Supplemental movie legends

Movie 1

Mitochondrial movement via TNT between the cells. Mitochondria were labeled with mitotracker red (red), and the cells were imaged for 3 minutes to see the movement of mitochondria from one cell to another via TNT.

Movie 2

Epithelial cell (LA-4) transfected with mGFP shows yellow colored mitochondria, after receiving mRFP labeled mitochondria from MSC, not visible in this field of the video.

Movie 3

Visualization of trachea by video assisted arthoscopy and injection of mGFP labeled MSC by a cannula, directly into the trachea of mouse.

Movie 4

The rate of mitochondrial motility is challenged despite TNT formation when MSC are transfected with Miro1 specific shRNA (green fluoriscence labeled cells), as compared to normal rate of mitochondrial motility in scrambled shRNA treated MSC (red panel) via the cellular TNT.