

Mar 26, 2024

Version 2

GeoMx Digital Spatial Profiler (DSP) Protocol v2 - University of Minnesota TMCs V.2

DOI

<https://dx.doi.org/10.17504/protocols.io.8epv5r7k6g1b/v2>

Laura J Niedernhofer¹, David A Bernlohr¹

¹University of Minnesota, Minneapolis, MN

Cellular Senescence Net...



Allie Abdellatif

MIBAM, University of Minnesota, Minneapolis, MN

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.8epv5r7k6g1b/v2>

Protocol Citation: Laura J Niedernhofer, David A Bernlohr 2024. GeoMx Digital Spatial Profiler (DSP) Protocol v2 - University of Minnesota TMCs. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.8epv5r7k6g1b/v2> Version created by **Allie Abdellatif**

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: March 26, 2024

Last Modified: March 26, 2024

Protocol Integer ID: 97409

Keywords: geomx digital spatial profiler, digital spatial profiler, minnesota genomics center, plex profiling at the protein, dsp, geomx, plex profiling, embedded limited tissue sample, rna level, limited tissue sample, temporal assessment of tumor, rna, university of minnesota tmc

Funders Acknowledgements:

NIH

Grant ID: 5U54AG076041-03

NIH

Grant ID: 5U54AG079754-02

Abstract

The nanoString GeoMx[®] Digital Spatial Profiler (DSP) is a platform that allows high-plex profiling at the protein and RNA level, providing spatial and temporal assessment of tumors in frozen or formalin-fixed paraffin-embedded limited tissue sample.

The following protocols/manuals were used at the University of Minnesota TMCs in collaboration with the University of Minnesota Genomics Center.



Slide Preparation

- 1 GeoMx DSP Manual Slide Preparation User Manual

 MAN-10150-04.pdf 2.7MB

ROI Acquisition

- 2 GeoMx DSP Instrument User Manual

 MAN-10152-04.pdf 51.3MB

Library Preparation

- 3 GeoMx DSP NGS Readout User Manual

 MAN-10153-04.pdf 9.2MB

Note

Sequence with the read format 27,8,8,27

FASTQ Generation

- 4 BCL data from Illumina sequencer is demultiplexed and converted into FASTQ format using bcl2fastq version 2.20.0