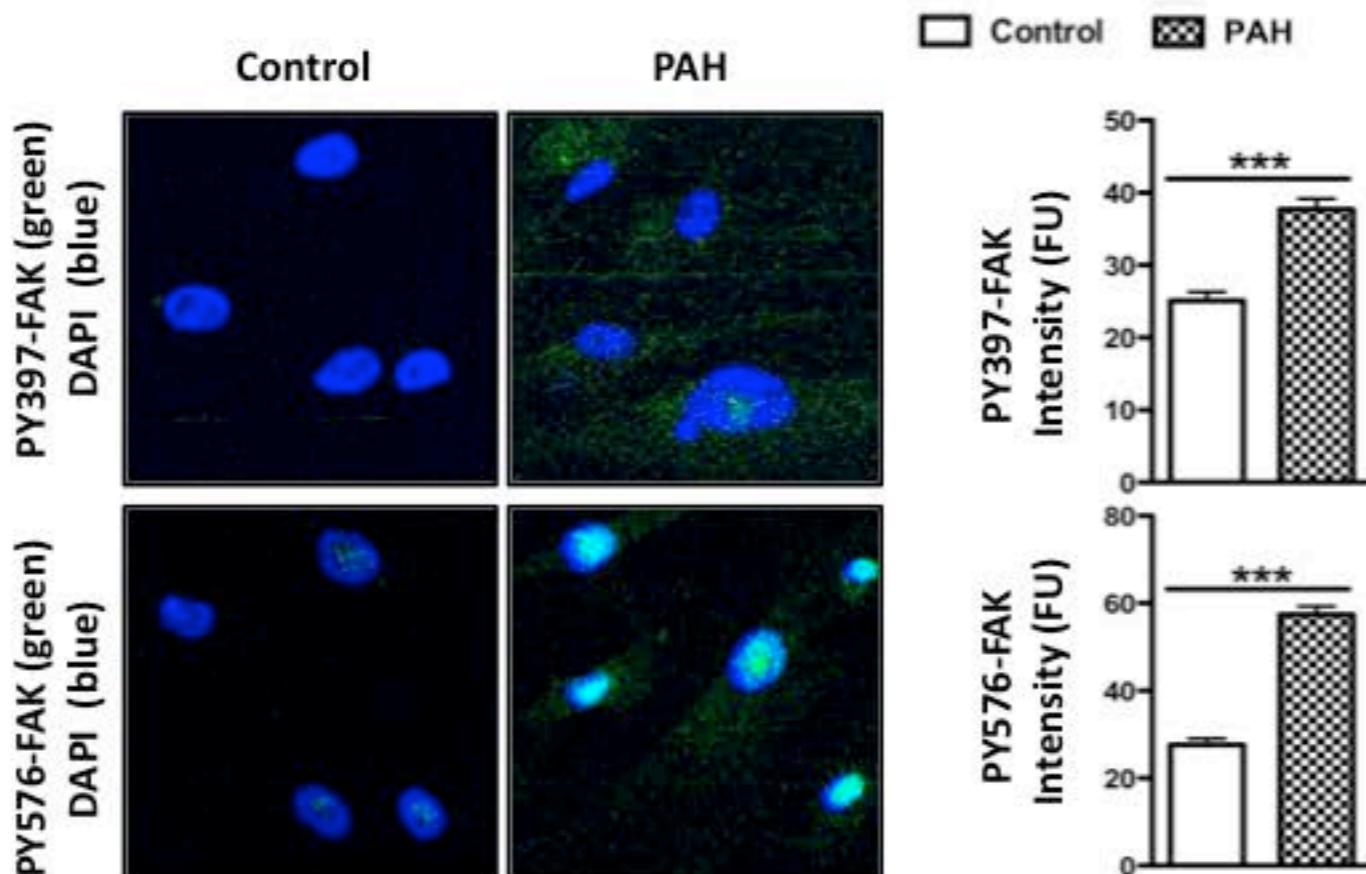
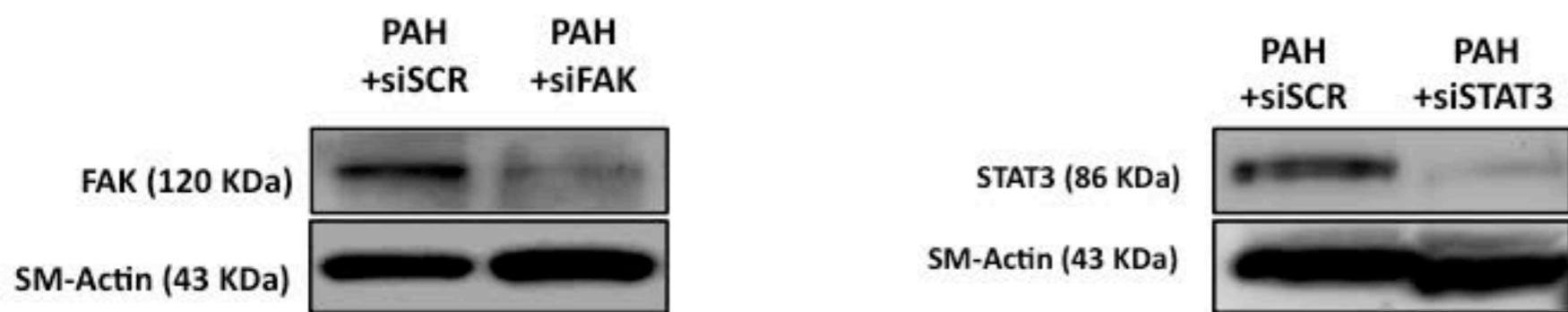


