DATASHEET

Glucagon Mouse Monoclonal Antibody(ARA509)

CAT. NO. ARA5833

KEY FEATURES

Target:	Glucagon	**Clone ID:**	ARA509
Source/Host:	Mouse	**Reactivity:**	Human
Clonality:	Monoclonal	**Applications:**	IHC
Storage:	at-20°C		

BACKGROUND

GCG encodes proglucagon (preproglucagon), a precursor protein that is proteolytically cleaved into four distinct mature peptides. In the pancreatic islet alpha cells, proglucagon is processed into glucagon, a pancreatic hormone that counteracts the glucose-lowering action of insulin by stimulating glycogenolysis and gluconeogenesis in the liver; glucagon also promotes lipolysis and ketone body formation during prolonged fasting or stress, and its secretion is stimulated by low blood glucose and inhibited by high glucose or insulin. Glucagon acts as a ligand for the glucagon receptor, a G-protein coupled receptor that activates the Gs protein-adenylate cyclase-cAMP-protein kinase A signaling pathway to regulate carbohydrate and lipid metabolism. In the intestinal L-cells, proglucagon is differentially processed into glucagon-like peptide-1 (GLP-1) and glucagon-like peptide-2 (GLP-2), which are secreted in response to nutrient ingestion: GLP-1 enhances glucose-dependent insulin secretion, suppresses glucagon release, slows gastric emptying and promotes satiety, while GLP-2 promotes intestinal growth, enhances nutrient absorption and supports mucosal integrity. The fourth peptide, glicentin, is an active enteroglucagon produced in the intestinal L-cells. In immunohistochemistry, glucagon is a marker of pancreatic islet alpha cells and is widely used in the evaluation of pancreatic islet tumors and in the differential diagnosis of neuroendocrine neoplasms.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

IHC	1:100-1:300

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

OVERVIEW

Description	Mouse monoclonal antibody to human Glucagon
Specificity	Recognizes endogenous levels of Glucagon protein.
Antibody Type	Primary antibody,Monoclonal
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human Glucagon. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Isotype	IgG1
Form/Buffer	50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
Alternative Names	GCG; GLP-1; GLP-1(7-36); GLP-1(7-37); GLP-2; GRPP; Glicentin; Glicentin-related polypeptide; Glucagon-like peptide 1; Glucagon-like peptide 2; Incretin; Incretin hormone; OXM; Oxyntomodulin; Preproglucagon; Pro-glucagon
Gene Symbol	GCG
Entrez Gene	2641(Human)
SwissProt	P01275(Human)

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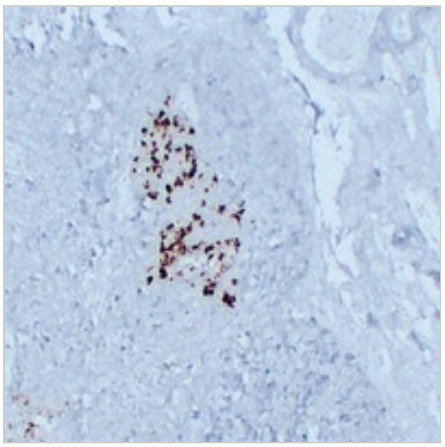
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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DATA



Immunohistochemical analysis of paraffin-embedded human pancreas tissue with Glucagon Mouse Monoclonal Antibody(ARA509) at 1:100 - 1:300 dilution. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0); detection with HRP conjugated compact polymer system, DAB chromogen; counterstained with hematoxylin.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: www.arexbio.com