Active Chromogranin A (CHGA)

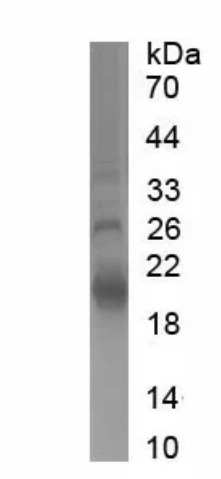
Catalog#:PHH12624

概述（Summary）

别称（Alternative Names）	CGA; SP-I; Parathyroid Secretory Protein 1; Vasostatin; Pancreastatin; Parastatin; Pituitary secretory protein I
纯度（Purity）	Greater than 80% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gln15-Gly148】
Accession #	P10645
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	16.6 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 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Strongly inhibits glucose induced insulin release from the pancreas.; Inhibits catecholamine release from chromaffin cells and noradrenergic neurons by acting as a non-competitive nicotinic cholinergic antagonist. Displays antibacterial activity against Gram-positive bacteria S.aureus and M.luteus, and Gram-negative bacteria E.coli and P.aeruginosa. Can induce mast cell migration, degranulation and production of cytokines and chemokines. Acts as a potent scavenger of free radicals in vitro. May play a role in the regulation of cardiac function and blood pressure.; Regulates granule biogenesis in endocrine cells by

up-regulating the transcription of protease nexin 1 (SERPINE2) via a cAMP-PKA-SP1 pathway. This leads to inhibition of granule protein degradation in the Golgi complex which in turn promotes granule formation.

电泳图（SDS-PAGE image）



Greater than 80% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

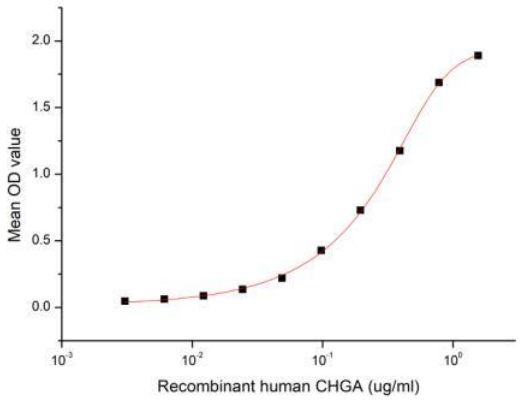


Figure 1. The binding activity of recombinant human CHGA and recombinant human LHb

Chromogranin A (CHGA), also known as pituitary secretory protein I (SP-I), is a member of the granin family of regulated secretory proteins. CHGA shares several protein characteristics common to the granin family: acidic isoelectric point, the capacity to bind calcium ions, the ability to form aggregates and multiple dibasic cleavage sites. Mature human CHGA is 439 amino acids (aa) and contains 10 dibasic, proteolytic cleavage sites, capable of yielding several smaller peptides, each displaying a unique function. CHGA is expressed exclusively in the secretory dense core granules of most normal and neoplastic neuroendocrine cells. A functional binding ELISA assay was conducted to detect the interaction of recombinant human CHGA and recombinant human LHb. Briefly, biotin-linked CHGA was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to LHb-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of CHGA and LHb was shown in Figure 1, the EC50 for this effect is 0.3 ug/mL.

注意事项（Note）

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