

Product Specification Sheet

Human Insulin Antibodies

□ Cat. # INSL23-A

Rabbit Anti-Human Insulin (recombinant) IgG, aff pure

SIZE: 100 ul

Insulin is a hormone that is central to regulating energy and glucose metabolism in the body. Insulin causes cells in the liver, muscle, and fat tissue to take up glucose from the blood, storing it as glycogen in the liver and muscle. Insulin is a peptide hormone composed of 51 amino acids and has a molecular weight of 5808 Da. It is produced in the islets of Langerhans in the pancreas. The name comes from the Latin insula for "island". Insulin's structure varies slightly between species of animal. Insulin from animal sources differs somewhat in "strength" (in carbohydrate metabolism control effects) in humans because of those variations. Porcine (pig) insulin is especially close to the human version.

When control of insulin levels fails, diabetes mellitus will result. As a consequence, insulin is used medically to treat some forms of diabetes mellitus. Patients with Type 1 diabetes mellitus depend on external insulin (most commonly injected subcutaneously) for their survival because the hormone is no longer produced internally. Patients with Type 2 diabetes mellitus are insulin resistant, and because of such resistance, may suffer from a relative insulin deficiency. Some patients with Type 2 diabetes may eventually require insulin if other medications fail to control blood glucose levels adequately, though this is somewhat uncommon.

Source of Antigen and Antibodies

Antigen	Recombinant human insulin protein
Antibody host/type	Rabbit polyclonal IgG, Cat # INSL23-A supplied in PBS, pH 7.4, 0.2% BSA, 0.01% thimerosal and 30% glycerol. or see lot sp. conc on the vial
Secondary Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
Negative Control Ab	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage

Storage

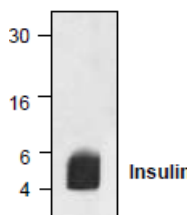
Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage



Western Blotting (1:500:2000) using ECL. Insulin in 6 Kda/

ELISA (0.1-1 ug/ml as detecting antibody. Suitable as capture antibody.

RIA: 1:10000-1:20,000 dilution

Histochemistry: not tested. We recommend the use of 2-10 ug/ml of antibody in paraformaldehyde-fixed, paraffin embedded sections.

Specificity & Cross-reactivity

INSL23-A reacts with human insulin. Antibody crossreactivity in various other species is not established. Purified recombinant human insulin (#INSL16-N-5) or insulin analogs, Glargine (#INSL17-N-5) or Lispro (#INSL18-N-5) can be used for control studies to compare antibody reactivity.

General References: Bell GI (1980) Nature 284, 26-32; Melloul D (2002) Diabetologia 45, 309-326; Steiner DF (1967) PNAS 57, 473-480;

*This product is for In vitro research use only.

Related material available from ADI

AntibodyType	Catalog#	ProdDescription
Mouse-Mono	INSL11-M	Monoclonal Anti-Rat/Mouse Insulin/proinsulin IgG, aff pure
G. pig-Poly	INSL12-S	Anti-Porcine Insulin antiserum
Mouse-Mono	INSL13-M	Monoclonal Anti-Human Insulin IgG, aff pure
Mouse-Mono	INSL14-M	Monoclonal Anti-Human Pro-Insulin IgG, aff pentapeptide IgG, aff pure
INSL15-N-10		Bovine pancreas Insulin (~30 USP U/mg)
INSL16-BTN		Recombinant (Yeast) Human Insulin (USP grade)-Biotin
INSL16-BTN-B		Recombinant (Yeast) Human Insulin (USP grade)-Biotin
Mouse-Mono	INSL16-M	Monoclonal Anti-Rat C-peptide IgG, aff pure grade) for cell culture and ELISA
G. pig-Poly	INSL17-A	Anti-Human Insulin IgG, aff pure
INSL17-N-5		Recombinant (Yeast) Human Glargine (Insulin analog) (USP grade) for cell culture and ELISA
INSL18-N-5		Recombinant (Yeast) Human Lispro (Insulin analog) (USP grade) for cell culture and ELISA
INSL19-N-10		Porcine Insulin (~30 USP U/mg)
INSL20-AS Human+Bovine+Porcine		Insulin-agarose affinity support
0030-10-B1		Bovine Insulin ELISA Kit, 96 tests, Quantitative,
0030-20-1		Human Insulin-Biotin ELISA Kit, 96 tests, Quantitative, 96 tests
0030-40-1		Mouse Insulin ELISA Kit, High Sensitivity, Quantitative, 96 tests
0030-50-1		Rat Insulin ELISA Kit, High Sensitivity, Quantitative, 96 tests
0030-60-1		Mouse/Rat Proinsulin ELISA Kit, High Sensitivity, Quantitative, 96
0030N		Human Insulin ELISA Kit, 96 tests, Quantitative, 96 tests
0035-IA		Human Insulin & Insulin Analogs (Lispro/Humalog, Aspart, Glargine, Glulisine, Detemir) ELISA Kit, 96 tests,
0040		Human C-peptide ELISA Kit, 96 tests, Quantitative

INSL23-A

140917A

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi - 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: customerservice@lifetechindia.com Website: www.lifetechindia.com