CROWN BIOSCIENCE

Sample Collection and Preparation Guide

A JSR Life Sciences Company

V1.0

Cell Pellet

- Please provide at least 1 million cells per sample.
- Wash cell pellet in buffer (e.g. PBS) twice.
- Aspirate the buffer as much as possible without disturbing cell pellet.
- Store cell pellet at -80°C until sample submission.
- Ship samples with sufficient dry ice to avoid defrosting.

Fresh Tumor Lesion Tissue

- Specimens should be observed or photographed before taking samples, to confirm the location and range of the tumor, and to differentiate the tumor from surrounding and necrotic tissue. Necrotic tissue harvesting should be avoided due to the difficulty in extracting high quality RNA.
- Paired with 'para-carcinoma tissue': select tissue samples which are within 3cm of the cancer-foci's edge. Paired with 'normal tissue': select tissue samples which are at least Scm away from cancer-foci's edge or at the furthest edge of the cancer-foci (or at the surgical margin), and clearly label the distance from the cancer-foci. For hollow organs such as esophagus, stomach, intestines, gallbladder, bladder, etc., 'para carcinoma tissue' and 'normal tissue' should be taken from their corresponding 'mucosal tissues'.
- To ensure the required samples for pathological examination are provided, harvest adequate tumor and adjacent normal tissues. This is generally not less than 200mg or 5 million cells.
- Cut the sample as quickly as possible (<30min) once the specimen is isolated. Tumor and adjacent tissues should be cut into approximately 30mg pieces with a sample volume no less than 1g.
- Once the fresh tissue is taken, immediately add itto liquid nitrogen (-195.79°(), and store at -20°C or -80°C, or in 10% neutral buffered formalin solution.
- The transportation of frozen tissues requires low temperatures (dry ice). Formalin fixed tissues must be stored in the stationary liquid, transported at room temperature, and delivered within 72 hours.
- When delivering samples, please make sure the following information is clearly recorded: the name of the sending organization, the name of the patient, gender, age, contact information, department, diagnosis results, and any other pertinent information.

Formalin-Fixed, Paraffin-Embedded (FFPE) Tissue

- The thickness of sections should be 5-8μm, with the number of sections depending on the size of the tumor tissue. If the section thickness is 5μm, at least 8 tissue sections are required. If the section thickness is 10μm, at least 5 tissue sections are required. The tumor cell content should be no less than 25% of the cell content, and the content of necrotic tissues should be less than 10%.
- Slicing can be performed without stretched preparation or adherence treatment. Directly transfer tissue sections to clean centrifuge tubes, small glass bottles (or other sealable containers) by clean tweezers.
- Place 5 tumor tissue sections with an approximate size of 250mm2 into each centrifuge tube.
- If the size of the tumor tissue sections is small, please increase the number of sections appropriately (no more than 10 sections).
- Please provide two tubes for each sample, with one tube used for testing and the other tube providing backup material.
- Samples should be stored and shipped at room temperature (25°C).
- If samples as described above cannot be provided, please provide 10 standard paraffin sections (unstained sections).
- All sections used here should be unstained and paired with the serial sections of paraffin sections for DNA extraction and H&E stained adjacent sections to determine tumor cell content.
- We do NOT accept stained sections, as this will significantly affect DNA extraction and PCR results and may lead to undesirable results.
- When delivering samples, please make sure the following information is clearly recorded: the name of the sending organization, the name of the patient, gender, age, contact information, department, diagnosis results, and any other pertinent information.

Get in touch

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