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A protocol for tissue clearing and three-dimensional imaging of human sigmoid mucosal biopsies V.2

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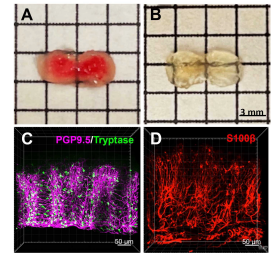
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SPARC

A single cell RNA sequenc...

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Protocol status: Working

We use this protocol and it's working

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Abstract

This protocol was developed for tissue clearing and 3D imaging of human sigmoid mucosal biopsies by adapting and modifying the original CLARITY tissue clearing technique/immunofluorescence protocols that we established for 3D imaging and phenotyping of human colonic enteric nervous system. By using this new protocol, a piece of entire human sigmoid mucosal biopsy specimen with the volume about 6x3x1-2 mm (length x wide x thickness) can be completely cleared within 3-4 days. The 3D images and videos generated from cleared biopsy samples showed clear spatial views of nerve innervation, distributions of mast cells and enteric glial cells, and configurations of mast cells with nerve fibers in the sigmoid colonic mucosa.

Attachments



[a protocol for CLARI...](#)

39.8MB

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