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CPTAC FFPE Sample Processing

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Spatial Subclone

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We use this protocol and it's working

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Abstract

This is a description of the steps that Clinical Proteomic Tumor Analysis Consortium (CPTAC) has developed to collect surgical resection biospecimens. There are multiple protocols with various preservation methods and targeted assays. Here only the Formalin-Fixed Paraffin-Embedded (FFPE) related information is provided.

Excerpted protocol from:
Li Y, Lih TM, Dhanasekaran SM, Mannan R, Chen L, Cieslik M, Wu Y, Lu RJ, Clark DJ, Kołodziejczak I, Hong R, Chen S, Zhao Y, Chugh S, Caravan W, Naser Al Deen N, Hosseini N, Newton CJ, Krug K, Xu Y, Cho KC, Hu Y, Zhang Y, Kumar-Sinha C, Ma W, Calinawan A, Wyczalkowski MA, Wendl MC, Wang Y, Guo S, Zhang C, Le A, Dagar A, Hopkins A, Cho H, Leprevost FDV, Jing X, Teo GC, Liu W, Reimers MA, Pachynski R, Lazar AJ, Chinnaiyan AM, Van Tine BA, Zhang B, Rodland KD, Getz G, Mani DR, Wang P, Chen F, Hostetter G, Thiagarajan M, Linehan WM, Fenyö D, Jewell SD, Omenn GS, Mehra R, Wiznerowicz M, Robles AI, Mesri M, Hiltke T, An E, Rodriguez H, Chan DW, Ricketts CJ, Nesvizhskii AI, Zhang H, Ding L; Clinical Proteomic Tumor Analysis Consortium. Histopathologic and proteogenomic heterogeneity reveals features of clear cell renal cell carcinoma aggressiveness. Cancer Cell. 2023 Jan 9;41(1):139-163.e17. doi: 10.1016/j.ccell.2022.12.001. Epub 2022 Dec 22. PMID: 36563681; PMCID: PMC9839644.

Sample Processing for CPTAC Renal Cell Carcinoma

1 The CPTAC Biospecimen Core Resource (BCR) at the Pathology and Biorepository Core of the Van Andel Research Institute in Grand Rapids, Michigan manufactured and distributed biospecimen kits to the Tissue Source Sites (TSS) located in the US, Europe, and Asia. Each kit contains a set of pre-manufactured labels for unique tracking of every specimen respective to TSS location, disease, and sample type, used to track the specimens through the BCR to the CPTAC proteomic and genomic characterization centers.

2 Tissue specimens averaging 200 mg were snap-frozen by the TSS within a 30 min cold ischemic time (CIT) (CIT average = 13 min) and an adjacent segment was formalin-fixed paraffin-embedded (FFPE) and H&E stained by the TSS for quality assessment to meet the CPTAC ccRCC requirements. Routinely, several tissue segments for each case were collected.