

Sep 02, 2022

Overall protocol for MicroPOTS LCMS top down proteomics of pancreas tissue sections

 Forked from [Overall protocol for MicroPOTS LCMS top down proteomics of kidney tissue sections](#)

DOI

<https://dx.doi.org/10.17504/protocols.io.bp2l61oy5vqe/v1>

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Protocol Citation: Mowei Zhou, James M Fulcher, Yen-Chen Liao, Ljiljana.PasaTolic 2022. Overall protocol for MicroPOTS LCMS top down proteomics of pancreas tissue sections. **protocols.io**

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Protocol status: Working

We use this protocol and it's working

Created: August 19, 2022

Last Modified: September 02, 2022

Protocol Integer ID: 68924

Keywords: proteomics of pancreas tissue section, proteomics of pancreas functional unit, pancreas functional unit, proteomic, micropots lcm, pancreas tissue section, pancreas tissue, overall protocol for micropots lcm, proteoform identification, overall workflow for lcm, lcm, micropots platform, functional units from tissue section, tissue functional unit, selected tissue

Abstract

This is the overall workflow for LCMS top down proteomics of pancreas functional units from tissue sections using the MicroPOTS platform. The expected outcomes are proteoform identification and quantitation values from selected tissue functional units.



Tissue collection

- 1 The tissue sections were prepared and shipped from Vanderbilt-TMC following the protocol below:

Protocol

NAME

Cryostat Sectioning of Tissues for 3D Multimodal Molecular Imaging

CREATED BY

Jamie Allen

Preview

Sample preparation

- 2 Functional units (islet and acinar) were dissected and collected into the microPOTS platform using the method below:

Protocol

NAME

Laser Capture Microdissection of Tissue Functional Units for microPOTS Top-Down Proteomics

CREATED BY

James M Fulcher

Preview

Data Acquisition

- 3 The samples were analyzed by LCMS top down proteomics as described below:



Protocol

NAME

Top Down Proteomics Data Collection for Microdissected Pancreas Tissue Functional Units

CREATED BY

Mowei Zhou

Preview

Data Analysis

- 4 LCMS datasets were analyzed for proteoform identification and quantitation. The final results are reported.

Protocol

NAME

Proteoform Identification and Quantitation with TopPIC and TDPortal for Human Tissues

CREATED BY

Mowei Zhou

Preview