

Product Information

Anti-Glucagon antibody, Mouse monoclonal
clone K79bB10, purified from hybridoma cell culture

Product Number **SAB4200685**

Product Description

Anti-Glucagon (mouse IgG1 isotype) is derived from the K79bB10 hybridoma, produced by the fusion of mouse myeloma cells and splenocytes from mouse immunized with Polymerized porcine glucagon.¹ The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Anti-Glucagon recognizes human,² porcine, mouse,² rat, rabbit, zebrafish,³ dog, guinea pig, and cat pancreatic Glucagon. The product may be used in several immunochemical techniques including immunohistochemistry¹ and radioimmunoassay (RIA)¹.

Glucagon is a hormone peptide produced in Langerhans islets alpha-cells in the pancreas, one of eight peptide chains results from the cleavage of pre-proglucagon (GCG). Additional cleavage peptides are oxyntomodulin and glucagon-like peptide-1 (GLP1).⁴⁻⁵ The biological activities of pancreatic Glucagon include glycogenolysis, lipolysis, gluconeogenesis and ketogenesis. Glucagon has an antagonistic effect in the maintenance of normoglycemia to those of insulin, and is suppressed by GLP1. Thus up-regulation of Glucagon is leading to increased blood glucose levels. Glucagon-specific antibodies would prove useful as a Langerhans islets alpha cell, glucagonomas and tumor markers applying immunohistochemical techniques, and as an analytical tool in quantification of the hormone.⁴⁻⁵

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunohistochemistry: a working concentration of 5-10 µg/mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded rat pancreas sections and Biotin/ExtrAvidin®-Peroxidase staining system.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Witt S. et al., *Acta Histochem Suppl.*, **35**, 217-23 (1988).
2. Rodriguez-Diaz R. et al., *Nat Med.*, **17**, 888-92 (2011).
3. Olsen AS. et al., *Wound Repair Regen.*, **18**, 532-42 (2010).
4. Lechago J. and Shah I., *Atlas of Diagnostic Immunohistopathology*, True, L. (ed.), Chapter 14, J.B. Lippincott Co., Philadelphia (1990).
5. Godoy-Matos AF., *Diabetol Metab Syndr.*, **6**, 91 (2014).

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