



Figure S2 Nuclear accumulation of H3K23ac and H3K18ac in pre-implantation embryo under different oxygen concentrations.

a-d Immunofluorescence staining for H3K23ac (Red) in mouse embryos at the 2-cell (2-cell), 4-cell (4-cell), morula (Morula) and blastocyst (Blast) stages embryos collected from the atmospheric oxygen (**a**), *in vivo* (**b**), oxygen gradient (**c**) and hypoxia (**d**) groups. DNA was stained with DAPI (Blue). **e-h** Immunofluorescence staining for H3K18ac (Red) in mouse embryos at the 2-cell (2-cell), 4-cell (4-cell), morula (Morula) and blastocyst (Blast) stages embryos collected from the atmospheric oxygen (**e**), *in vivo* (**f**), oxygen gradient (**g**), and hypoxia (**h**) groups. DNA was stained with DAPI (Blue). More than 9 embryos were examined in each stage each condition. Scale bars: 20 μ m.