

# Insulin Monoclonal Antibody (ICBTACLS), eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	ICBTACLS
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_2573014

Applications	Tested Dilution	Publications
Western Blot (WB)	5 µg/mL	-
Immunohistochemistry (IHC)	-	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	0.25 µg/mL	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications

## Product Specific Information

**Description:** This ICBTACLS monoclonal antibody reacts with the hormone insulin, responsible for regulation of carbohydrate and fat metabolism. Blood glucose levels are maintained by insulin. Insulin secretion from pancreatic beta-cells within the islets of Langerhans results in uptake of excess glucose from the blood into organs and its storage in the form of glycogen. Patients with type 1 diabetes have an autoimmune destruction of insulin-producing beta-cells in the pancreas, resulting in insulin deficiency and elevated levels of blood glucose. Patients with type 2 diabetes have insulin resistance where insulin becomes less effective at reducing the amount of blood glucose. Insulin is also important for proper endothelial cell function in with respect to vascular elasticity in response to changing blood pressure and plays a role in cognition, learning, and memory.

The ICBTACLS antibody recognizes human, mouse, and rat insulin.

**Applications Reported:** This ICBTACLS antibody has been reported for use in western blotting, immunohistochemical staining of formalin-fixed paraffin embedded tissue sections, and microscopy.

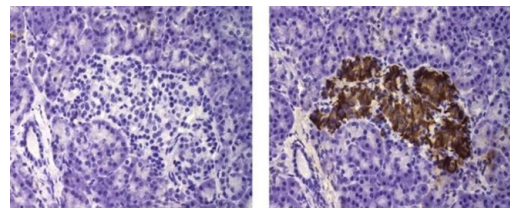
**Applications Tested:** This ICBTACLS antibody has been tested by immunohistochemistry of formalin-fixed paraffin embedded tissue using low or high pH antigen retrieval and can be used at less than or equal to 0.25 µg/mL. This ICBTACLS antibody has been tested by western blot of non-reduced pancreatic tissue lysate and can be used at less than or equal to 5 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For Insulin Monoclonal Antibody (ICBTACLS), eBioscience™**



**Insulin Antibody (14-9769-82) in IHC (P)**  
Immunohistochemistry of formalin-fixed paraffin embedded human pancreas using 0.25 µg/mL of Mouse IgG2a K Isotype Control Purified (left) or 0.25 µg/mL of Anti-Insulin Purified (right) followed by 10 µg/mL of Anti-Mouse IgG Biotin, Avidin-HRP, and DAB visualization. Nuclei are counterstained with hematoxylin.

## Immunohistochemistry (4)

Iranian journal of basic medical sciences

### Alterations in hippocampal neurogenesis and hippocampal insulin signaling pathway in rat with metabolic syndrome.

"14-9769-82 was used in Immunohistochemistry to conclude that the insulin signaling pathway may have an effect on the decreased neurogenesis in the MetS group."

Authors: Bayram P,Billur D,Kizil S,Caliskan H,Can B

Year  
2022

Species  
Rat

Dilution  
1:200

Journal of molecular endocrinology

### Loss of urotensin II receptor diminishes hyperglycemia and kidney injury in streptozotocin-treated mice.

"14-9769-82 was used in Immunohistochemistry to evaluate the effect of UT deletion on the development of hyperglycemia and diabetic kidney disease (DKD) in streptozotocin (STZ)-treated mice."

Authors: Peixoto-Neves D,Kanthakumar P,Kumar R,Soni H,Adebiyi A

Year  
2022

Species  
Mouse

Dilution  
1:100

[View more IHC references on thermofisher.cn](#)

## Immunohistochemistry (Paraffin) (1)

Oxidative medicine and cellular longevity

### Black Seed Thymoquinone Improved Insulin Secretion, Hepatic Glycogen Storage, and Oxidative Stress in Streptozotocin-Induced Diabetic Male Wistar Rats.

"Published figure using Insulin monoclonal antibody (Product # 14-9769-82) in Immunohistochemistry (Paraffin)"

Authors: Abdelrazek HMA,Kilany OE,Muhammad MAA,Tag HM,Abdelazim AM

Year  
2018

## Immunocytochemistry (2)

Journal of applied biomedicine

### Exenatide prevents statin-related LDL receptor increase and improves insulin secretion in pancreatic beta cells (1.1E7) in a protein kinase A-dependent manner.

"14-9769-82 was used in Immunocytochemistry to explore the impact of atorvastatin on pancreatic islet beta cells line (1.1.E7)."

Authors: Buldak L,Machnik G,Skudrzyk E,Boldys A,Maliglowka M,Kosowski M,Basiak M,Buldak R,Okopien B

Year  
2022

Species  
Human

## More applications with references on thermofisher.cn

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.