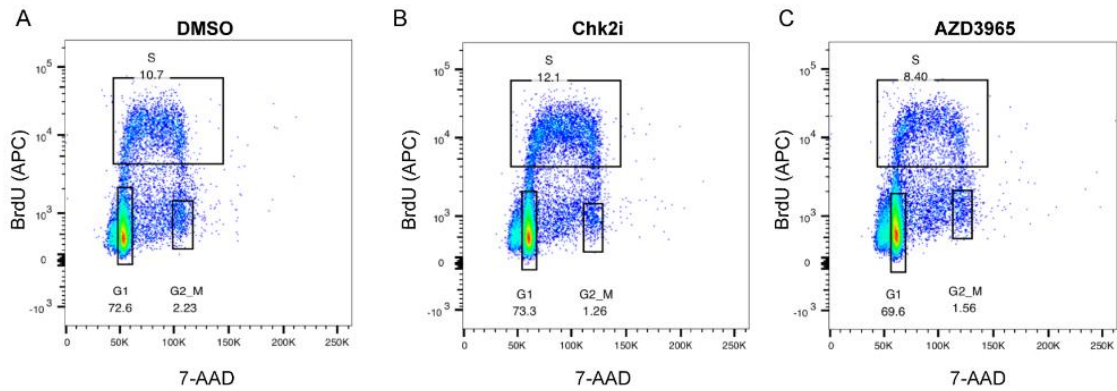
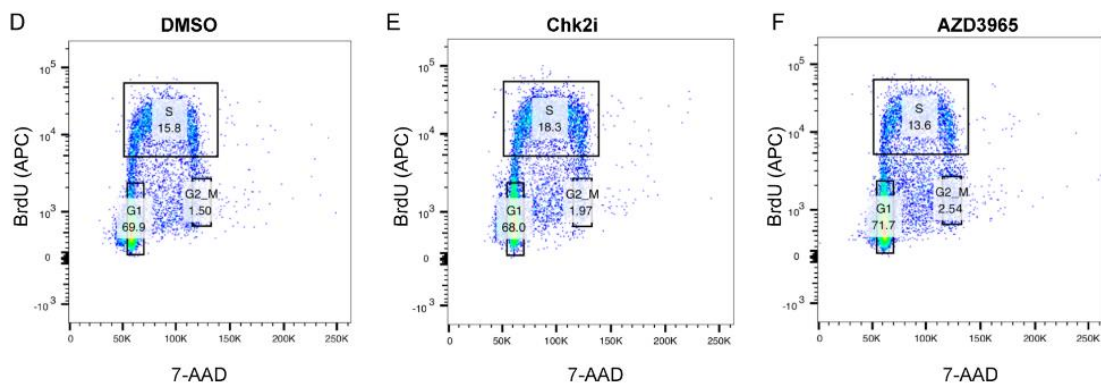


