

Human CLCA1 protein, His tag

Cat. No. GTX00147-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

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 exists 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 100 µl 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 solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of CLCA1 with TMEM16A was in a dose dependent manner.

Observed MW (kDa) 28 kDa.

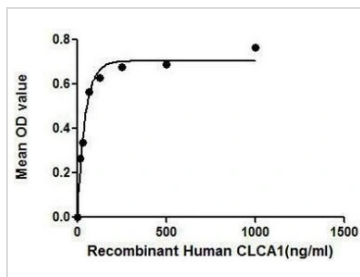
Properties

Form Lyophilized powder**Buffer** Reconstitute with 10mM PBS (pH7.4) to 0.1-1.0mg/ml. Do not vortex. Lyophilized from PBS (pH7.4), 0.01% SKL, 1mM DTT, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Asn416~Arg670 (NP_001276.2)**Expression System** E. coli**Purity** > 97%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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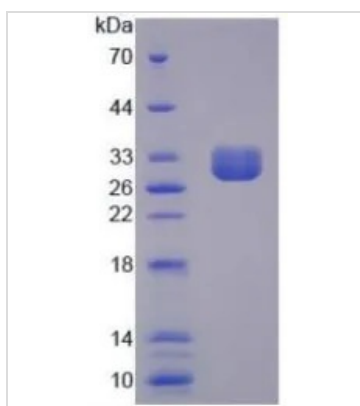
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DATA IMAGES



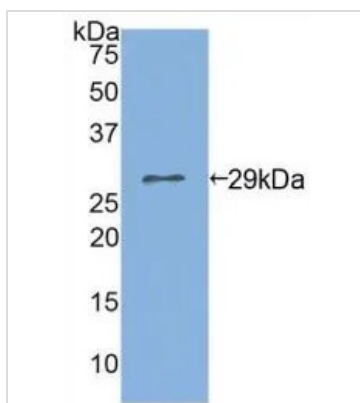
GTX00147-pro Functional Assay Image

Functional ELISA analysis of GTX00147-pro Human CLCA1 protein which can bind immobilized TMEM16A protein.



GTX00147-pro Image

SDS-PAGE analysis of GTX00147-pro Human CLCA1 protein.



GTX00147-pro Image

WB analysis of GTX00147-pro Human CLCA1 protein.



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