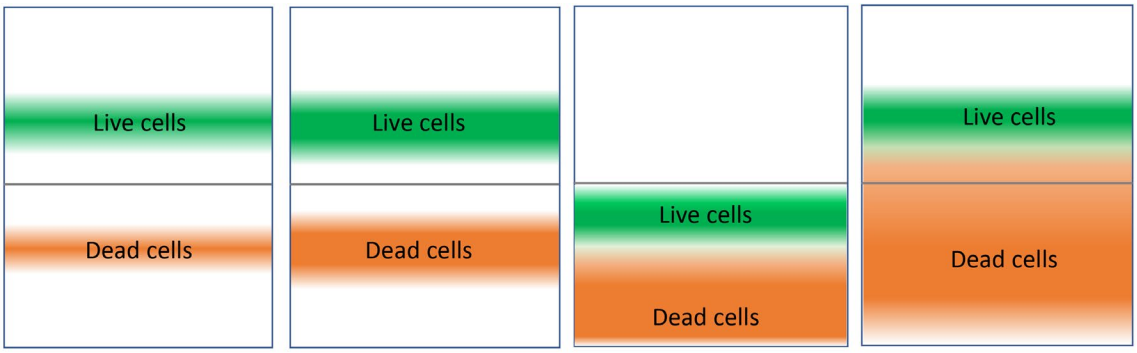
PARAMETERS TO ADJUST WHEN USING LEVICELL FOR VIABLE CELL ENRICHMENT

OVERVIEW

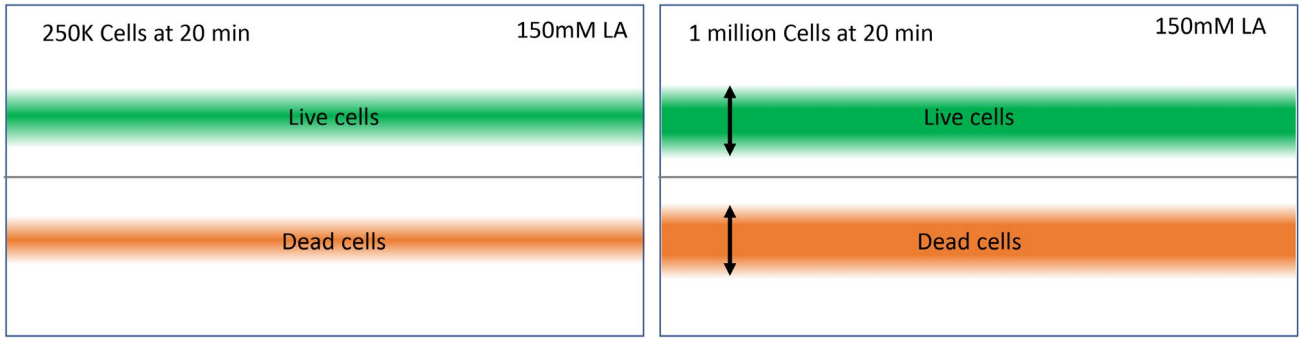
This quick reference guide summarizes the different levitation parameters that can be adjusted when performIng viable cell enrichment on the LeviCell™ system. For full details, please reference the supplemental technical note, 90-00013 Parameters to Adjust When Using LeviCell for Viable Cell Enrichment.

LEVITATION PARAMETERS - SUMMARY



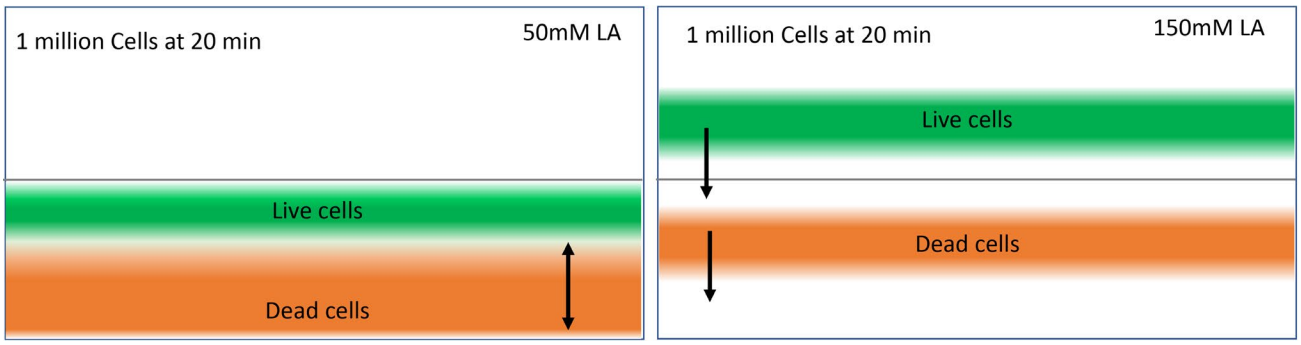
Cell Number	250K	1M	1M	1M
Concentration of Levitation Agent	150mM	150mM	50mM	150mM
Levitation Time	20 min	20 min	20 min	5 min
Change/Effect	--	Increase cell number Widening of bands	Lower LA Concentration 1- Lowering Levitation height 2- Widening of bands	Reduce Levitation Time 1-Equilibrium may not be reached 2- Larger spread of smaller particles

