For Research Use Only

CLCA1 Recombinant antibody

Catalog Number:83829-7-RR



Basic Information	Catalog Number: 83829-7-RR	GenBank Accession Number: BC 156805	Purification Method: Protein A purfication		
	Size: 100ul , Concentration: 1000 ug/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG18176	GeneID (NCBI): 1179 UNIPROT ID: A8K7I4 Full Name:	CloneNo.: 240941G4 Recommended Dilutions: WB 1:5000-1:50000		
				chloride channel accessory 1 Calculated MW: 914 aa, 100 kDa	
		Applications	Tested Applications:	Positive Controls: WB : SH-SY5Y cells, A431 cells	
			WB, ELISA 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 Buffer: PBS with 0.02% sodium azide and 50% glycerol pH 7.3.				
*** 20ul sizes contain 0.1%BSA	Aliquoting is unnecessary for -20 $^{\circ}$ C s				

For technical support and original validation data for this product please contact:T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)E: proteintech@ptglab.comW: ptglab.comW: ptglab.com

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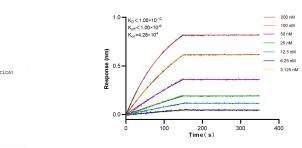
Selected Validation Data

 $\begin{array}{c} 180 \text{ kDa} \rightarrow \\ 140 \text{ kDa} \rightarrow \\ 100 \text{ kDa} \rightarrow \\ 75 \text{ kDa} \rightarrow \end{array}$

60 kDa→ 45 kDa→ 35 kDa→ 25 kDa→

15 kDa-

10 kDa→



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.