For Research Use Only

CLCA1 Recombinant antibody

Catalog Number:83829-7-RR



Basic Information

Catalog Number:

GenBank Accession Number: BC 156805

Purification Method: Protein A purfication

83829-7-RR

GeneID (NCBI):

ntern A purncatio

Size: 1000 μg/ml

GenelD (NCBI): 1179 CloneNo.: 240941G4

Source:

UNIPROT ID: A8K7I4 Recommended Dilutions:

Rabbit

Full Name:

WB 1:5000-1:50000

Isotype:

chloride channel accessory 1
Calculated MW:

Immunogen Catalog Number: AG18176

914 aa, 100 kDa

Observed MW:

50 kDa

Applications

Tested Applications:

Positive Controls:

WB, ELISA

WB: SH-SY5Y cells, A431 cells

Species Specificity:

human

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:

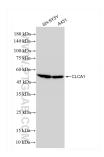
Store at -20°C. Stable for one year after shipment.

Storage Buffe

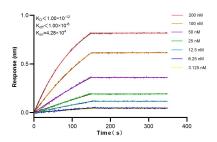
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83829-7-RR (CLCA1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLL) kinetic assays of 83829-7-RR against Human CLCA1 were performed. The affinity constant is below 1 pM.