# abcam

# Product datasheet

# Anti-GLP-1 antibody [EPR4042-407] ab111125

יעלטעבע RabMAb

1 References 画像数5

#### 製品の概要

製品名 Anti-GLP-1 antibody [EPR4042-407]

製品の詳細 Rabbit monoclonal [EPR4042-407] to GLP-1

由来種 Rabbit

アプリケーション 適用あり: IHC-P, Indirect ELISA

適用なし: IP or WB

種交差性 交差種: Mouse, Rat, 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 IHC-P: Human, Mouse and Rat 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**.

## 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 long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR4042-407

アイソタイプ lgG

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab111125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
IHC-P		1/10000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  Heat up to 98°C, below boiling, and then let cool for 10-20 min.
Indirect ELISA		Use a concentration of 62.5 μg/ml.

#### 追加情報

Is unsuitable for IP or WB.

#### 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.

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.

Belongs to the glucagon family.

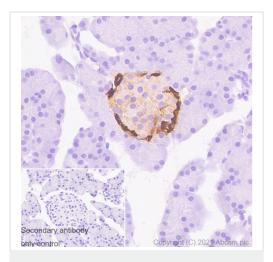
Proglucagon is post-translationally processed in a tissue-specific manner in pancreatic A cells and intestinal L cells. In pancreatic A cells, the major bioactive hormone is glucagon cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1 liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is 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.

### 組織特異性

# 配列類似性 翻訳後修飾

#### 图 10 10 19 四



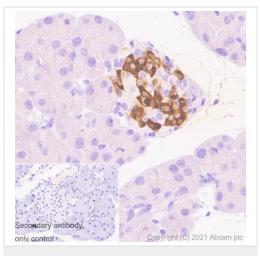
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GLP-1 antibody
[EPR4042-407] (ab111125)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat pancreas tissue sections labeling GLP-1 with purified ab111125 at 1/10000 dilution (0.03 µg/mL) for 30 mins at room temperature. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Positive staining on  $\alpha$ -cells of the islets of Langerhans in rat pancreas.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



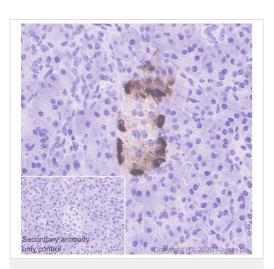
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GLP-1 antibody
[EPR4042-407] (ab111125)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse pancreas tissue sections labeling GLP-1 with purified ab111125 at 1/10000 dilution (0.03 µg/mL) for 30 mins at room temperature. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

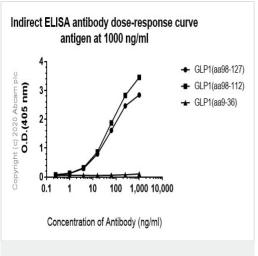
Positive staining on  $\alpha$ -cells of the islets of Langerhans in mouse pancreas.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GLP-1 antibody
[EPR4042-407] (ab111125)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pancreas tissue sections labeling GLP-1 with purified ab111125 at 1/10000 dilution (0.11 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Indirect ELISA - Anti-GLP-1 antibody [EPR4042-407] (ab111125)

ELISA analysis of recombinant GLP-1 proteins using ab111125. Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) used as the secondary antibody at 1/2500 dilution (0.24  $\mu$ g/mL).



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