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Datasheet for 600-401-MV9

Glucagon Antibody

Overview

Description:	Anti-Glucagon (RABBIT) Antibody - 600-401-MV9
Item No.:	600-401-MV9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Glucagon is a member of a multigene family that includes secretin. Glucagon is a 29-amino acid pancreatic hormone that counteracts the glucose-lowering action of insulin by stimulating glycogenolysis and gluconeogenesis. The human glucagon gene is approximately 9.4 kb long, contains 6 exons and 5 introns, and assigned to 2q36-2q37. This antibody is suitable for researchers interested in metabolic diseases, like diabetes, cell proliferation, differentiation, apoptosis, GCPR signaling, and calcium signaling research.
Synonyms:	Rabbit Anti-Glucagon, Pro-glucagon, Glicentin, Oxyntomodulin, OXM, OXY, Glucagon
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	GCG
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Glucagon antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of human Glucagon.

Purity/Specificity:	This affinity purified antibody is directed against human Glucagon. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to human, chimpanzee, and bonobo.
Relevant Links:	• GeneID - 2641 • UniProtKB - P01275 • NCBI - NP_002045.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Glucagon is tested in ELISA, IF, IHC-P, and Western Blot. Expect a band approximately ~20.9 kDa corresponding to the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:24,800-1:44,800
IF:	5-15µg/mL
IHC:	User Optimized
WB:	User Optimized

Formulation

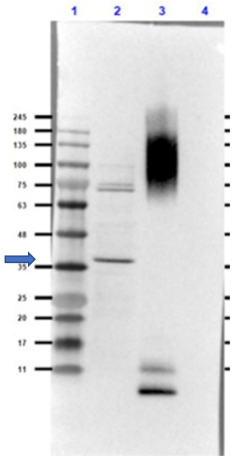
Physical State:	Liquid (sterile filtered)
Concentration:	1.18 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

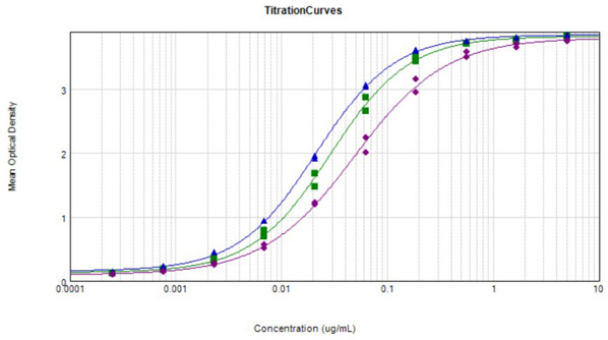
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

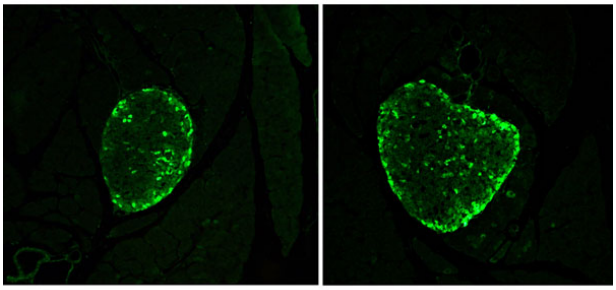
Images



Western Blot
Western Blot of Rabbit Anti-Glucagon Antibody.
Lane 1: Opal Prestained Molecular Weight (p/n MB-210-0500).
Lane 2: COS-7 Lysate - reduced (20µg).
Lane 3: BSA Conjugated Glucagon peptide - reduced (0.02µg).
Lane 4: Insulin - reduced (0.05µg).
Primary Antibody: Anti-Glucagon [Rabbit] Antibody at 1.0µg/mL overnight at 2-8°C.
Secondary Antibody: Goat Anti-Rabbit IgG (MX10) Peroxidase conjugated at 1:70,000 for 30mins at RT.
Block: Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) for 1hr at RT.
Expected MW: ~21kDa. Observed MW: endogenous detection in COS-7 Lysate at ~35kDa. Glucagon peptide is detected at the MW of BSA. No cross-reactivity with insulin is observed.
Exposure: 25 sec.



ELISA
ELISA Results of Rabbit Anti-Glucagon Antibody.
Each well was coated with 1µg of conjugate. The starting concentration of antibody in the dilution series was 5 µg/ml. The titer is 1:34,800 Glucagon - Free peptide [Green Line], 1:47200 Glucagon Standard - BSA conjugated [Blue Line], and 1:20,500 Glucagon - BSA conjugated [Purple Line]. Each point on the Y-axis represents a 3-fold dilution. 3% Fish Gel (p/n MB-066-0100), HRP conjugated Goat anti-Rabbit IgG (H&L) (p/n 611-1302), and TMB substrate (p/n TMB-1000) were used for detection.



Immunohistochemistry
Immunohistochemistry results using Rabbit Anti-Glucagon Antibody.
Tissue: alpha cells in CD1 mouse pancreatic islets.
Fixation: 4% paraformaldehyde.
Antigen Retrieval: 10mM Sodium Citrate buffer for 10 mins at 95-100°C.
Blocking: PBS, 1% ovalbumin, 0.3% Triton X-100.
Primary Antibody: Anti-Glucagon at 1:100 overnight at RT.
Secondary Antibody: Anti-Rabbit Alexa Fluor 488 at 1:500 for 1hr at RT.
Original magnification 20x.
Independently Validated by antibodies-online GmbH (ABIN7448121). Courtesy of Prof. Merighi, University of Turin.

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