

ARG62446 anti-Chromogranin A antibody [LK2H10]

Package: 100 µl
Store at: -20°C

Summary

| | |
|---------------------|---|
| Product Description | Mouse Monoclonal antibody [LK2H10] recognizes Chromogranin A |
| Tested Reactivity | Hu, Pig |
| Predict Reactivity | Mk |
| Tested Application | IHC-Fr, IHC-P, WB |
| Specificity | The antibody is specific for chromogranin A. Specificity was ascertained by immunoblotting and immunohistochemistry. The antibody predominantly reacts with a 68 kDa protein. |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | LK2H10 |
| Isotype | IgG1 |
| Target Name | Chromogranin A |
| Species | Human |
| Immunogen | Antigen was isolated from human Pheochromocytoma. |
| Conjugation | Un-conjugated |
| Alternate Names | Vasostatin II; CGA; Vasostatin I; Pituitary secretory protein I; SP-I; CgA; SL21; Chromogranin-A |

Application Instructions

| | |
|------------------|--|
| Application Note | IHC: 1/10 for acetone fixation * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |
|------------------|--|

Properties

| | |
|---------------------|--|
| Form | Liquid |
| Buffer | PBS and 0.09% Sodium azide |
| Preservative | 0.09% Sodium azide |
| Concentration | 0.2 mg/ml |
| 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 or below. 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

| | |
|-----------------------|---|
| Database links | GeneID: 1113 Human GeneID: 397540 Pig Swiss-port # P04404 Pig Swiss-port # P10645 Human |
| Gene Symbol | CHGA |
| Gene Full Name | chromogranin A |
| Background | <p>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]</p> |
| 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> |
| Research Area | Cancer antibody; Controls and Markers antibody; Neuroscience antibody; Signaling Transduction antibody |
| Calculated Mw | 51 kDa |
| 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).</p> |
| Cellular Localization | Secreted |