



core unit cell sorting
room 03.054, floor 03
Nikolaus-Fiebiger Zentrum
Tel. : 09131/8529322
Glückstr. 6
91054 Erlangen

information sheet for all sorter user

Erlangen, 28.09.2026

cell preparation:

all cell samples must be prepared as single cell suspensions without clumps and aggregates.
Use **EDTA** (2mM standard, 10mM maximum) to prevent clumps.

Attention: EDTA can not be used with some antibodies e.g. CD138 or CD23.

Check epitope preservation list, before using EDTA.

However, after staining, EDTA can be added to your buffer, independent of the used antibodies.

Cell concentrations: **20*10⁷ cells/ml** for events bigger than 15µm
50*10⁷ cells/ml for events smaller than 15µm

The **minimum volume** of your cell suspension should be at least **500µl**.

The standard buffer is : PBS / 2% FCS / 2mM EDTA.

If you want to use different buffers ask your operator before use.

A high rate of viable cells is recommended. So higher the rate of dead cells is, so higher is also the risk of failures within sorting your samples.

If a sample is too sticky, it maybe can't be sorted.

Valuable informations about the sorter:

which collecting vessels can be used:

falcons	plates	others
50ml; 15ml;	6well, 24well,96well, 384well plates	facs tubes (5ml); eppendorf- tubes (1.5 or 2ml)

If you want to collect your samples in other vessels, contact your operator.

Sorting in plates is a very accurate process. We proved to hit a 384well plate with a precision of 97.5 %. Sorting in plates can not be done with multiple population simultaneously.

How many populations can be sorted:

MoFlo XDP: **4** populations simultaneously



MoFlo Astrios: **6** populations simultaneously

If multiple populations are sorted, the percentage of wanted populations should be similar. Sorting for example, a 80% population together with 5 very small populations (e.g. 0,1%) can lead to technical problems.

which fluorochromes can be used:

Every sorter has a unique filter setting and a different configuration. You can get the tabulation for every filter setting for each sorter from your operator.

However, before you set a final antibody-panel, contact your operator to ask if your wanted combination can be applied on our equipment.

Please consider, that panels, established on analysers, may look different on a cell-sorter.

about the booking-time:

cells smaller than 15µm	cells bigger than 15µm
10 Mio cells approx. 10-30min	10 Mio cells approx. 20-40min
100 Mio cells approx. 1,5 h	100Mio cells approx. 3h
maximum cells / day / sorter: approx. 600-800 Mio	maximum cells / day / sorter: approx. 300-400 Mio

The above mentioned time refers to optimal prepared samples and a failure-free operation. Clumpy or sticky cells can extend the above mentioned time intervals.

Sterility:

Our sorter are operated with sterile air pressure without any humidity.

Before and after each user, we run cleaning procedures on our sorter.

Every 3 month a big decontamination procedure is performed. Therefore the sorter are operated with pure ETOH and the use of nitrogen instead of normal air pressure.

Experience shows, that most of cultivation-experiments show no contamination.

Even so, sorting cells can never be a 100% sterile process.

Please, use antibiotica for your cultivation experiments.

trouble-shooting:

If you would have repeated problems with the quality or purity of your cells after sorting, contact first our technical employees.

If our operators can not solve your problem, we offer you the possibility to contact our scientific administration. Please contact therefore Dr. Wolfgang Schuh via email (Wolfgang.Schuh@uk-erlangen.de).