MAR 15, 2024

DOI:
dx.doi.org/10.17504/protocols.io.6qpvr31b2vmk/v1

Protocol Citation: kangsk, Runze Dong, Liangcai Gu 2024. Preparation for OCT embedding Mouse Kidney Tissue (TDA-University of Washington). **protocols.io** https://dx.doi.org/10.17504/protocols.io.6qpvr31b2vmk/v1

Protocol status: Working
We use this protocol and it's working

Preparation for OCT embedding Mouse Kidney Tissue (TDA-University of Washington)

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ABSTRACT

Preparation for OCT embedding Mouse Kidney Tissue (TDA-University of Washington)

Created: Mar 14, 2024

Last Modified: Mar 15, 2024

PROTOCOL integer ID: 96734

Kidney tissue collection

1 C57BL/6J male mice from the National Institute of Aging Rodent Resource were handled according to the guidelines of the Institutional Animal Care Committee at the University of Washington. Mice aged 5 and 26 months were selected for the study. Kidney tissue extraction was conducted immediately following euthanasia.

2 Make an incision then cut the skin from the bottom to the top of the mice followed the abdominal line with the round side of the scissors.

3 Proceed to cut the lateral skin to get access to the kidney. Carefully extract the kidney, rinse it with HBSS (Hank's Balanced Salt Solution, Thermo, 14025092), remove the capsule, and section the kidney into pieces measuring 3 to 5 mm in thickness.

OCT Embedding

4 Apply a thin layer of OCT compound (Sakura Tissue-Tek O.C.T. Compound, Sigma, 4583) into a disposable mold (Epredia, 18985-1).

5 Position the sample tissue at the center of the mold, ensuring that the side intended for cutting faces inward.

6 Cover the tissue completely with additional OCT compound.

7 Lower the mold into liquid nitrogen, being careful to not fully submerge the mold. Hold in liquid nitrogen for a few seconds until fully frozen.

8 Transfer the frozen mold to dry ice for storage at -80ºC.