Polyclonal
Guinea Pig Anti-Swine
Insulin
Immunogen: Porcine pancreatic insulin

**Code A0564**
Protein concentration g/L: See label on vial.

**Intended use**
For In Vitro diagnostic use.


**Summary and explanation**

**Introduction**
Insulin is one of seven known polypeptide hormones produced in the pancreas. Insulin, secreted by B-cells of the islets of Langerhans, participates in glucose utilization, protein synthesis and in the formation and storage of neutral lipids.¹

**Specificity**
The antibody cross-reacts with insulin from several mammalian species. Specificity as determined by radioimmunoassay was 100% for human insulin, 100% for porcine insulin and less than 0.05% for glucagon and human growth hormone. This product has been optimized for use on human tissues.

For more information on insulin detection and pancreatic tumors, please see references 3–8.

**Reagent provided**
Guinea pig anti-insulin is an unfractionated guinea pig antiserum in 0.05 mol/L Tris-HCl, pH 7.6, and 0.015 mol/L sodium azide.

Guinea pig anti-insulin may be used at a dilution of 1:50 to 1:150 in the LSAB method, determined on formalin-fixed, paraffin-embedded tissue. These are guidelines only; optimal dilutions should be determined by the individual laboratory.

**Materials required, but not supplied**
Refer to the “General Instructions for Immunohistochemical Staining” and/or the Detection System “Instructions.”

**Precautions**
1. For professional users.
2. This product contains sodium azide (NaN₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, build-ups of NaN₃ may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing.⁹
3. Minimize microbial contamination of reagents or increase in nonspecific staining may occur.
4. As with any product derived from biological sources, proper handling procedures should be used.
5. Safety Data Sheet available for professional users on request.

**Storage**
Store at 2–8°C.

**Specimen preparation**
*Paraffin Sections*
Guinea pig anti-insulin can be used on formalin-fixed, paraffin-embedded tissue sections. Pretreatment of tissue with proteolytic enzymes is not required.

**Staining procedure**
Follow the recommended procedure for the detection system selected.

**Staining interpretation**
The cellular staining pattern for anti-insulin is cytoplasmic.

**Performance characteristics**
**Normal Tissues**
This antibody labels the cytoplasm of insulin-producing B-cells.

**Abnormal Tissues**
Insulin producing islet cell tumors, hyperplastic islet cells and islet cells originating in pancreatic ductules are positively labelled.¹⁰ Mesenchymal tumors are not reactive.
References

1. Sternberger LA. In: Immunocytochemistry (2nd ed.). New York: John Wiley and Sons 1979; 8
2. Weidenheim KM, et al. Hyperinsulinemic hypoglycemia in adults with islet-cell hyperplasia and
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Plenum Press 1977:551
6. Creutzfeldt W. Endocrine tumors of the pancreas. Clinica, chemical and morphological findings. In:
9. Department of Health, Education and Welfare, National Institute for Occupational Safety and Health,
Rockville, MD. "Procedures for the decontamination of plumbing systems containing copper and/or lead
10. Weidenheim KM, et al. Hyperinsulinemic hypoglycemia in adults with islet-cell hyperplasia and