ARG81361
GLP1 (1-36, 7-36, 9-36) ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG81361 GLP1 (1-36, 7-36, 9-36) ELISA Kit is an Enzyme Immunoassay kit for the quantification of GLP1 (1-36, 7-36, 9-36) in serum or plasma (EDTA). The kit contains GLP1 (7-36) peptide as standard.
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA
Specificity	Cross Reactivity: GLP1 (7-36): 100% GLP1 (9-36) Amide: 100% GLP1 (1-36) Amide: 100% GLP1 (7-37): 0.4% GLP2 (Human), Glucagon (Human, Rat, Mouse, Porcine, Bovine), CGRP, GIP, VIP, Insulin, Exendin 4: 0%
Target Name	GLP1 (1-36, 7-36, 9-36)
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.11 ng/ml
Sample Type	Serum or plasma (EDTA).
Standard Range	0.01 - 100 ng/ml
Sample Volume	50 µl
Alternate Names	GLP-1; GLP-2; GLP1; OXY; GLP2; Glucagon; OXM; 7-37; 7-36; Incretin hormone; GRPP

Application Instructions

Assay Time	4 hours

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GCG
Gene Full Name	glucagon
Background	The protein encoded by this gene is actually a preproprotein that is cleaved into four distinct mature peptides. One of these, glucagon, is a pancreatic hormone that counteracts the glucose-lowering action of insulin by stimulating glycogenolysis and gluconeogenesis. Glucagon is a ligand for a specific G-

protein linked receptor whose signalling pathway controls cell proliferation. Two of the other peptides are secreted from gut endocrine cells and promote nutrient absorption through distinct mechanisms. Finally, the fourth peptide is similar to glicentin, an active enteroglucagon. [provided by RefSeq, Jul 2008]

Function

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 proliferation. 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. [UniProt]

Highlight

New ELISA data calculation tool:
Simplify the ELISA analysis by GainData

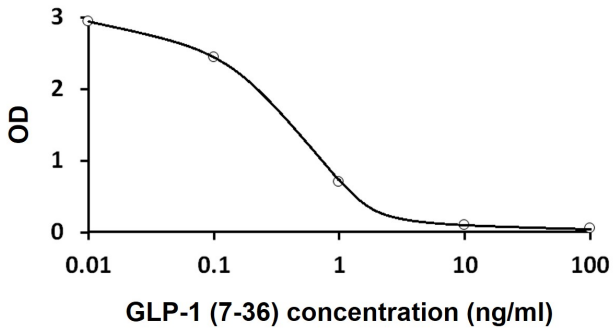
Related news:
Studying obesity and appetite control by quantifying orexigenic and anorexigenic hormones;

Related products:
GLP1 antibodies; GLP1 ELISA Kits;

PTM

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. [UniProt]

Images



ARG81361 GLP1 (1-36, 7-36, 9-36) ELISA Kit standard curve image

ARG81361 GLP1 (1-36, 7-36, 9-36) ELISA Kit results of a typical standard run with optical density reading at 450 nm.