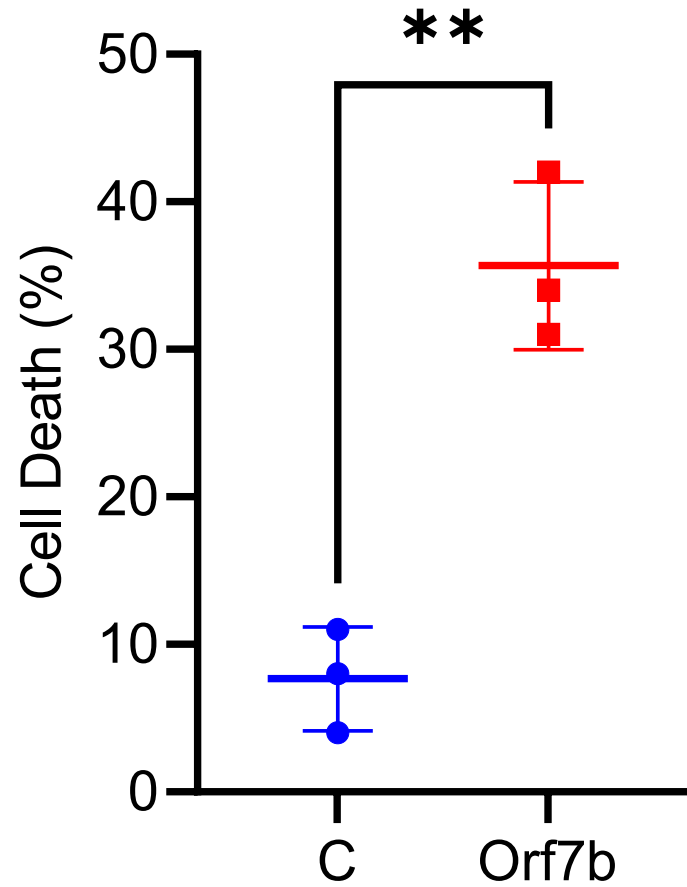
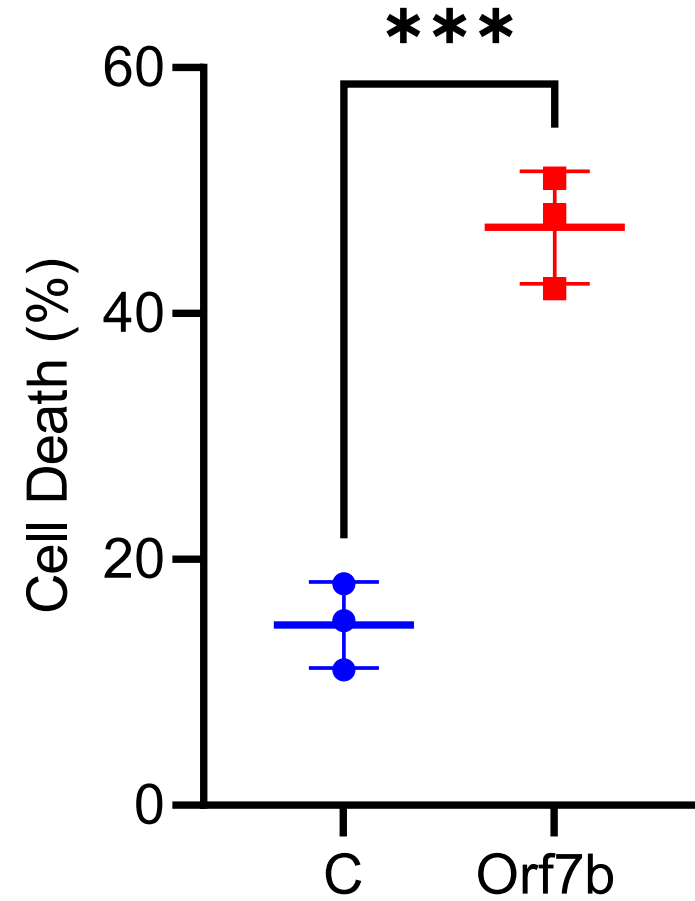


