

ARG82803 Human Chromogranin A ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG82803 Human Chromogranin A ELISA Kit is an Enzyme Immunoassay kit for the quantification of Chromogranin A in Human serum.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Chromogranin A
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	7.4 µg/L
Sample Type	Serum
Standard Range	30 - 900 µg/L
Sample Volume	50 µl serum (diluted 1+8)
Precision	Intra-Assay CV: 4.9% Inter-Assay CV: 10.2%
Alternate Names	Vasostatin II; CGA; Vasostatin I; Pituitary secretory protein I; SP-I; CgA; SL21; Chromogranin-A

Application Instructions

Assay Time	2 hours 30 min
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Properties

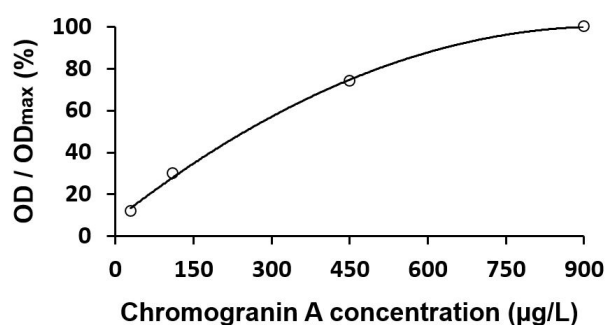
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CHGA
Gene Full Name	chromogranin A
Background	The protein encoded by this gene is a member of the chromogranin/secretogranin family of neuroendocrine secretory proteins. It is found in secretory vesicles of neurons and endocrine cells. This gene product is a precursor to three biologically active peptides; vasostatin, pancreastatin, and parastatin. These peptides act as autocrine or paracrine negative modulators of the neuroendocrine system. Two other peptides, catestatin and chromofungin, have antimicrobial activity and antifungal activity, respectively. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2014]

Function	<p>Pancreastatin: Strongly inhibits glucose induced insulin release from the pancreas.</p> <p>Catestatin: Inhibits catecholamine release from chromaffin cells and noradrenergic neurons by acting as a non-competitive nicotinic cholinergic antagonist (PubMed:15326220). Displays antibacterial activity against Gram-positive bacteria <i>S.aureus</i> and <i>M.luteus</i>, and Gram-negative bacteria <i>E.coli</i> and <i>P.aeruginosa</i> (PubMed:15723172 and PubMed:24723458). Can induce mast cell migration, degranulation and production of cytokines and chemokines (PubMed:21214543). Acts as a potent scavenger of free radicals in vitro (PubMed:24723458). May play a role in the regulation of cardiac function and blood pressure (PubMed:18541522).</p> <p>Serpinin: 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. [UniProt]</p>
Highlight	<p>Related products:</p> <p>Chromogranin A antibodies; Chromogranin A ELISA Kits;</p> <p>New ELISA data calculation tool:</p> <p>Simplify the ELISA analysis by GainData</p>
Research Area	Cancer kit; Controls and Markers kit; Neuroscience kit; Signaling Transduction kit
PTM	<p>Sulfated on tyrosine residues and/or contains sulfated glycans.</p> <p>O-glycosylated with core 1 or possibly core 8 glycans.</p> <p>Proteolytic processing gives rise to an additional longer form of catestatin (residues 358-390) which displays a less potent catecholamine release-inhibitory activity (PubMed:10781584). Plasmin-mediated proteolytic processing can give rise to additional shorter and longer forms of catestatin peptides (PubMed:17991725). [UniProt]</p>
Cellular Localization	<p>Cytoplasmic vesicle, secretory vesicle lumen. Cytoplasmic vesicle, secretory vesicle membrane. Secreted. Note=Associated with the secretory granule membrane through direct interaction to SCG3 that in turn binds to cholesterol-enriched lipid rafts in intragranular conditions. Serpinin: Secreted. Cytoplasmic vesicle, secretory vesicle. Note=Pyroglutaminated serpinin localizes to secretory vesicle. [UniProt]</p>

Images



ARG82803 Human Chromogranin A ELISA Kit standard curve image

ARG82803 Human Chromogranin A ELISA Kit results of a typical standard run with optical density reading at 450 nm.