## **Electronic supplementary material**

**Video 1.** Src dynamics in U87 cells treated with pervanadate (PV). Confocal images of U87 cells transfected with SrcI and plated on Matrigel. After addition of 100  $\mu$ M PV, disassembly of FAs containing SrcI was observed together with formation of membrane ruffles containing SrcI. The time interval is 1 frame/5 min for 1 h. See also Fig. 4A.

**Video 2.** Src dynamics in U87 cells treated with PV. Confocal images of U87 cells transfected with SrcI and plated on Matrigel. After addition of PV, membrane ruffling and FA disassembly were observed. The time interval is 1 frame/90 s for 1 h. See also Fig. 6A, top.

**Video 3.** Src dynamics in U87 cells pretreated with PP2 (10  $\mu$ M). Confocal images of U87 cells transfected with SrcI and plated on Matrigel. After addition of PV, membrane ruffling and FA disassembly were not observed. The time interval is 1 frame/5 min for 1 h. See also Fig. 6A, middle.

**Video 4.** Src dynamics in U87 cells pretreated with PP3 (10  $\mu$ M). Confocal images of U87 cells transfected with SrcI and plated on Matrigel. After addition of PV, membrane ruffling and FA disassembly were observed. The time interval is 1 frame/20 min for 1 h. See also Fig. 6A, bottom.

**Video 5.** Src dynamics in U87 cells treated with PV. Confocal images of U87 cells transfected with SrcI and plated on Matrigel. After addition of PV, the cell displayed periodic extensions and retractions of the leading edge. Note also the loss of FAs. The time interval is 1 frame/min for 45 min. See also Fig. 7A.