

Supplemental Materials

Molecular Biology of the Cell

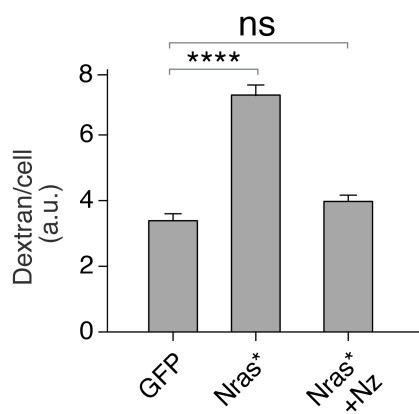
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Supplemental Figures

Supp. Fig. 1. **Nocodazole inhibits macropinocytosis in HeLa cells expressing active N-Ras.**

HeLa cells expressing either GFP-N-Ras12V or GFP were treated with nocodazole or DMSO for 30 min prior to addition of dextran 594 mixture for 20 min as in B. Bar graphs show the average (\pm SEM) dextran fluorescence of 200 GFP-positive cells per condition in a single matched experiment. An ordinary one-way ANOVA was used to compare groups to the GFP control.

Supplemental Figure 1



Movie Legends

Movie 1. Time lapse imaging of mApple-F-actin (red) expressing HT1080 cells, pre-incubated with Alexa Fluor 488 Zenon labeled CD147 antibodies (green). Images collected every 8 sec (total of 22 min), corresponding to Figure 1D.

Movie 2. Microtubules and nascent macropinosomes in HT1080 cells. Time-lapse imaging of EMTB-3xGFP (green) and mApple-F-tractin (red) co-expression in HT1080 cells. Images collected every 5 sec (total of 10 min 5 sec), corresponding to Figure 3A.

Movie 3. Membrane ruffling and macropinosome formation in DMSO-treated HT1080 cells. Time-lapse imaging of HT1080 cells, pre-incubated with Alexa Fluor 488 Zenon labeled CD147 antibodies (green), immediately after treatment with DMSO. Images collected every 5 sec (total of 24 min 57 sec), corresponding to Figure 3D (DMSO).

Movie 4. Membrane ruffling and inhibition of macropinocytosis in nocodazole-treated HT1080 cells. Extended time-lapse imaging of HT1080 cells, pre-incubated with Alexa Fluor 488 Zenon labeled CD147 antibodies (green) and pretreated for 20 min with nocodazole prior to imaging. Images collected every 8 sec (total of 61 min, 44 sec), corresponding to Figure 3D (Nz).

Movie 5. Membrane ruffling and macropinocytosis in control siRNA-treated HT1080 cells. Time-lapse imaging of control siRNA-treated HT1080 cells incubated with Alexa Fluor 488 Zenon labeled CD147 antibodies (green). Images collected every 12 sec (total of 46 min, 36 sec), corresponding to Figure 5E (Control).

Movie 6. Membrane ruffling and inhibition of macropinocytosis in Jip3-depleted HT1080 cells. Time-lapse imaging of Jip3-depleted HT1080 cells incubated with Alexa Fluor 488 Zenon labeled CD147 antibodies (green). Images collected every 12 sec (total of 39 min, 3 sec), corresponding to Figure 5E (siJip3).

Movie 7. Membrane ruffling and inhibition of macropinocytosis in Arf6-depleted HT1080 cells. Time-lapse imaging of Arf6-depleted HT1080 cells incubated with Alexa Fluor 488 Zenon labeled CD147 antibodies (green). Images collected every 12 sec (total of 22 min, 48 sec), corresponding to Figure 5E (siArf6).