## **TABLES**

## Table S1- P Values of t-test on the mean from Figure 6 C.

Test performed on values from the 5 minute time point for each condition. In green, P values for significantly different populations. In red, P values for t-test with no differences.

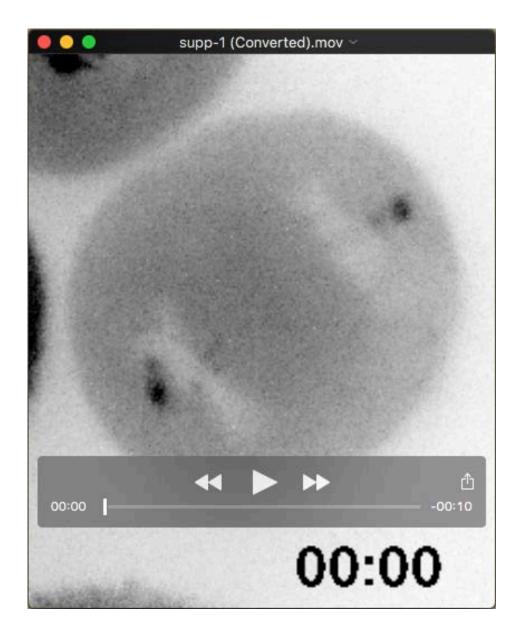
Click here to Download Table S1

## Table S2- P Values of t-test on the mean from Figure 7 B.

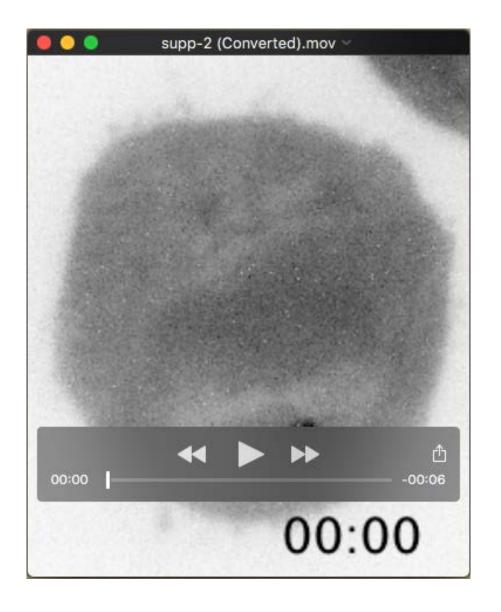
Test performed on values from the 5 minute time point for each condition. In green, P values for significantly different populations. In red, P values for t-test with no differences.

Click here to Download Table S2

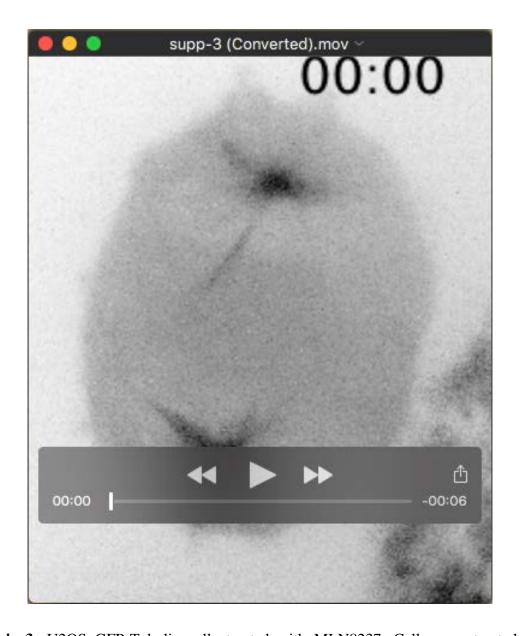
## **MOVIES**



Movie 1- Fluorescence time-lapse microscopy showing MT nucleation in WTAurA cells expressing GFP-Tubulin, which were depleted of endogenous Aurora A and treated with 10  $\mu$ M 1-Na-PP1. MT regrowth begins at t = 0 (time in minutes)



Movie 2- Fluorescence time-lapse microscopy showing MT nucleation in ASAurA cells expressing GFP-Tubulin, which were depleted of endogenous Aurora A and treated with 10  $\mu$ M 1-Na-PP1. MT regrowth begins at t=0 (time in minutes)



**Movie 3-** U2OS GFP-Tubulin cells treated with MLN8237. Cells were treated at the metaphase to anaphase transition. MT regrowth begins at t = 0 (time in minutes).