abcam

Product datasheet

Anti-GLP-1 antibody [EPR4042-1] ab108443

リコンビナント RabMAb

1 Abreviews 画像数 10

製品の概要

製品名	Anti-GLP-1 antibody [EPR4042-1]
製品の詳細	Rabbit monoclonal [EPR4042-1] to GLP-1
由来種	Rabbit
アプリケーション	**適用あり:** ELISA, ICC/IF, WB, IHC-P
種交差性	**交差種:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	Glicentin polypeptide, Human pancreas tissue.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR4042-1

アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab108443の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ELISA		Use a concentration of 0.5 - 1 µg/ml.
ICC/IF		1/800.
WB		1/2000. Predicted molecular weight: 21 kDa. **For unpurified, use 1/200.**
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

ターゲット情報

機能

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.
GLP-1 is a potent stimulator of glucose-dependent insulin release. Play important roles on gastric motility and the suppression of plasma glucagon levels. May be involved in the suppression of satiety and stimulation of glucose disposal in peripheral tissues, independent of the actions of insulin. Have growth-promoting activities on intestinal epithelium. May also regulate the hypothalamic pituitary axis (HPA) via effects on LH, TSH, CRH, oxytocin, and vasopressin secretion. Increases islet mass through stimulation of islet neogenesis and pancreatic beta cell proliferaton. Inhibits beta cell apoptosis.
GLP-2 stimulates intestinal growth and up-regulates villus height in the small intestine, concomitant with increased crypt cell proliferation and decreased enterocyte apoptosis. The gastrointestinal tract, from the stomach to the colon is the principal target for GLP-2 action. Plays a key role in nutrient homeostasis, enhancing nutrient assimilation through enhanced gastrointestinal function, as well as increasing nutrient disposal. Stimulates intestinal glucose transport and decreases mucosal permeability.
Oxyntomodulin significantly reduces food intake. Inhibits gastric emptying in humans. Suppression of gastric emptying may lead to increased gastric distension, which may contribute to satiety by causing a sensation of fullness.
Glicentin may modulate gastric acid secretion and the gastro-pyloro-duodenal activity. May play an important role in intestinal mucosal growth in the early period of life.

組織特異性

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.

配列類似性

Belongs to the glucagon family.

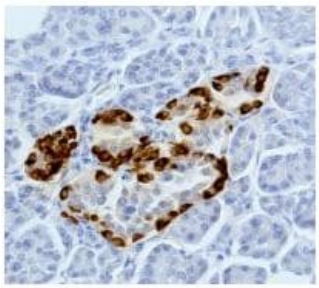
翻訳後修飾

Proglucagon is post-translationally processed in a tissue-specific manner in pancreatic A cells

and intestinal L cells. In pancreatic A cells, the major bioactive hormone is glucagon cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1 liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is further N-terminally truncated by post-translational processing in the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide. The C-terminal amidation is neither important for the metabolism of GLP-1 nor for its effects on the endocrine pancreas.

細胞内局在 Secreted.

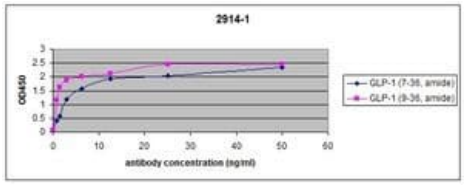
画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

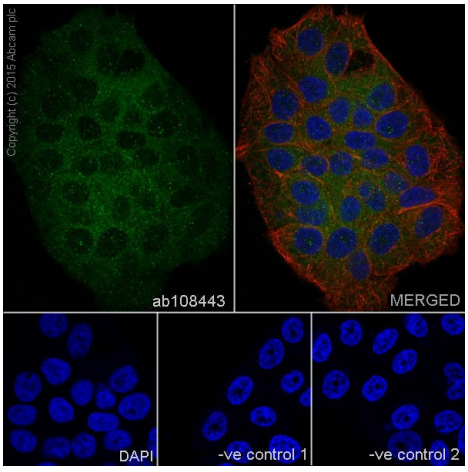
Unpurified ab108443, at 1/100 dilution, staining Glicentin in Human pancreas tissue by immunohistochemistry

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



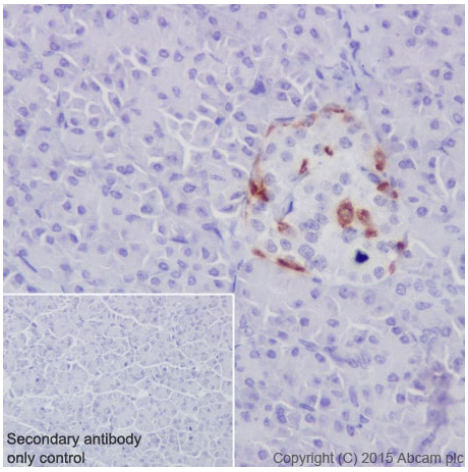
ELISA - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

1 ug/mL of Glucagon-like Peptide (GLP-1) was coated into 96-wells. Various concentrations of anti-Glucagon-Like Peptide 1 (GLP-1, 7-36,amide) rabbit monoclonal antibody (unpurified ab108443) was added. HRP conjugated goat anti-rabbit IgG antibody was used to develop the color.



