# abcam

# Product datasheet

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

★★★★★ 2 Abreviews 13 References 3 图像

概述

产**品名称** Anti-GLP-1抗体[11E2]

描述 小鼠单克隆抗体[11E2] to GLP-1

**宿主** Mouse

特异性 This antibody reacts with all forms of GLP-1, including precursor.

经测试应用 适用于: ELISA, Sandwich ELISA, ICC/IF

种属反应性 与反应: Rat

预测可用于: Guinea pig, Cow

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

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

阳性对照 ICC/IF: PC12 cells.

常规说明

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.097% Sodium azide

Constituents: 0.0268% PBS, 2.9% Sodium chloride

纯**化**说明 Protein A/G purified

1

克隆 单克降

克隆编号 11E2

骨髓瘤 x63-Ag8.653

同种型 lgG2a 轻链类型 kappa

应用

# The Abpromise guarantee

Abpromise™承诺保证使用ab23468于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ELISA		Use at an assay dependent concentration.
Sandwich ELISA		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

### 靶标

### 功能

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.

序列相似性 Belongs to the glucagon family.

组织特异性

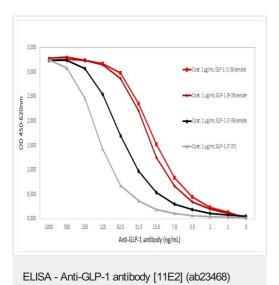
# 翻译后修饰

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.

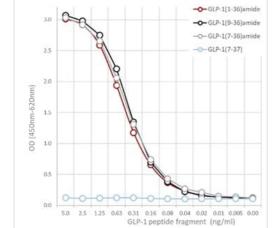
# 细胞定位

Secreted.

# 图片

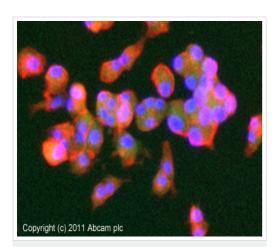


ELISA graph displaying different concentrations of ab23468 used to detect 1  $\mu$ g/mL of the GLP-1 (GLP-1 (1-36)amide, GLP-1 (9-36)amide, GLP-1 (7-36)amide, and GLP-1 (7-37)) coated directly in the well.



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"

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