

## Description of Additional Supplementary Files

**File name:** Supplementary Data 1

**Description:** The source data behind the graphs in the paper.

**File name:** Supplementary Video 1

**Description:** Confocal time-lapse of MET+ mCherry-LifeAct cells. Cells were monitored for a total of 16 hours and images were taken every 20 minutes. A virtual LUT was applied to highlight the areas with intense red signal according to the scale in Supp. Figure 2a.

**File name:** Supplementary Video 2

**Description:** Confocal time-lapse of MET+ mCherry-LifeAct cells. Cells were monitored for a total of 16 hours and images were taken every 20 minutes. A merge of mCherry-LifeAct and brightfield view is shown.

**File name:** Supplementary Video 3

**Description:** Time-lapse of MET+ cells performed with optical diffraction microscopy (ODT) imaging. Cells were monitored for a total of 12h. Images were taken every 10 minutes.

**File name:** Supplementary Video 4

**Description:** Time-lapse of MET+ cells performed with optical diffraction microscopy (ODT) imaging. Cells were monitored for a total of 3h. Images were taken every 10 minutes.

**File name:** Supplementary Video 5

**Description:** Time-lapse of MET-KO cells performed with optical diffraction microscopy (ODT) imaging. Cells were monitored for a total of 8h. Images were taken every 10 minutes.

**File name:** Supplementary Video 6

**Description:** Time-lapse of MET+ cells performed with Phasefocus LiveocyteTM. MET+ cells were seeded in 96-wells plates and incubated for 12h before starting image acquisition. Cells were monitored for more than 48h, and images were taken every 1-4h.

**File name:** Supplementary Video 7

**Description:** Time-lapse of MET-KO cells performed with Phasefocus Livecyte™. MET-KO cells were seeded in 96-wells plates and incubated for 12h before starting image acquisition. Cells were monitored for more than 48h, and images were taken every 1-4h.

**File name:** Supplementary Video 8

**Description:** Time-lapse of MET-KO TPR-MET cells performed with Phasefocus Livecyte™. MET-KO TPR-MET cells were seeded in 96-wells plates and incubated for 12h before starting image acquisition. Cells were monitored for more than 48h, and images were taken every 1-4h.

**File name:** Supplementary Video 9

**Description:** Time-lapse of MET+ cells grown in suspension performed with IncuCyte® platform. MET+ cells were seeded over a layer of 0.6% agar to prevent cell adhesion. Starting from the day after seeding, spheroids formation was monitored with IncuCyte® for 7 days and 16h, and images were acquired every 4h.

**File name:** Supplementary Video 10

**Description:** Time-lapse of MET-KO cells grown in suspension performed with IncuCyte® platform. MET-KO cells were seeded over a layer of 0.6% agar to prevent cell adhesion. Starting from the day after seeding, spheroids formation was monitored with IncuCyte® for 7 days and 16h, and images were acquired every 4h.