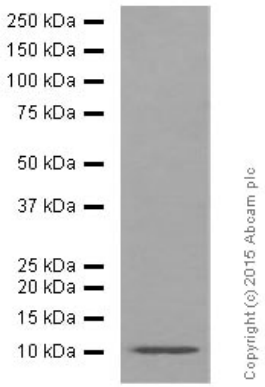
Immunocytochemistry/ Immunofluorescence - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

Immunofluorescence staining of BxPC-3 cells with purified ab108443 at a working dilution of 1/800, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab108443 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

Immunohistochemical staining of paraffin embedded human pancreas with purified ab108443 at a working dilution of 1/200. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Western blot - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

Anti-GLP-1 antibody [EPR4042-1] (ab108443) at 1/2000 dilution (purified) + human fetal pancreas tissue lysate at 10 µg

Secondary

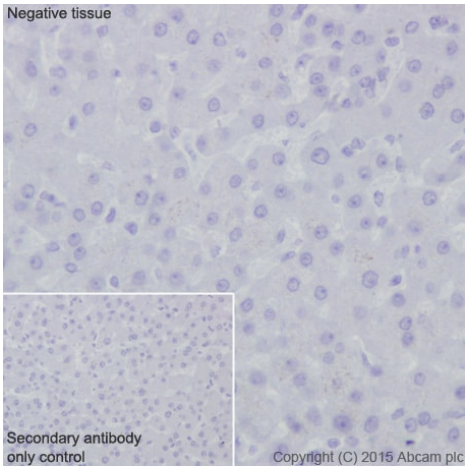
HRP goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 21 kDa

Observed band size: 11 kDa

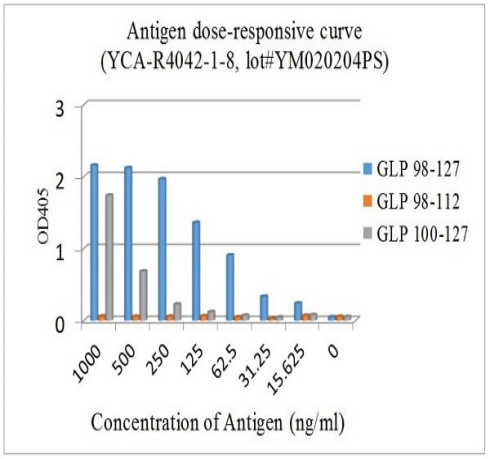
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



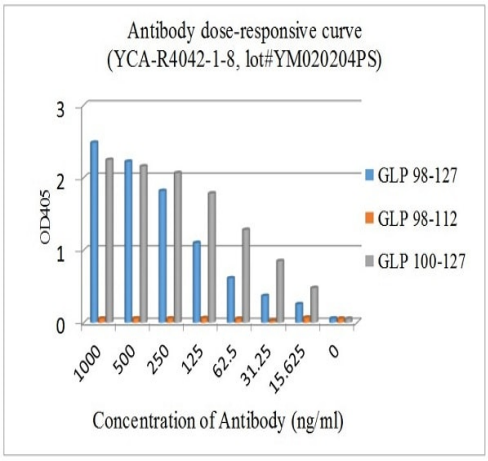
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

Immunohistochemical staining of paraffin embedded human liver with purified ab108443 at a working dilution of 1/200. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



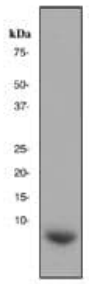
ELISA - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

Antigen dose-response curve using purified ab108443. Antibody concentration of 1 µg/mL. An Alkaline Phosphatase-conjugated goat anti-rabbit IgG (H+L) (1/2500) was used as the secondary antibody.



ELISA - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

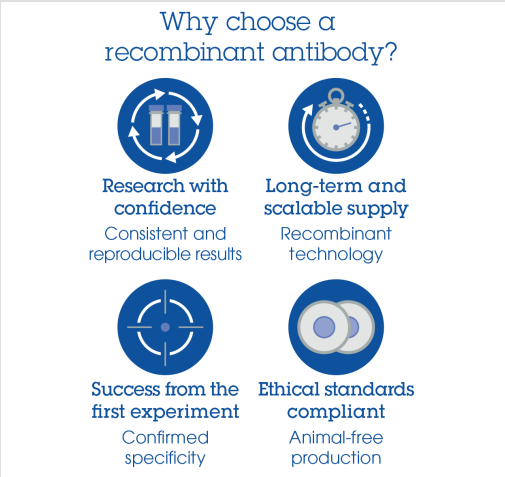
Antibody dose-response curve using purified ab108443. Antigen concentration of 1 µg/mL. An Alkaline Phosphatase-conjugated goat anti-rabbit IgG (H+L) (1/2500) was used as the secondary antibody.



Western blot - Anti-GLP-1 antibody [EPR4042-1] (ab108443)

Anti-GLP-1 antibody [EPR4042-1] (ab108443) at 1/200 dilution (unpurified) + Glicentin polypeptide at 0.005 µg

Predicted band size: 21 kDa



Anti-GLP-1 antibody [EPR4042-1] (ab108443)

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