



Version 2 ▼

Apr 30, 2021

# ADI IsletCore Protocols for the Isolation, Assessment and Cryopreservation of Human Pancreatic Islets of Langerhans for Research Purposes V.2

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Works for me

dx.doi.org/10.17504/protocols.io.bupanvie

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## ABSTRACT

This collection of protocols describe the processes used by the Alberta Diabetes Institute IsletCore for the isolation of human pancreatic islets of Langerhans for research. In addition, protocols related to quality control and the cryopreservation of human islets are included. <http://www.bcell.org/adi-isletcore.html>

The ADI IsletCore program is described in full here:

Lyon J, Manning Fox JE, Spigelman AF, Kim R, Smith N, O'Gorman D, Kin T, Shapiro AMJ, Rajotte RV, MacDonald PE (2016) Research-focused isolation of human islets from donors with and without diabetes at the Alberta Diabetes Institute IsletCore. [Endocrinology, 157\(2\): 560-569.](#)

## EXTERNAL LINK

[www.isletcore.ca](http://www.isletcore.ca)

## DOI

[dx.doi.org/10.17504/protocols.io.bupanvie](https://dx.doi.org/10.17504/protocols.io.bupanvie)

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## COLLECTION CITATION

James Lyon, Aliya F Spigelman, Jocelyn E E Manning Fox, Patrick E Macdonald 2021. ADI IsletCore Protocols for the Isolation, Assessment and Cryopreservation of Human Pancreatic Islets of Langerhans for Research Purposes. **protocols.io**  
<https://dx.doi.org/10.17504/protocols.io.bupanvie>  
Version created by Jocelyn E Manning Fox

## WHAT'S NEW

Minor edits, and the addition of a protocol for preparing the enzymes for human islet isolation.

## KEYWORDS

Human Islets, Islets of Langerhans, Cryopreservation, IsletCore

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
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## FILES

		Isolation of Human Pancreatic Islets of Langerhans for Research <b>Version 2</b> by Jocelyn E Manning Fox, University of Alberta
		Human Islet Isolation Media Preparation <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		IsletCore Equipment Setup for Human Islet Isolation <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Human Islet Isolation Enzyme Preparation Version 1.0 <b>Version 1</b> by James Lyon, University of Alberta
		Human Pancreas Biopsy Collection, ex vivo <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Human Islet Purification - COBE setup <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Sampling of Human Islets for Quality Control Purposes <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Human Islet Quantification and Purity Assessment <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Human Islet Cryopreservation <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Thawing Cryopreserved Human Islets <b>Version 1</b> by Jocelyn E Manning Fox, University of Alberta
		Static Glucose-stimulated Insulin Secretion (GSIS) Protocol - Human Islets <b>Version 3</b> by Aliya Spigelman, University of Alberta