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GCG Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1503a

Product Information

Application	WB, E
Primary Accession	P01275
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2F9
Isotype	IgG1
Calculated MW	20909
Description	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.Tissue specificity: Glucagon is secreted in the A cells of the islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin are secreted from enteroendocrine cells throughout the gastrointestinal tract. GLP1 and GLP2 are also secreted in selected neurons in the brain.
Immunogen	Purified recombinant fragment of human GCG expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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
Dilution	WB~~1/500 - 1/2000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GCG 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

References

1. Int J Mol Med. 2008 Jul;22(1):127-32. 2. Physiol Behav. 2008 Aug 6;94(5):696-9.

Images

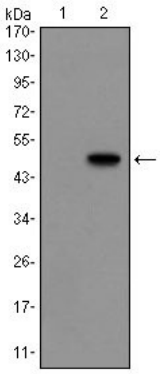


Figure 1: Western blot analysis using GCG mAb against HEK293 (1) and GCG(AA: 1-180)-hIgGFc transfected HEK293 (2) cell lysate.

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