# abcam

## Product datasheet

## Anti-GLP-1 antibody [11E2] ab23468

★★★★★ 2 Abreviews 13 References 画像数3

#### 製品の概要

製品名 Anti-GLP-1 antibody [11E2]

製品の詳細 Mouse monoclonal [11E2] to GLP-1

由来種 Mouse

特異性 This antibody reacts with all forms of GLP-1, including precursor.

アプリケーション 適用あり: ELISA, Sandwich ELISA, ICC/IF

種交差性 交差種: Rat

交差が予測される動物種: Guinea pig, Cow 4

免疫原 Synthetic peptide corresponding to Human GLP-1 aa 50-150. The immunogen sequence

> corresponds to Glucagon-like peptide 1(7-36), one of the chains formed when cleaved. Immunogen was coupled to a carrier and adsorbed onto aluminum hydroxide gel.

Database link: P01275

Run BLAST with Run BLAST with

エピトープ This antibody reacts with a mid-molecular epitope of GLP 1 (Glucagon-like peptide 1(7-36)).

ポジティブ・コントロール ICC/IF: PC12 cells.

特記事項 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

バッファー pH: 7.40

Preservative: 0.097% Sodium azide

Constituents: 0.0268% PBS, 2.9% Sodium chloride

特記事項(精製) Protein A/G purified

ポリ/モノ モノクローナル

**クローン名** 11E2

**₹I**□-**₹** x63-Ag8.653

アイソタイプ lgG2a 軽鎖の種類 kappa

#### アプリケーション

**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ab23468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 at an assay dependent concentration.
Sandwich ELISA		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

#### 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.

配列類似性 Belongs to the glucagon family.

### 組織特異性

#### 2

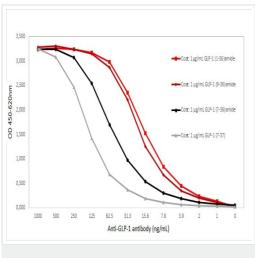
### 翻訳後修飾

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

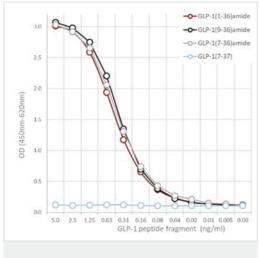
Secreted.

#### 画像



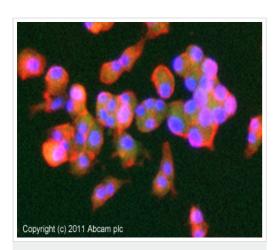
ELISA - Anti-GLP-1 antibody [11E2] (ab23468)

ELISA graph displaying different concentrations of ab23468 used to detect 1  $\mu$ g/mL of the GLP-1 (GLP-1 (1-36)amide, GLP-1 (9-36)amide, GLP-1 (7-36)amide, and GLP-1 (7-37)) coated directly in the well.



Sandwich ELISA - Anti-GLP-1 antibody [11E2] (ab23468)

Sandwich ELISA graph showing GLP-1 (1-36)amide, GLP-1 (9-36)amide, and GLP-1 (7-36)amide detection using <u>ab26278</u> as catching antibody and biotinylated ab23468 detection antibody.



Immunocytochemistry/ Immunofluorescence - Anti-GLP-1 antibody [11E2] (ab23468)

ICC/IF image of ab23468 stained PC12 cells. The cells were 4% formaldehyde (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab23468, 10μg/ml) overnight at +4°C. The secondary antibody (green) was <u>ab96879</u> Dylight 488 goat anti-mouse lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors