

REQUIREMENTS FOR COLLECTING AND SHIPPING BIOLOGICAL SAMPLES

General information

Labeling: The sample must be correctly identified (patient initials/code, date of birth, etc.).

Recommendations for sampling

FFPE tissue biopsy

1. For IHC testing to be successful, a minimum of 100 morphologically identifiable, definitively viable tumor cells are required.
2. Other reasons why a sample may be insufficient for both IHC testing and NGS panels include extensive necrosis, melanin pigment, and tissue preparation with previous stains.
3. Select the most recent sample available with the highest percentage of tumor cellularity; these may be primary tumor or metastasis samples.
4. If the patient has received targeted therapies, it is important to send a sample taken after targeted therapy or a LIQUID BIOPSY if this is not available.
5. Tumor tissue must represent at least 20% of the total tissue in the sample.

Fixation for paraffin-embedded tissues

Fresh tissue must be placed in the fixative automatically: 4% buffered formalin. H₂O and PBS are not valid.

No tissue may be kept in formalin at room temperature for more than 24 hours. If fixation has not been carried out at room temperature and the tissue has been refrigerated at 4°C, the fixation process is slower and the tissue should be left in formalin for an additional day.

If we are unable to obtain fresh tissue and carry out this first step of fixation, and due to circumstances beyond our control the tissue is going to spend more than 24 hours in formalin: when 24 hours in formalin have elapsed, it must be transferred to 70% ethanol and stored at 4°C (the tissue may appear gelatinous afterwards).

REQUIREMENTS FOR COLLECTING AND SHIPPING BIOLOGICAL SAMPLES

Sampling recommendations

Liquid biopsy

1. Send two completely filled Streck tubes for proper sample processing.
2. Keep samples at room temperature at all times.
3. Since Streck tubes are made of glass, precautions must be taken to prevent breakage during shipping.
4. Collect the sample as close to the shipping date as possible. It is crucial that the sample be processed within 10 days of collection.
5. If the patient has received targeted therapies, a sample taken after administration of such therapy should be shipped.

Ex-vivo Test

The sample obtained after biopsy should be placed in the medium provided by OncoDynamics. This medium preserves the viability of the sample cells at 4°C for 48 hours.