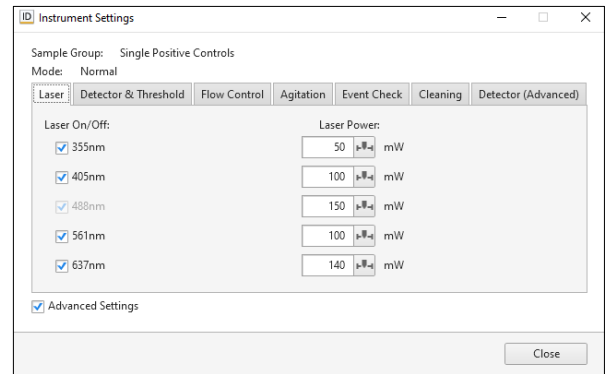


# ID7000 Sample Groups

= Combination of Instrument Settings, Unmixing Settings & Shared Worksheet:

## INSTRUMENT SETTINGS:

- **Detector & Threshold Settings**  
and
- **Acquisition Settings:**
  - Boost, Sample Flow Rate & Offset
  - Agitation, Low Dead Volume option
  - Event Check, Cleaning options

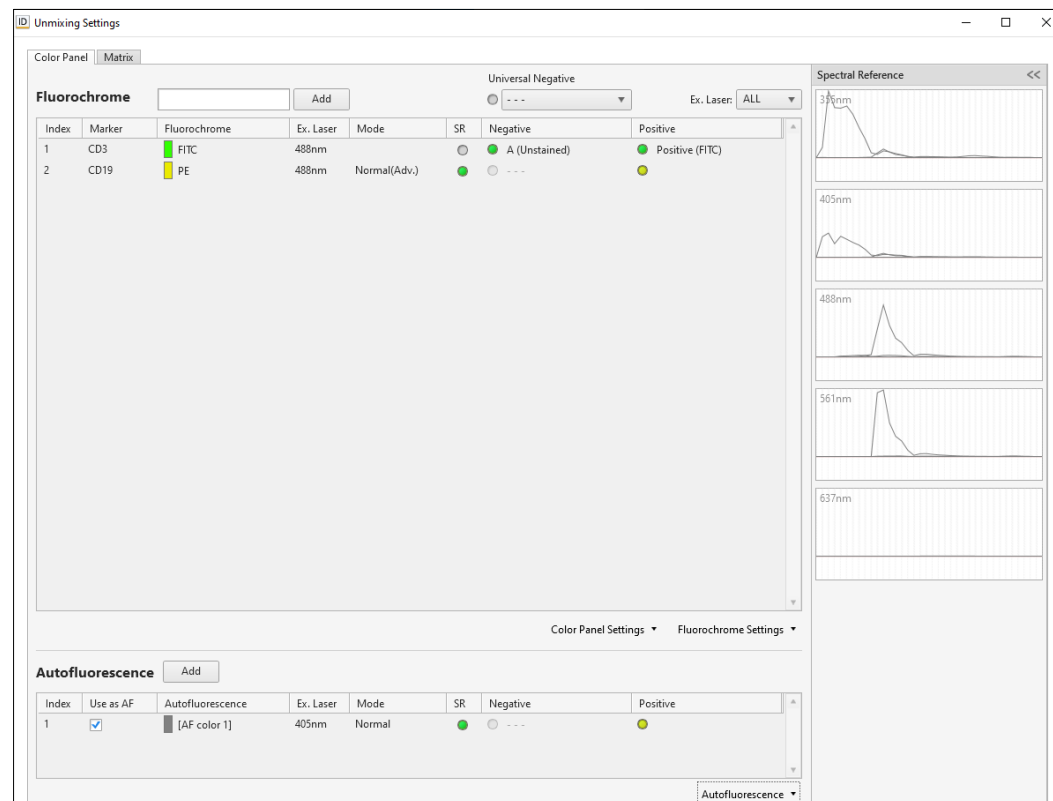


## SHARED WORKSHEET Sample Group - 1 (0/0)

- The Sample Group's common Worksheet

## UNMIXING SETTINGS:

- **Color panel** (marker + fluorochrome combination)
- **Unmixing including Autofluorescence**
- All the **matrices**



- **Sample Groups are a tool enabling automation:**

- Sample Groups can be shared across multiple tube racks/plates **of the same type** across one Experiment
- The system of Sample Groups allows us to run samples with different detector & threshold settings, acquisition settings and panels from the same plate and in the same auto-acquisition process. It also allows us to apply one Shared Worksheet across all the samples within one Sample Group.

**!!keep the number of Sample Groups to minimum - use multiple Sample Groups only when necessary!!**

- Keep in mind that you can zoom on the scatters – absolute majority of samples can share the same FCS/SSC/threshold Settings (even beads and cells)
- You can send samples from one Sample Group to another at any time prior or post acquisition. Prior acquisition, the samples will **always** have the Instrument & Unmixing Settings of the Sample Group which they are currently in.
- **BE AWARE:** if you remove an acquired sample from Sample Groups completely, all the data will be deleted.

# ID7000 Sample Groups

## WHEN DO I NEED MULTIPLE SAMPLE GROUPS? EXAMPLES:

- Some samples to be acquired on a high speed (flow rate 8), while others need to be acquired on a low speed (flow rate 2) and with the “Low Dead Volume” option activated
  - In a case like this, if the Unmixing Settings of all the samples in the plate is identical and it's only the Instrument Settings that differs, after the Acquisition is finished, all the samples can be moved to the same Sample Group – to keep things simple. *In this case, multiple Sample Groups were used only as a tool for automation (to run it all at once even though different Instrument Settings was required)*
- Samples with multiple different panels
  - The Instrument Settings is identical but there are multiple different Unmixing Settings in the same plate, for example B cell and T cell panel. Using multiple Sample Groups helps you to have the correct Unmixing Matrix for each panel. *Tip: if the Instrument Settings is the same for both panels, you can use 1 Sample Group for the Acquisition and split the samples into individual Sample Groups by panel during Analysis.*
- Same Settings, same panel but different autofluorescence
  - Instrument Settings and Color Panel are identical, but Autofluorescence is different (for example activated and resting cells, PBMCs vs. spleen vs. bone marrow, different cell lines but the same fluorescent protein etc)
- More complex combination of the above-mentioned examples can occur, but the principle will remain the same

## HOW TO WORK WITH MULTIPLE SAMPLE GROUPS?



- To prevent mistakes, always start from **one** Sample Group → **duplicate** → make the necessary adjustments on the duplicate. This will ensure that besides the adjustment made, all the other settings will be identical to the original Sample Group.
- **Experiment Designer tips:**
  - uncheck the box next to the “Sample Group – 1” and use the “Single Positive Controls” Sample Group as your default Sample Group, which can be duplicated later if multiple are needed

### Experiment Preview

Details	
Sample List	Sample Group Information
Experiment 14/03/2022 12:57	Name: Single Positive Controls
24 Tube Rack (5mL)	Memo:
Single Positive Controls (4/4)	Worksheet Mode: Individual
Sample Group - 1 (0/0)	Sample Group Type: Single Positive Control

- The “Single Positive Controls” is just a name – it doesn't mean that you cannot place your samples into this group, if they have identical Instrument and Unmixing Settings as your controls. You can change the name if it confuses you.

### - **Keep in mind:**

- Creating a New Sample Group will lead to a Sample Group with Default Settings
- Changing Instrument Settings of one Sample Group will have **no effect** on any other already existing Sample Group. If you need to do the same change in multiple Sample Groups, you must introduce this change separately to each of them.

