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Glucagon Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1940B

Product Information

Application	WB, E
Primary Accession	P01275
Other Accession	NP_002045.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Clone Names	329CT36.10.10
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 mice immunized with a KLH conjugated synthetic peptide between 119-148 amino acids from human Glucagon.
Dilution	WB~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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 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

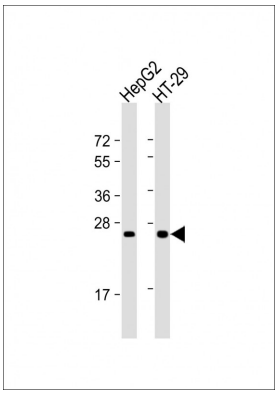
Background

The protein encoded by this gene 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

Jablonski, K.A., et al. Diabetes 59(10):2672-2681(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Hare, K.J. Dan Med Bull 57 (9), B4181 (2010) :
Yamaoka-Tojo, M., et al. Cardiovasc Diabetol 9, 17 (2010) :
Bertenshaw, G.P., et al. J. Biol. Chem. 276(16):13248-13255(2001)

Images



All lanes : Anti-Glucagon Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: HT-29 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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