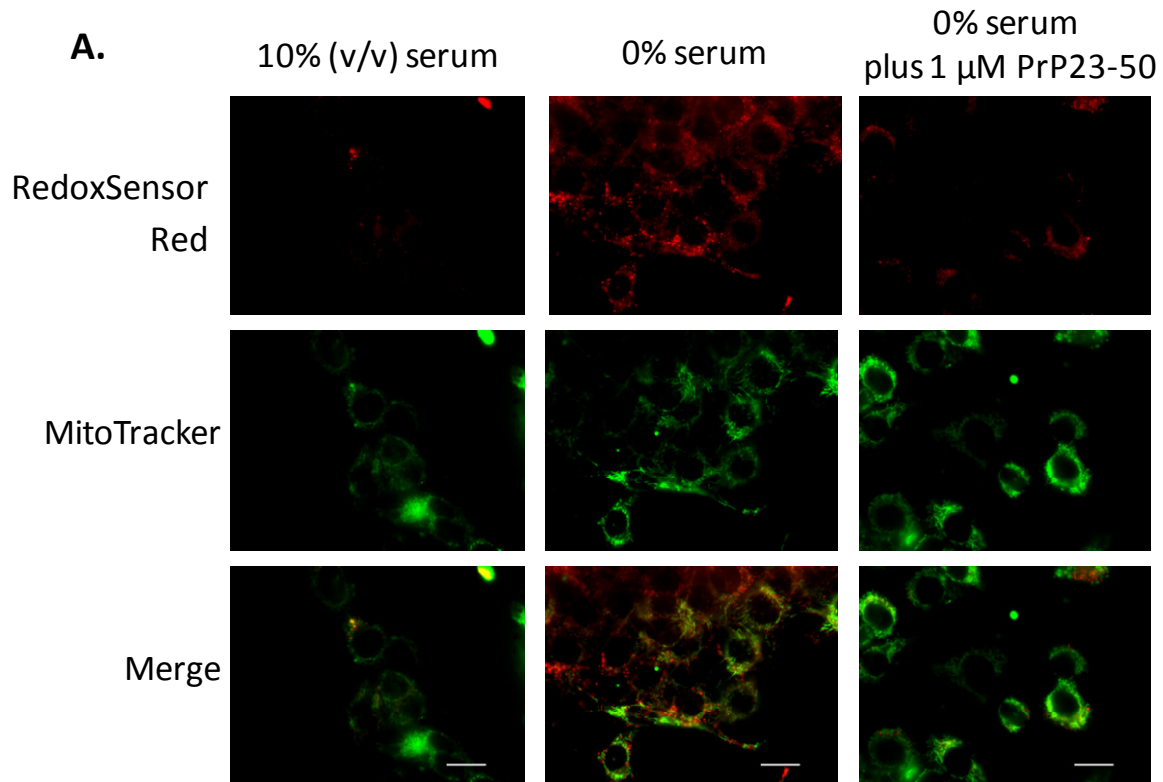
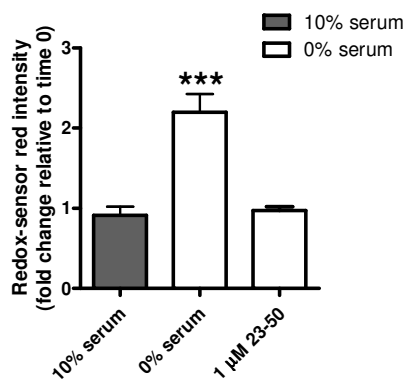


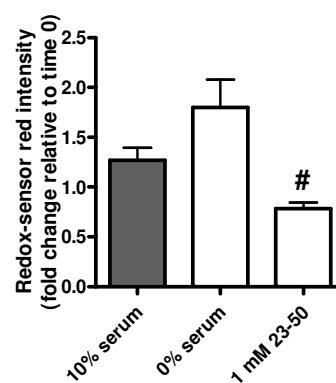
**Supplementary Figure 6.** *RedoxSensor Red analysis of PrP23-50 influence on intracellular ROS production.* CF10 cells were labelled with RedoxSensor Red fluorescent indicator, and MitoTracker green to indicate compartmental partitioning, then incubated in normal (10% v/v serum), serum-free or serum-free with 1  $\mu$ M PrP23-50 phenol-red free OptiMEM. At 90 minutes images were collected and cellular fluorescence quantified with MitoTracker co-localisation used to determine the cytosolic and lysosomal fractions. Shown below are representative plates of each condition (**A**) and quantification of total fluorescence (**B**), cytosolic fractions (**C**) and lysosomal fractions (**D**). Serum deprivation significantly increases RedoxSensor Red fluorescence (**B**;  $F = 19.26$ ,  $p < 0.001$ ,  $n = 3$ ) and this is restored to the levels of ROS produced under normal culture conditions by PrP23-50. The cytosolic component (fluorescence co-localised with MitoTracker) of ROS produced was not significantly increased in the serum deprived cells, however PrP23-50 still reduced this significantly (**C**;  $F = 5.668$ ,  $p = 0.006$ ,  $n = 3$ ). The main increase in ROS seen in response to serum deprivation was in the lysosomes and this was significantly reduced by PrP23-50 (**D**;  $F = 65.09$ ,  $p < 0.001$ ,  $n = 3$ ). Scale bars = 20  $\mu$ m.



**B. Total**



**C. Cytosolic**



**D. Lysosomal**

