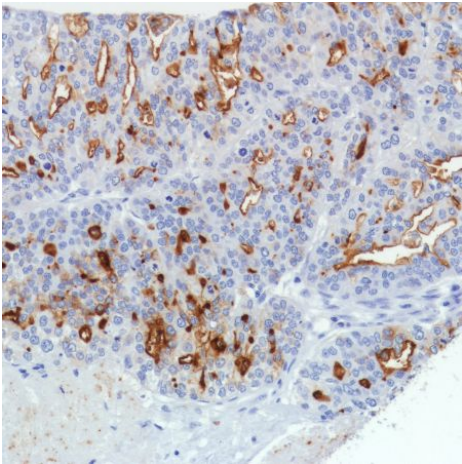
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)

Formalin-fixed, paraffin-embedded human lung adenocarcinoma tissue stained for SLC34A2 using ab228474 at 1/100 dilution in immunohistochemical analysis.



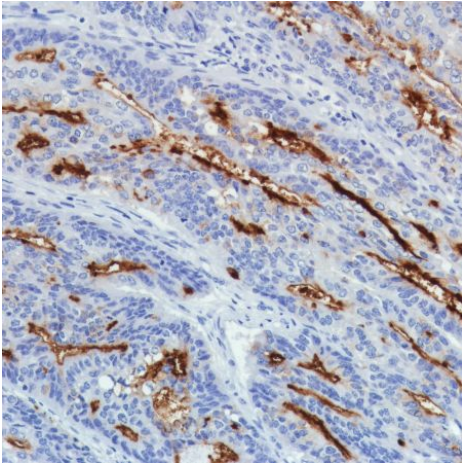
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)



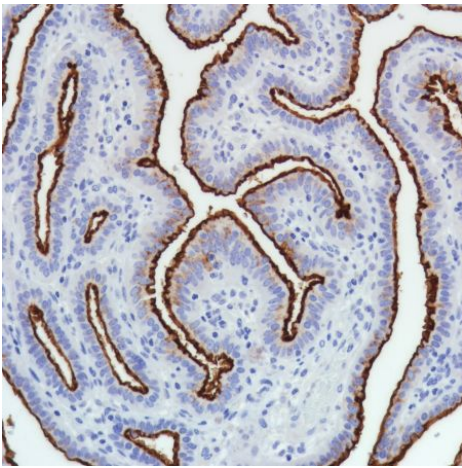
Formalin-fixed, paraffin-embedded human ovarian adenocarcinoma tissue stained for SLC34A2 using ab228474 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)



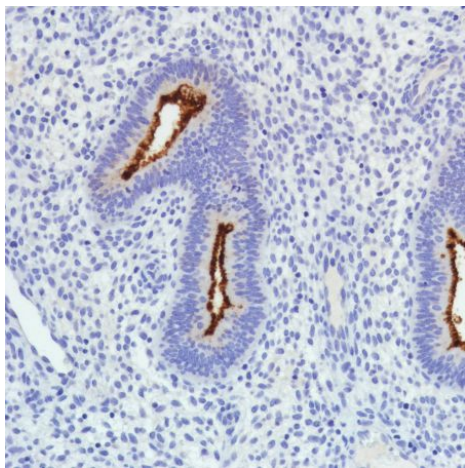
Formalin-fixed, paraffin-embedded human endometrial adenocarcinoma tissue stained for SLC34A2 using ab228474 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)



Formalin-fixed, paraffin-embedded human fallopian tube tissue stained for SLC34A2 using ab228474 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)



Formalin-fixed, paraffin-embedded human uterus tissue stained for SLC34A2 using ab228474 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SLC34A2 antibody [SP322] - N-terminal (ab228474)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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