

DATASHEET

Insulin Mouse Monoclonal Antibody (2D11-H5)

CAT. NO. ARA0021

KEY FEATURES

Target	Insulin	Source / Host	Mouse
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	IP, IF/ICC, IHC, ELISA	Storage	-20°C

BACKGROUND

Insulin is a secreted peptide hormone that elicits metabolic effects such as increases in glucose uptake and glycogen synthesis leading to a decrease in blood glucose concentration. Insulin is first formed as a precursor molecule, proinsulin, which is later cleaved to proinsulin and finally to the mature Insulin hormone. Mature Insulin consists of 51 amino acids, contained within an A chain and a B chain that are connected by two disulfide bridges. It increases cell permeability to monosaccharides, amino acids and fatty acids. Insulin is secreted by the pancreas at basal levels in the absence of exogenous stimuli, with secretion increasing in response to glucose. Insulin action is effected by the binding of Insulin to cell - surface receptors on the target cell membrane. Defects of Insulin are the cause of hyperproinsulinemia and of type 2 diabetes mellitus.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

IHC	1:50-1:500
IF/ICC	1:50-1:500
ELISA	1:30-1:3000
IP	1-2 µg/100-500 µg total protein

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Isotype	Mouse IgG1 kappa light chain
Target Antigen	Insulin
Gene Name	INS
UniProt ID	P01308 (Human), P01325 (Mouse), P01322 (Rat)
Entrez Gene ID	3630 (Human), 16333 (Mouse), 24505 (Rat)
Molecular Weight	6 kDa (Mature form), 12 kDa (Proinsulin)
Gene Aliases	IDDM, IDDM2, ILPR, IRDN, MODY10, Proinsulin
Immunogen	amino acids 1-84 representing full length Insulin of porcine origin
Form/Buffer	PBS with < 0.1% sodium azide and 0.1% gelatin

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

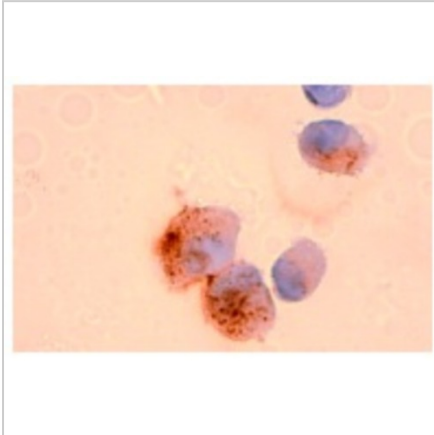
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

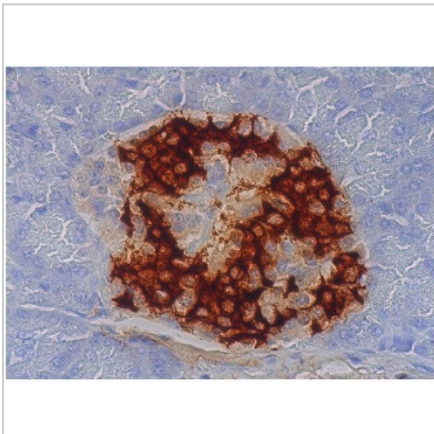
Insulin Mouse Monoclonal Antibody (2D11-H5)

CAT. NO. ARA0021

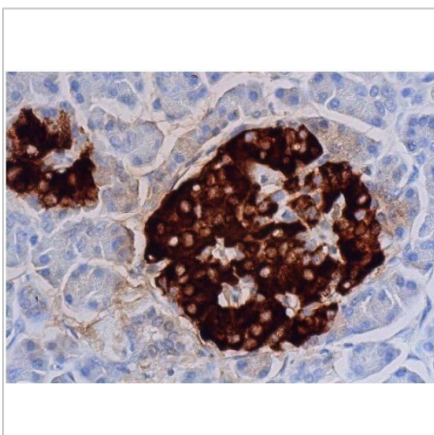
DATA



Immunoperoxidase staining of formalin-fixed MIA PaCa-2 cell smear showing cytoplasmic localization.



Immunoperoxidase staining of formalin fixed MIA PaCa - 2 cell smear showing cytoplasmic localization (A, upper). Immunoperoxidase staining of formalin fixed, paraffin - embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans (B, below).



Immunoperoxidase staining of formalin fixed, paraffin - embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans.

STORAGE

Store at 4°C, DO NOT FREEZE. Stable for one year from the date of shipment.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: www.arexbio.com