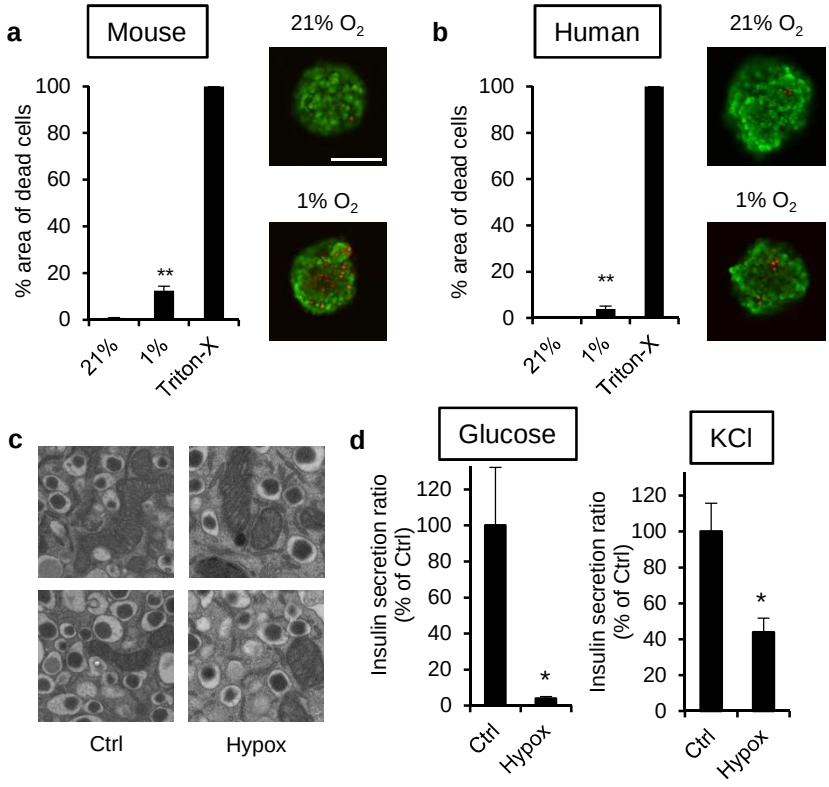
ESM Figure 3



Effect of hypoxia on cell death, cellular ultrastructure and insulin secretion. (a) CD1 mouse and (b) human islets were incubated for 24 h at either 21%, 1% ambient oxygen, or treated with 1% Triton X-100 for 5 min. The percentage of dead cells within intact islets was assessed using calcein and propidium iodide staining. Scale bar, 100 μm. (c) Electron micrographs of CD1 mouse islets after incubation for 24 h at either 21% or 1% ambient oxygen. (d) After 24 h of exposure to 21% (Ctrl) or 1% (Hypox) ambient oxygen, insulin secretion from CD1 mouse islets was assessed during exposure to high glucose (16.7 mM) or KCl (30mM), and the ratio of insulin secretion (fold change *versus* basal secretion at 3 mM glucose) was calculated and expressed as % of Ctrl. Bars represent mean ± S.E. *, $p < 0.05$; **, $p < 0.01$