

Table S2: Organelle movement data

Organelle	Treatment	Mean Velocity <sup>1</sup> ±SD (μm/sec)	Mean Displacement Rate <sup>2</sup> ±SD (μm/sec)	Mean Distance <sup>3</sup> ±SD (μm)
Golgi	EV	1.107±0.982	0.544±0.819	28.93±25.49
	XI-2	0.758±0.809	0.373±0.614	20.58±18.35
	XI-F	0.881±0.855	0.397±0.716	23.91±20.98
	XI-K	0.123±0.088	0.062±0.080	00.61±00.49
	XI-K/GTD	0.123±0.045	0.046±0.039	00.58±00.45
	VIII-1	0.887±0.822	0.446±0.714	22.83±22.27
	ds GFP	1.251±1.088	0.587±0.894	32.25±30.06
	ds XI-2	0.747±0.762	0.333±0.605	25.19±20.57
	ds XI-F	0.893±0.826	0.893±0.825	34.17±23.86
	ds XI-K	0.222±0.157	0.126±0.133	01.54±01.59
Mitochondria	EV	1.394±1.009	0.740±0.962	25.66±21.99
	XI-2	1.120±0.809	0.462±0.562	29.36±25.38
	XI-F	1.121±0.489	0.394±0.326	35.26±24.28
	XI-K	0.168±0.100	0.068±0.082	00.95±00.80
	VIII-1	1.327±1.278	0.594±0.979	35.34±27.77
	EV/silencing	1.391±0.979	0.709±0.918	26.69±23.70
	ds XI-2	0.779±0.459	0.330±0.378	37.70±28.52
	ds XI-F	0.985±0.880	0.557±0.819	24.89±24.93
	ds XI-K	0.088±0.044	0.048±0.041	00.99±00.86
Peroxisomes	EV	0.881±1.133	0.585±0.987	14.61±15.26
	XI-2	0.284±0.387	0.178±0.304	08.62±10.76
	XI-F	0.357±0.565	0.214±0.492	10.56±12.00
	XI-K	0.063±0.043	0.030±0.034	01.20±00.90
	VIII-1	0.480±0.546	0.330±0.436	10.72±11.51
	ds GFP	0.940±1.040	0.616±0.950	14.73±16.30
	ds XI-2	0.592±0.738	0.381±0.603	11.01±12.58
	ds XI-F	0.552±0.515	0.291±0.366	12.88±13.16
	ds XI-K	0.195±0.162	0.125±0.158	02.07±02.57

<sup>1</sup>Speed calculated using the full length of the organelle track; <sup>2</sup>Speed calculated using the straight line length between the first and the last points of the track; <sup>3</sup>Full track length.