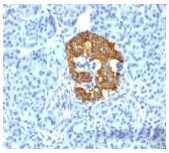
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Insulin Monoclonal Mouse Antibody (2D11-H5)



Product Description

Recognizes a polypeptide which is identified as insulin, a 51-amino acid polypeptide composed of A and B chains connected through the C-peptide. Proinsulin, which has very little biological activity, is cleaved by proteases within its cell of origin into the insulin molecule and the C-terminal basic residue. Insulin enhances membrane transport of glucose, amino acids, and certain ions. It also promotes glycogen storage, formation of triglycerides, and synthesis of proteins and nucleic acids. Deficiency of insulin results in diabetes mellitus. The main storage site for insulin is the pancreatic islets. Antibodies to insulin are important as beta-cell and insulinoma marker.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0030, Anti-Insulin (2D11-H5)

Product attributes

Antibody number	#0030
Antibody reactivity (target)	Insulin
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	2D11-H5
Isotype	IgG1, kappa
Molecular weight of antigen	6 kDa
Synonyms	IDDM2, ILPR, IRDN, MODY10, Proinsulin
Human gene symbol	INS
Entrez gene ID	3630
SwissProt	P01308
Unigene	272259
Immunogen	Purified pig insulin, conjugated to KLH
Antibody target cellular localization	Secreted (extracellular)
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Cow, Human, Mouse, Pig
Expected antibody applications	IF (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.1-0.2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	MIA PaCa-2 cells or Pancreas
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Endocrinology
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	Pancreatic beta cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Biol Chem (2007) 282(46): 33583-33592. (IHC, FFPE)
2. Histochem Cell Biol (2020) 153: 279-285. (IF)