Active Recombinant Human CLCA1 protein, His-tagged

Cat. No. CLCA1-10H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human CLCA1 protein(A8K7I4)(416-670 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	416-670 aa
Form	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	CLCA1 (Calcium-activated chloride channel regulator 1) is a member of the calcium sensitive chloride conductance protein family. This protein is expressed as a precursor protein that is processed into two cell-surface-associated subunits. It has been reported that CLCA1 activates calcium-dependent chloride channel through the interaction with TMEM16A (anoctamin-1). Besides, there exits similarities between human and mouse TMEM16A in amino acid sequence with the identity of 89.66%. Thus, a functional ELISA assay was conducted to detect the association of recombinant human CLCA1 with recombinant mouse TMEM16A. Briefly, CLCA1 were diluted serially in PBS with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to TMEM16A-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-CLCA1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate

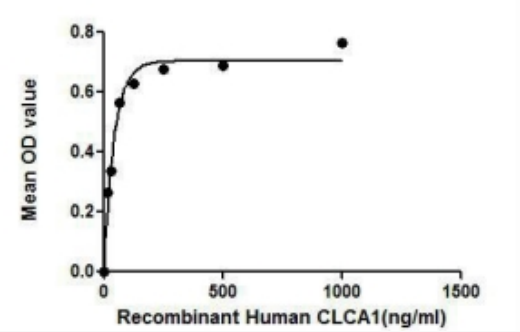
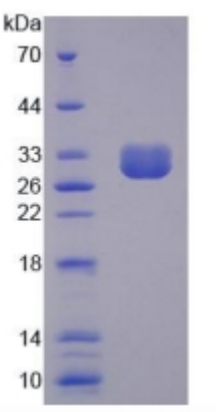
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	solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µ stop solution to the wells and read at 450nm immediately. The binding activity of CLCA1 with TMEM16A was shown and this effect was in a dose dependent manner.
Molecular Mass	28.4kDa
Purity	> 97%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	CLCA1 chloride channel accessory 1 [Homo sapiens]
Official Symbol	CLCA1
Synonyms	CLCA1; chloride channel accessory 1; chloride channel regulator 1 , chloride channel, calcium activated, family member 1; calcium-activated chloride channel regulator 1; CaCC; CLCRG1; chloride channel regulator 1; calcium-dependent chloride channel-1; calcium-activated chloride channel protein 1; CLCA family member 1, chloride channel regulator; calcium-activated chloride channel family member 1; chloride channel, calcium activated, family member 1; CACC; GOB5; CACC1; CaCC-1; hCLCA1; hCaCC-1; FLJ95147;
Gene ID	1179
mRNA Refseq	NM_001285

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Protein Refseq	NP_001276
MIM	603906
UniProt ID	A8K7I4
Activity	
SDS-PAGE	

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