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Glucagon Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6798C

Product Information

Application	WB, IHC-P, IF, FC, IHC-P-Leica, E
Primary Accession	P01275
Reactivity	Human, Mouse, Rat
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19525
Calculated MW	20909
Antigen Region	119-148

Additional Information

Gene ID	2641
Other Names	Glucagon, Glicentin, Glicentin-related polypeptide, GRPP, Oxyntomodulin, OXM, OXY, Glucagon, Glucagon-like peptide 1, GLP-1, Incretin hormone, Glucagon-like peptide 1(7-37), GLP-1(7-37), Glucagon-like peptide 1(7-36), GLP-1(7-36), Glucagon-like peptide 2, GLP-2, GCG
Target/Specificity	This Glucagon antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 119-148 amino acids from the C-terminal region of human Glucagon.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 IHC-P-Leica~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Glucagon Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GCG (HGNC:4191)

Function	[Glucagon]: Plays a key role in glucose metabolism and homeostasis. Regulates blood glucose by increasing gluconeogenesis and decreasing glycolysis. A counterregulatory hormone of insulin, raises plasma glucose levels in response to insulin-induced hypoglycemia. Plays an important role in initiating and maintaining hyperglycemic conditions in diabetes. Binds to and activates the glucagon receptor GCGR, which couples to the G(s) G protein and elevates intracellular cAMP, triggering downstream metabolic responses (PubMed:32193322).
Cellular Location	Secreted.
Tissue Location	[Glucagon]: Secreted in the A cells of the islets of Langerhans. [Glucagon-like peptide 2]: Secreted from enteroendocrine cells throughout the gastrointestinal tract. Also secreted in selected neurons in the brain [Oxyntomodulin]: Secreted from enteroendocrine cells throughout the gastrointestinal tract

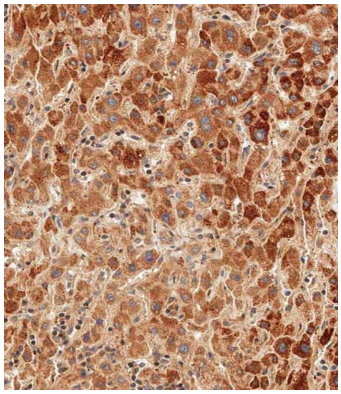
Background

Glucagon is actually a preproprotein that is cleaved into four distinct mature peptides. One of these, glucagon, is a pancreatic hormone that counteracts the glucose-lowering action of insulin by stimulating glycogenolysis and gluconeogenesis. Glucagon is a ligand for a specific G-protein linked receptor whose signalling pathway controls cell proliferation. Two of the other peptides are secreted from gut endocrine cells and promote nutrient absorption through distinct mechanisms. Finally, the fourth peptide is similar to glicentin, an active enteroglucagon.

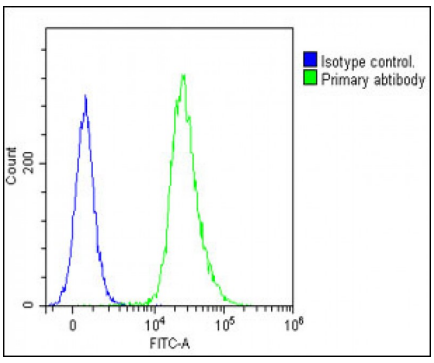
References

Brennan,I.M., et.al., Am. J. Physiol. Gastrointest. Liver Physiol. 297 (3), G602-G610(2009)

Images

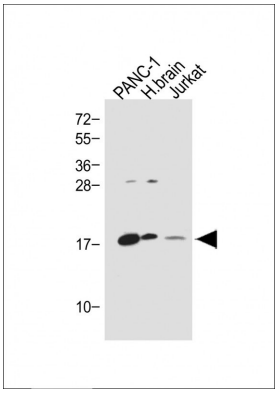


Immunohistochemical analysis of paraffin-embedded human liver tissue using AP6798c performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

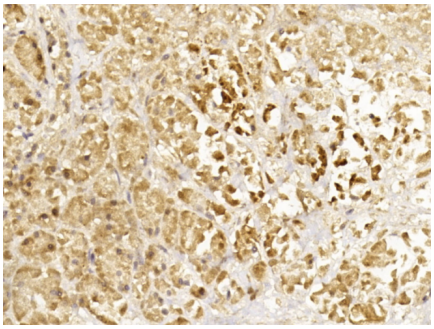


Overlay histogram showing Jurkat cells stained with AP6798c(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same

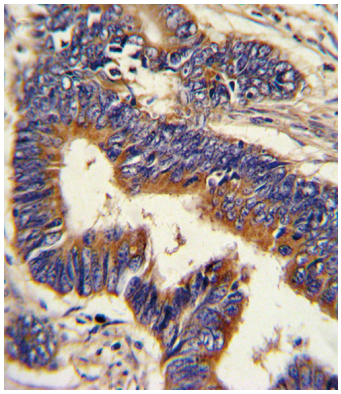
conditions. Acquisition of >10, 000 events was performed.



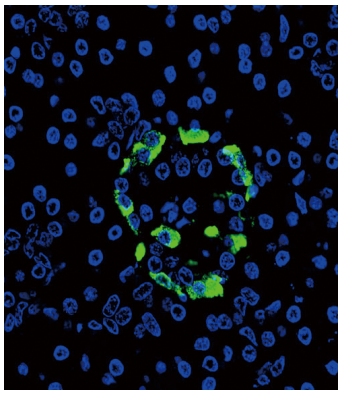
All lanes : Anti-Glucagon Antibody (C-term) at 1:1000 dilution Lane 1: PANC-1 whole cell lysate Lane 2: Humanbrain lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human pancreas section using Pink1(Cat#AP6798C). AP6798C was diluted at 1:125 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Formalin-fixed and paraffin-embedded human colon carcinoma with Glucagon Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of Glucagon Antibody (C-term) (Cat. #AP6798c) with pancreas tissue followed by Alexa Fluor寨?488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.