

## Sample preparation and shipment

### 1. Tumor material

#### 1.1. Origin

Preferably bone marrow, peripheral blood or pleural effusion sample. In case of a solid tumor sample, please inform the DRP team (leukemia.drp@kispi.uzh.ch) ahead of time, such that necessary preparations are made.

#### 1.2. Blast percentage

> 40%	DRP can be performed without additional requirements. For a full panel (110 compounds) approx. 20mio viable cells are needed.
10%-40%	DRP is still possible, but <b>detailed Flow Analysis</b> must be provided to perform an antibody staining to identify specifically the malignant cell population. If possible the flow report should therefore contain detailed gating which includes the healthy population as well. For a full panel (110 compounds) approx. 40mio viable cells are needed.
1%-10%	The above requirements apply. However, the success of the DRP depends on cell survival during assay.
< 1%	No DRP is possible with primary material. Patient derived xenograft can be created. If engraftment is successful, approx. 3-6 months after transplantation, DRP can be performed with PDX sample. Approx. 10mio cells are sufficient.

### 2. Sample preparation

#### 2.1. Fresh tumor material (preferred)

Fresh material (10mL is usually sufficient) can be sent at ambient temperature in Heparin/EDTA, immediately after sample collection. The sample can stay at RT for 4 days. Therefore, ideally the sample is taken early in the week and send to us immediately, such that it arrives Tuesday or Wednesday. It will be processed by the DRP team on Thursday the same week.

#### 2.2. Frozen tumor material

Mononuclear cells should be extracted with Ficoll or RBC lysis and frozen in a cryovial in 10% DMSO / 90% FCS freezing medium (or equivalents). Vials should be subsequently placed in a cell freezing container and transferred to -80°C for at least 24hrs and then transferred to liquid nitrogen if needed. Cryovials of samples should be packaged leakproof in a polystyrene box filled completely with dry ice (~10kg) and sent by overnight express courier service. Please state the exact number of cryovials in the accompanying letter.

### 3. Shipment

To avoid any type of delay due to weekends we recommend to ship the sample Monday or Tuesday if possible. If shipping from outside of Switzerland, please also include a custom declaration sheet to avoid delays at the borders. The sample must arrive latest in a cryovial until Thursday, 12am at the DRP lab if it has to be processed immediately.

#### **Shipping address:**

Universitäts-Kinderspital Zürich Oncology Research,  
Drug Response Profiling (LLF.C+4.004)  
Lenggstrasse 30  
CH-8008 Zürich  
Switzerland

Contact: Dr. Silvia Gutnik / Ms. Arianna Arpagaus / Ms. Larissa Schori

Tel: +41 44 249 61 25

Email: leukemia.drp@kispi.uzh.ch

Once the samples have been shipped, please send the following information via e-mail to **leukemia.drp@kispi.uzh.ch**:

- courier company details
- tracking number
- separate CRF per sample

### 4. Receipt

Upon receipt of the tumor material, a sample and patient identifier are assigned and communicated to the referring clinic. No patient names, date of birth or addresses are collected.