

Product datasheet

Anti-GLP1 antibody [5B10] ab191894

4 Images

Overview

Product name	Anti-GLP1 antibody [5B10]
Description	Mouse monoclonal [5B10] to GLP1
Host species	Mouse
Specificity	ab191894 reacts with all forms of GLP1 , including precursor and GLP1 (9-37) / GLP1 (9-36amide) metabolite. ab191894 cross-reacts with Liraglutide, a GLP1 agonist.
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Guinea pig, Hamster, Cow, Dog, Pig 
Immunogen	Synthetic peptide corresponding to Human GLP1 aa 7-36 (internal sequence). Coupled to a carrier. Sequence: VAGLFVMLVQGSWQRS LQDTEEKSRFSAS Database link: P01275  Run BLAST with  Run BLAST with
Epitope	Mid-molecular epitope of GLP1
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions,</p>

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.40 Preservative: 0.09% Sodium azide Constituents: 2.9% Sodium chloride, 97% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	5B10
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab191894** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/3200 - 1/4000.

Target

Function	<p>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.</p> <p>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.</p> <p>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</p>
-----------------	--

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.

Tissue specificity

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.

Sequence similarities

Belongs to the glucagon family.

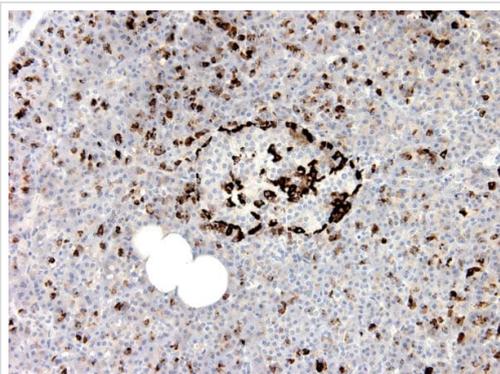
Post-translational modifications

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.

Cellular localization

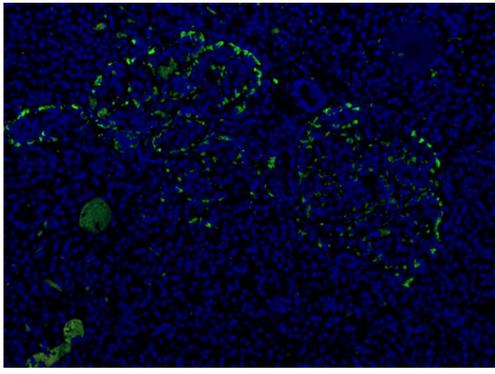
Secreted.

Images



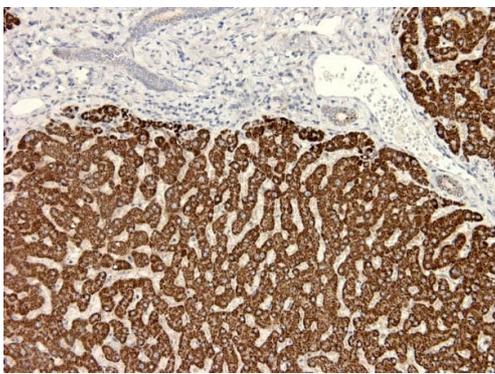
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pancreas tissue labelling GLP1 with ab191894 at a dilution of 1/3200. Alpha cells of the Langerhans islet and scattered cells in the exocrine area of the pancreas were stained strongly.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP1 [5B10] antibody (ab191894)



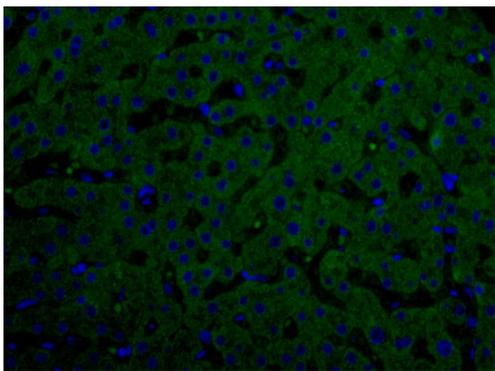
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP1 [5B10] antibody (ab191894)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pancreas tissue labelling GLP1 with ab191894 at a dilution of 1/4000. Signal is strong in alpha cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP1 [5B10] antibody (ab191894)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling GLP1 with ab191894 at a dilution of 1/3200. Hepatocytes were stained strongly.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GLP1 [5B10] antibody (ab191894)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling GLP1 with ab191894 at a dilution of 1/4000. Signal is strong in the cytoplasm of hepatocytes.

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 <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

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