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## Product Datasheet

### Human CLCA1 protein, His tag, Unconjugated GTX00147-PRO

Article Name	Human CLCA1 protein, His tag, Unconjugated
Biozol Catalog Number	GTX00147-PRO
Supplier Catalog Number	GTX00147-pro
Alternative Catalog Number	GTX00147-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	<a href="#">1179</a>
UniProt	<a href="#">A8K7I4</a>
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, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Asn416~Arg670 (NP_001276.2)

#### Application Notes

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 37C. 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 37C. 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.