Active Chloride Channel Accessory 1 (CLCA1)

Catalog#:PEH12964

概述（Summary）

别称（Alternative Names）	CaCC1; CLCRG1; Chloride Channel,Calcium Activated,Family Member 1; Calcium-activated chloride channel protein 1
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Asn416-Arg670】
Accession #	A8K7I4
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	28.4 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	May be involved in mediating calcium-activated chloride conductance. May play critical roles in goblet cell metaplasia, mucus hypersecretion, cystic fibrosis and AHR. May be involved in the regulation of mucus production and/or secretion by goblet cells. Involved in the regulation of tissue inflammation in the innate immune response. May play a role as a tumor suppressor. Induces MUC5AC.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

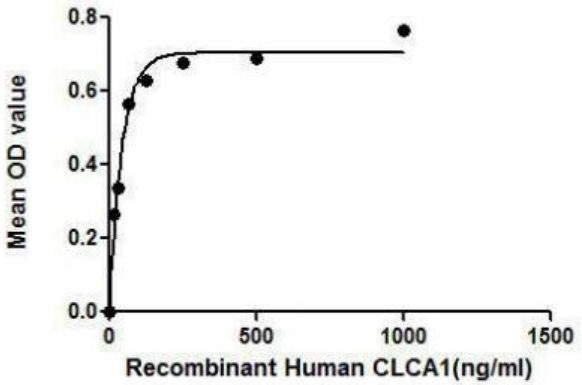

Figure 1. The binding activity of CLCA1 with TMEM16A

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 solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of CLCA1 with TMEM16A was shown in Figure 1 and this effect was in a dose dependent manner.

注意事项（Note）

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