INCREASING CELL NUMBER WILL EFFECTIVELY INCREASE BAND THICKNESS



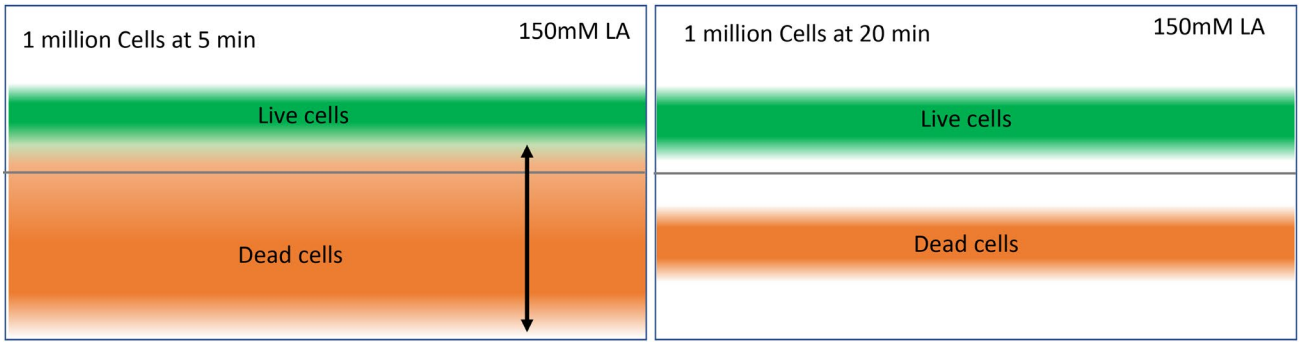
Live cell band visualization is related to the number of cells loaded into the LeviCell. *The distance between the live and dead cell bands does not change, but the cell bands become broader as more cells are loaded.*

EFFECT OF LEVITATION AGENT CONCENTRATION ON LEVITATION HEIGHT AND BAND THICKNESS



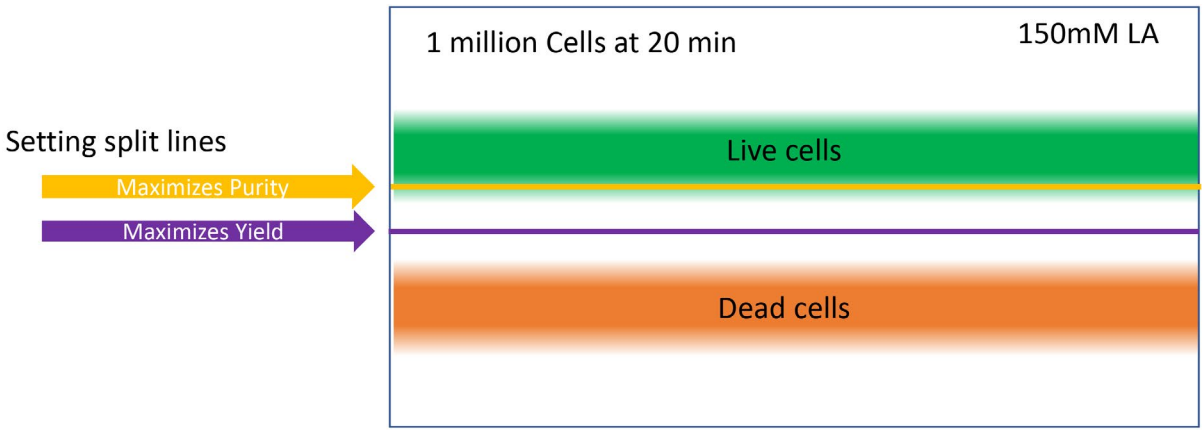
Levitation Agent (LA) concentration affects the cells' levitation height. *By decreasing Levitation Agent concentration, cells will levitate in a lower position. In addition the bands can broaden, potentially decreasing the resolution between the live cells and the dead cells.*

EFFECT OF LEVITATION TIME ON CELL RECOVERY



Levitation Agent (LA) concentration affects the cells' levitation height. *By decreasing Levitation Agent concentration, cells will levitate in a lower position. In addition the bands can broaden, potentially decreasing the resolution between the live cells and the dead cells.*

SETTING THE SPLIT LINE FOR PURITY (VIABILITY) OR YIELD (LIVE CELLS IN/LIVE CELLS OUT)



Selecting for purity vs yield. *Where the split line is set can define the quality of the output samples. Setting the split stringently can maximize the purity of the lives cells ensuring highest viability however the tradeoff is a potential drop in yield. Setting the further away can maximize yield and may or may not affect the purity of the viable cells.*