

For Research Use Only

# CLCA1 Polyclonal antibody

Catalog Number: 25291-1-AP



## Basic Information

<b>Catalog Number:</b> 25291-1-AP	<b>GenBank Accession Number:</b> BC156805	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 550 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1179	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> A8K7I4	
<b>Isotype:</b> IgG	<b>Full Name:</b> chloride channel accessory 1	
<b>Immunogen Catalog Number:</b> AG18176	<b>Calculated MW:</b> 914 aa, 100 kDa	
	<b>Observed MW:</b> 50 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse	<b>WB :</b> COLO 320 cells, mouse colon tissue, mouse lung tissue
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> human small intestine tissue,

## Background Information

Calcium-activated chloride channel regulator 1 (CLCA1) is a secreted protein, and it has an N-terminal zinc-dependent metallohydrolase domain with a conserved HExxE catalytic motif similar to that found in matrix metalloproteases (MMPs), and "a Disintegrin and metalloproteases" (ADAMs). The only known substrate for CLCA1 is CLCA1 itself as it undergoes intracellular autocatalytic cleavage resulting in two cleavage products which are both secreted. Since a previous study suggested that a band around 75 kDa, corresponding to the N-terminal autocatalytic cleavage product, was observed in mucus from both human and WT mice. In addition, an additional band at 50 kDa was identified in human and WT mouse mucus, suggesting that CLCA1 can be further processed. However, no band corresponding to the full-length un-cleaved CLCA1 could be detected in the human samples, and only a very faint band was observed in WT mouse mucus, indicating that most of the CLCA1 that is secreted into the mucus is fully cleaved in vivo. (PMID: 29885864)

## Storage

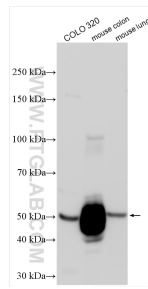
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

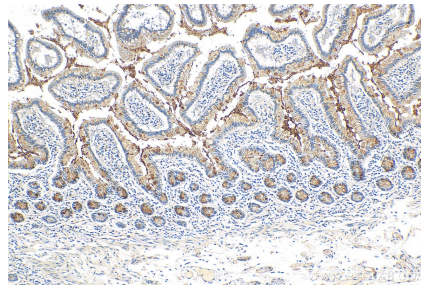
For technical support and original validation data for this product please contact:  
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 25291-1-AP (CLCA1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human small intestine tissue slide using 25291-1-AP (CLCA1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).