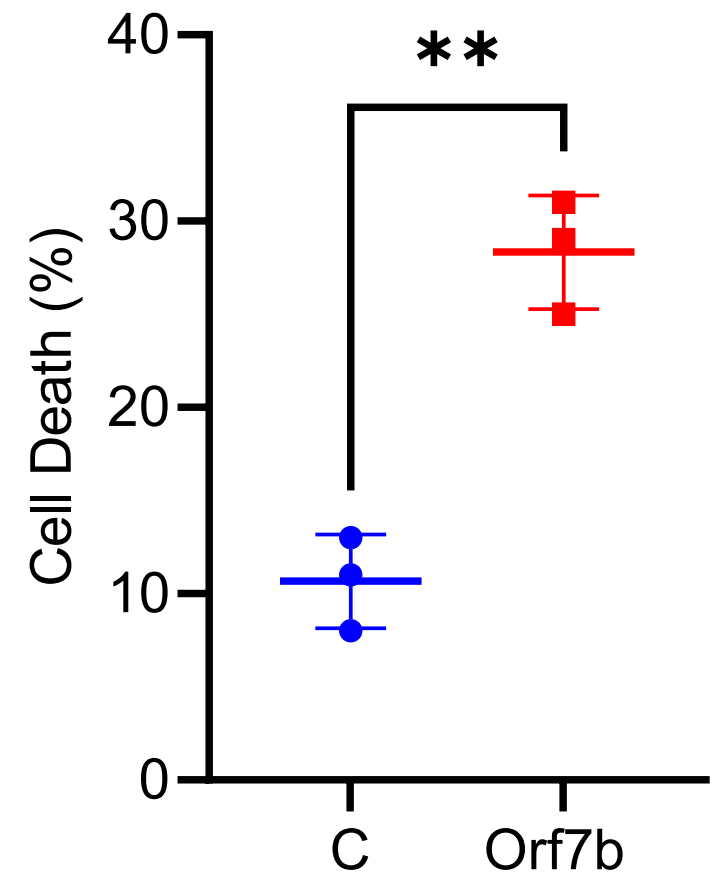
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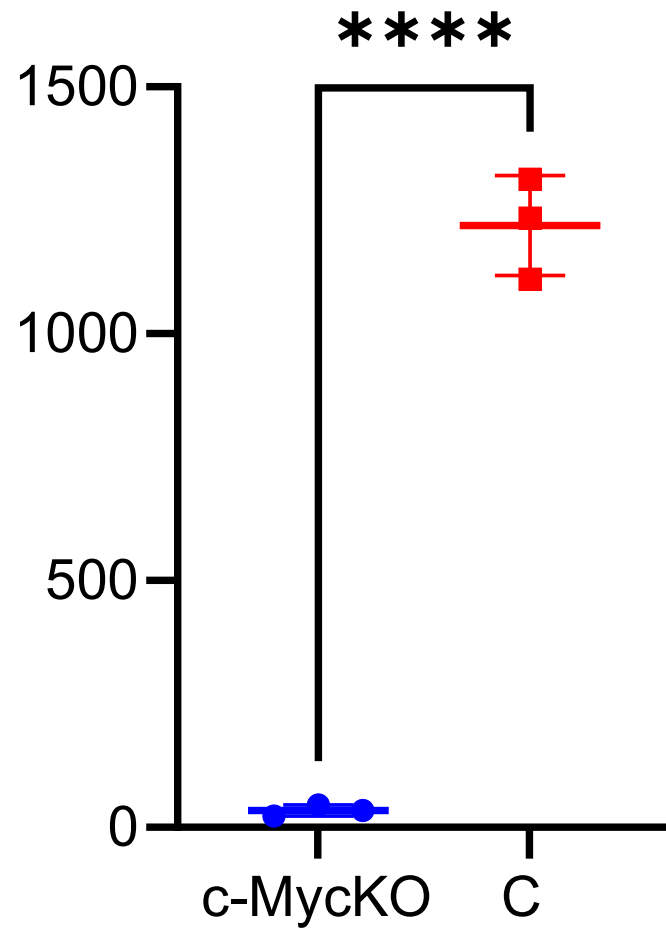
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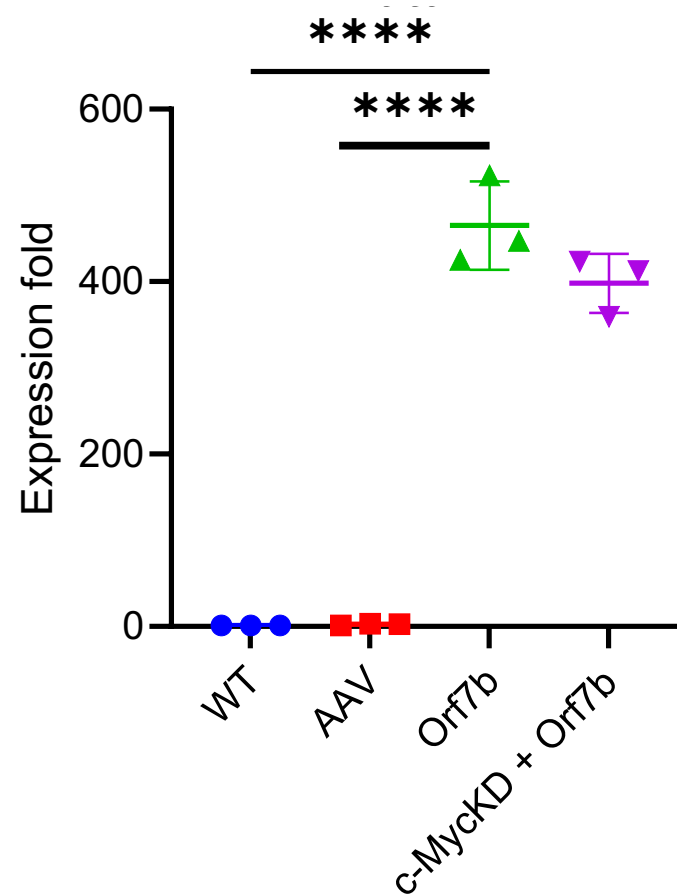
C



Supplementary Fig S1. Results of LDH assay for Beas 2B cells (A), A549 cells (B) and primary cells (HSAEC)(C) suggested Orf7b induced cytotoxicity in all the three the cell lines. C: control group, Orf7b: Orf7b overexpressed group. \*\*:  $P \leq 0.01$ , \*\*\*:  $P \leq 0.001$ .



Supplementary Fig S2. Relative gene expression fold of c-Myc in c-Myc knockout and control groups, with respect to untreated groups using qPCR confirmed the successful knockout of c-Myc in the knockout group. C: control group, c-MycKO: c-Myc knockout group. \*\*\*\*:  $P \leq 0.001$ .



Supplementary Fig S3. Relative gene expression fold of Orf7b in wild type, control, Orf7b overexpressed and c-Myc knockdown Orf7b overexpressed groups, with respect to wild type group using qPCR confirmed the successful overexpression of Orf7b in the Orf7b and c-MycKD +Orf7b groups. WT: wild type group, AAV: control group, Orf7b-Orf7b overexpressed group, c-MycKD + O7b: c-Myc knockdown group overexpressed with Orf7b. \*\*\*\*:  $P \leq 0.001$ .