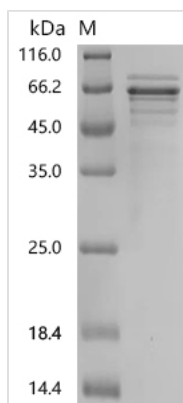




Recombinant Human Chromogranin-A (CHGA)

Product Code	CSB-EP005344HU
Relevance	Pancreastatin: Strongly inhibits glucose induced insulin release from the pancreas. Catestatin: 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.
Abbreviation	Recombinant Human CHGA protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P10645
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	LPVNSPMNKGDTEVMKCIVEVISDTLSKPSPMPVSQECFETLRGDERILSILRH QNLLKELQDLALQGAKERAHQKKHSGFEDELSEVLENQSSQAEELKEAVEEP SSKDVMEKREDSKEAEKSGEATDGARPQALPEPMQESKAEGNNQAPGEEEE EEEEATNTHPPASLPQKYPGPQAEGDSEGLSQGLVDREKGLSAEPGWQAK EEEEEEEEEEAEAGEEAVPEEEGPTTVVLNPHPSLGYKEIRKGESRSEALAVDG AGKPGAEAAQDPEGKGEQEHSQQKEEEEEEMAVVPQGLFRGGKSGELEQEE ERLSKEWEDSKRWSKMDQLAKELTAEKRLEGQEEEEEDNRDSSMKLSFRARA YGFRGPGPQLRRGWRPSSREDSLEAGLPLQVRGYPEEKKEEEGSANRRPED QELESLSAIEAELEKVAHQLQALRRG
Research Area	Cancer
Source	E.coli
Target Names	CHGA
Expression Region	19-457aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	55.8 kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The DNA sequence containing the gene coding for 19-457aa of human chromogranin-A/CHGA was used to express recombinant CHGA protein in E.coli cells. The recombinant CHGA protein was fused with a 6xHis-tag at the N-terminus for purification. According to the SDS-PAGE analysis, a molecular mass band of about 51-65 kDa of the CHGA protein was visualized on the gel. The purity of this CHGA protein is greater than 90%. Apart from being as an immunogen for antibody generation, this recombinant protein also may be used in the CHGA-associated cancer studies.

CHGA is a member of the granin family of neuroendocrine secretory proteins located in the secretory vesicles of neurons and endocrine cells. Its main function is in the granulogenesis of vesicle formation. CHGA acting as the precursor synthesizes many functional peptides such as catestatin, vasostatin, and parastatin. CHGA is often secreted by neuroendocrine tumors (NETs), and measurement of serum CHGA is a sensitive and effective noninvasive laboratory test for the clinical detection and management of NETs if other non-NET physiological, pathological, and pharmacological causes are excluded or considered in the interpretation.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.