Figure S2 (related to Figure 2)
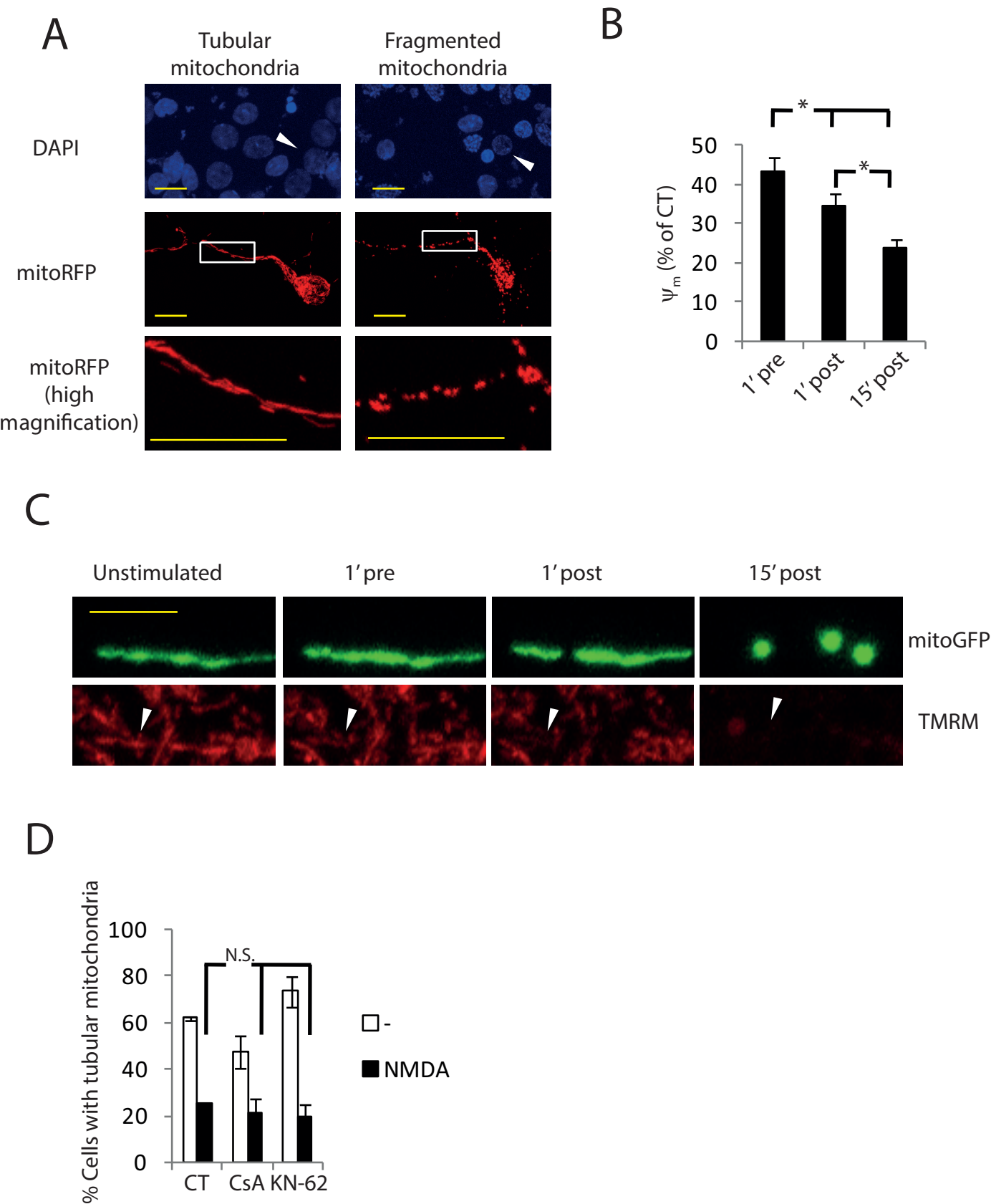
A

	Tubular mitochondria	Fragmented mitochondria
DAPI		
mitoRFP		
mitoRFP (high magnification)		

B

C

	Unstimulated	1' pre	1' post	15' post
mitoGFP				
TMRM				

D

Figure S2. A) Representative images of neurons transfected with plasmid encoding mitochondria targeted RFP (mtRFP) showing tubular or fragmented mitochondria. The white box indicates the high magnification area. Arrowhead points to the transfected neuron. Scale bar = 20 µm. B) Mitochondrial membrane potential pre- and post-fragmentation of neurons treated with 30 µM NMDA. (n= 8 mitochondria from different neurons). *p<0.05, two-tailed T-test.   C) Representative example from (B). Scale bar= 5 µm. D) Analysis of mitochondrial morphology of neurons pre-treated with CsA (10 µM) or KN-62 (10 µM) for 45 minutes and then stimulated with NMDA (30 µM) for 1 hour. *p<0.05, two-tailed T-test.