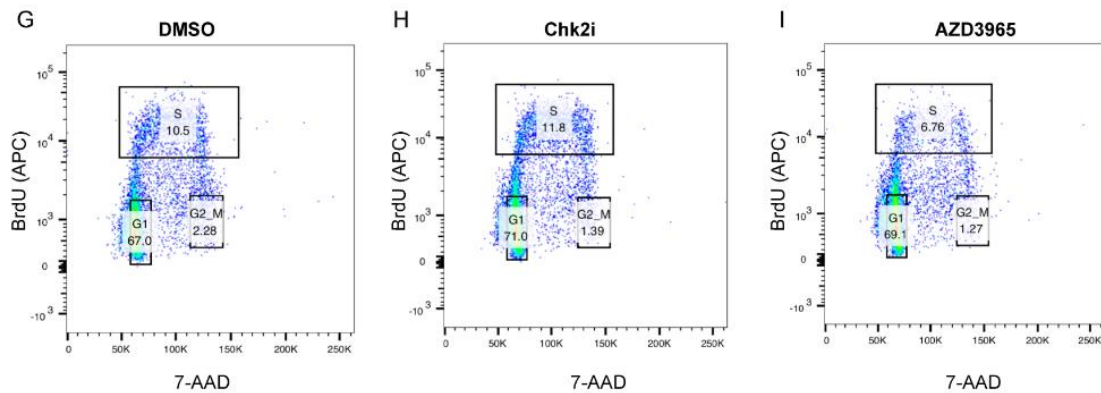
## TX1079



## TX1080

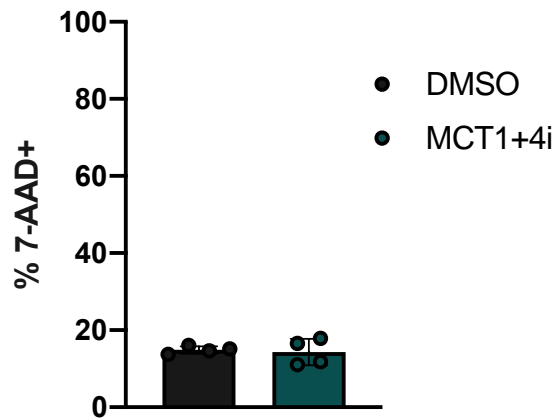


## TX1081



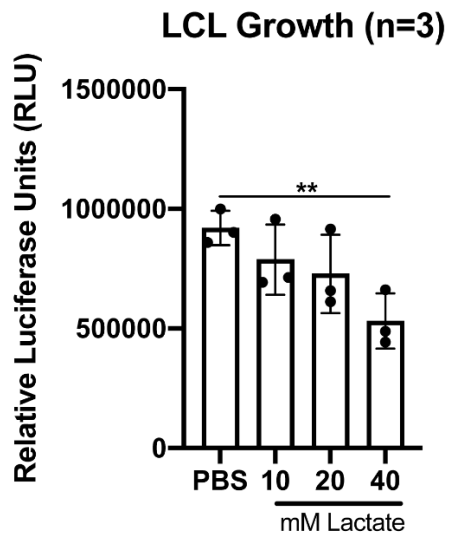
**Supplementary Figure 1. MCT1 inhibition in early EBV-infected B cells leads to a G1/S-phase growth arrest, and not cell death. A-I.** Three PBMC donors (TX1079, TX1080, and TX1081) were treated with either DMSO, 5 $\mu$ M Chk2 inhibitor II, or 250nM AZD3965 for 48h. After 48h, cells were pulsed with BrdU for 2h, and cell cycle progression assessed by flow cytometry. Chk2i = positive proliferation control.

## LCL Death

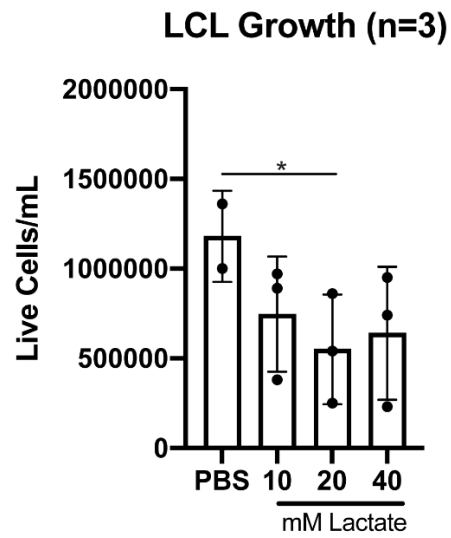


**Supplementary Figure 2. Dual MCT1/4 inhibition in LCLs does not result in cell death.** Two LCL donors were treated in duplicate (n=4) with either DMSO or 1 $\mu$ M AZD3965 + 20 $\mu$ M VB124 for 72h, and 7-AAD positivity was assessed via fluorescence-activated cell sorting (FACS).

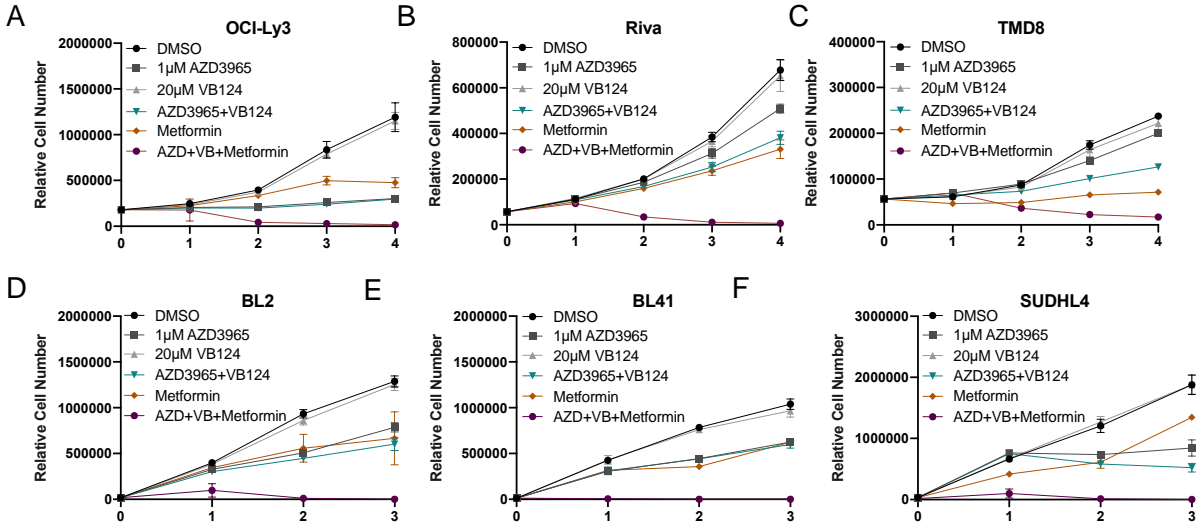
A



B



**Supplementary Figure 3. Exogenous L-lactate treatment in LCLs leads to growth arrest.** LCLs were treated for 72h with varying concentrations of L-lactate. Growth was assessed by either CellTiter Glo (**A**) or trypan blue exclusion counting (**B**). Statistical significance was determined by paired t-test.  $*=p<0.05$ ,  $**=p<0.01$ .



**Supplementary Figure 4. Combined MCT1/4 inhibition sensitizes nonviral, Burkitt Lymphoma and Diffuse Large B-Cell Lymphoma cell lines to killing by metformin. A-E.** Cells were seeded in triplicate at 300,000 cells/mL, and treated with DMSO, 1µM AZD3965, 20µM VB124, 1µM AZD3965+20µM VB124 (AZD+VB), 2mM Metformin, or AZD3965+20µM VB124+2mM Metformin (AZD+VB+Metformin). Growth was assessed daily for three days by CellTiter Glo luminescence.