ARG40232
anti-Chromogranin A antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Chromogranin A
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Chromogranin A
Species	Human
Immunogen	Synthetic peptide derived from Human Chromogranin A.
Conjugation	Un-conjugated
Alternate Names	Vasostatin II; CGA; Vasostatin I; Pituitary secretory protein I; SP-I; CgA; SL21; Chromogranin-A

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: SH-SY5Y

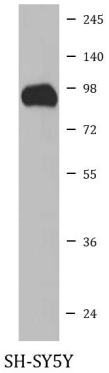
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
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	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. 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]
Calculated Mw	51 kDa
PTM	Sulfated on tyrosine residues and/or contains sulfated glycans. O-glycosylated with core 1 or possibly core 8 glycans. 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]
Cellular Localization	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]

Images



ARG40232 anti-Chromogranin A antibody WB image

Western blot: SH-SY5Y cell lysate stained with ARG40232 anti-Chromogranin A antibody.