

CLCA1 Polyclonal antibody

Catalog Number: 25291-1-AP

Basic Information

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

Applications

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

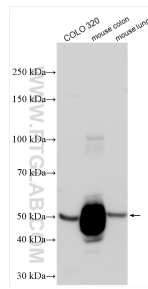
Background Information

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)

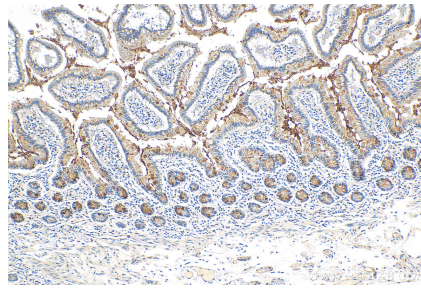
Storage

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

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).