Supplemental Figure 1

A *FAK is hyperphosphorylated in PAH-PASMCs*

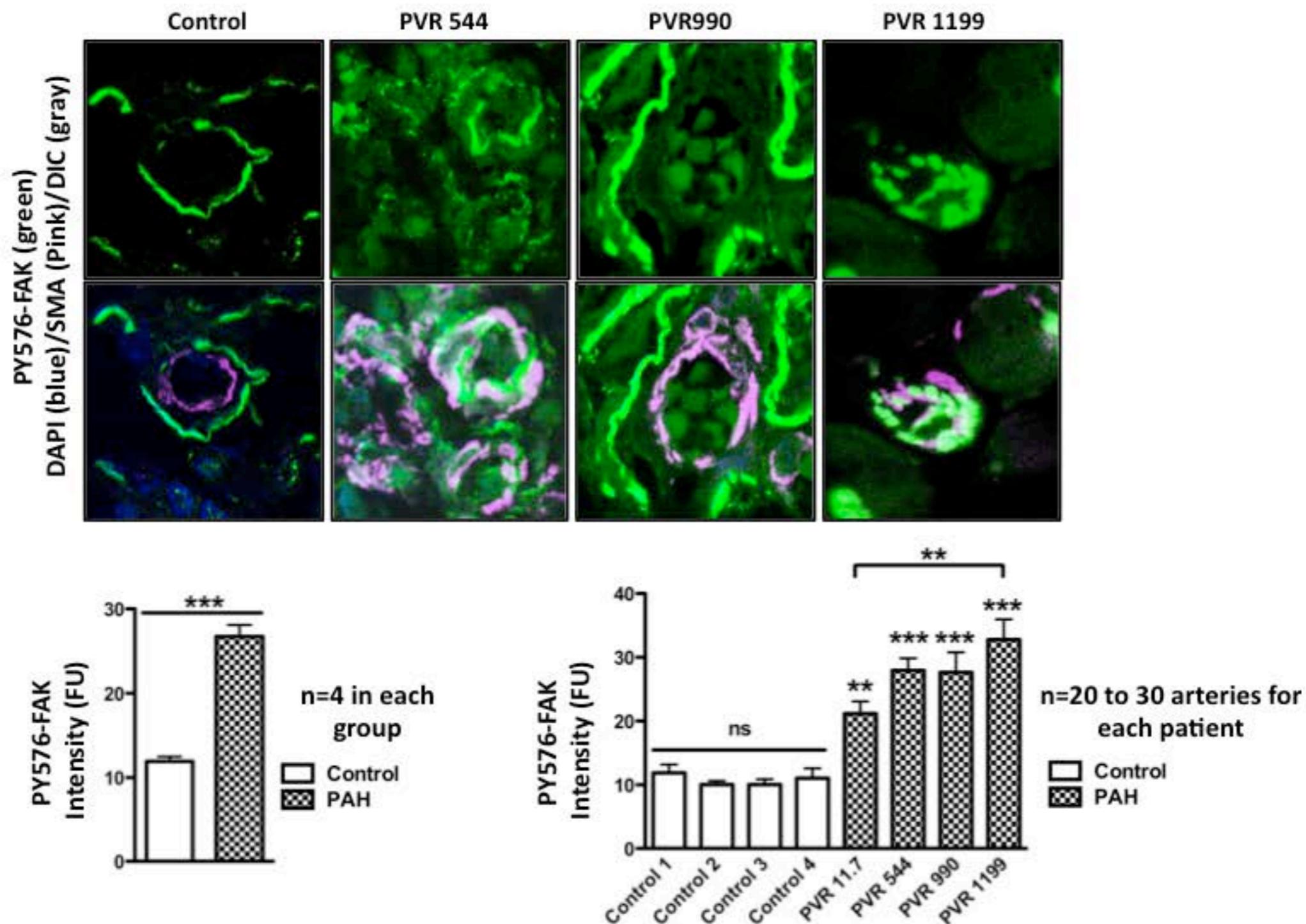


B *Transfection efficiencies*



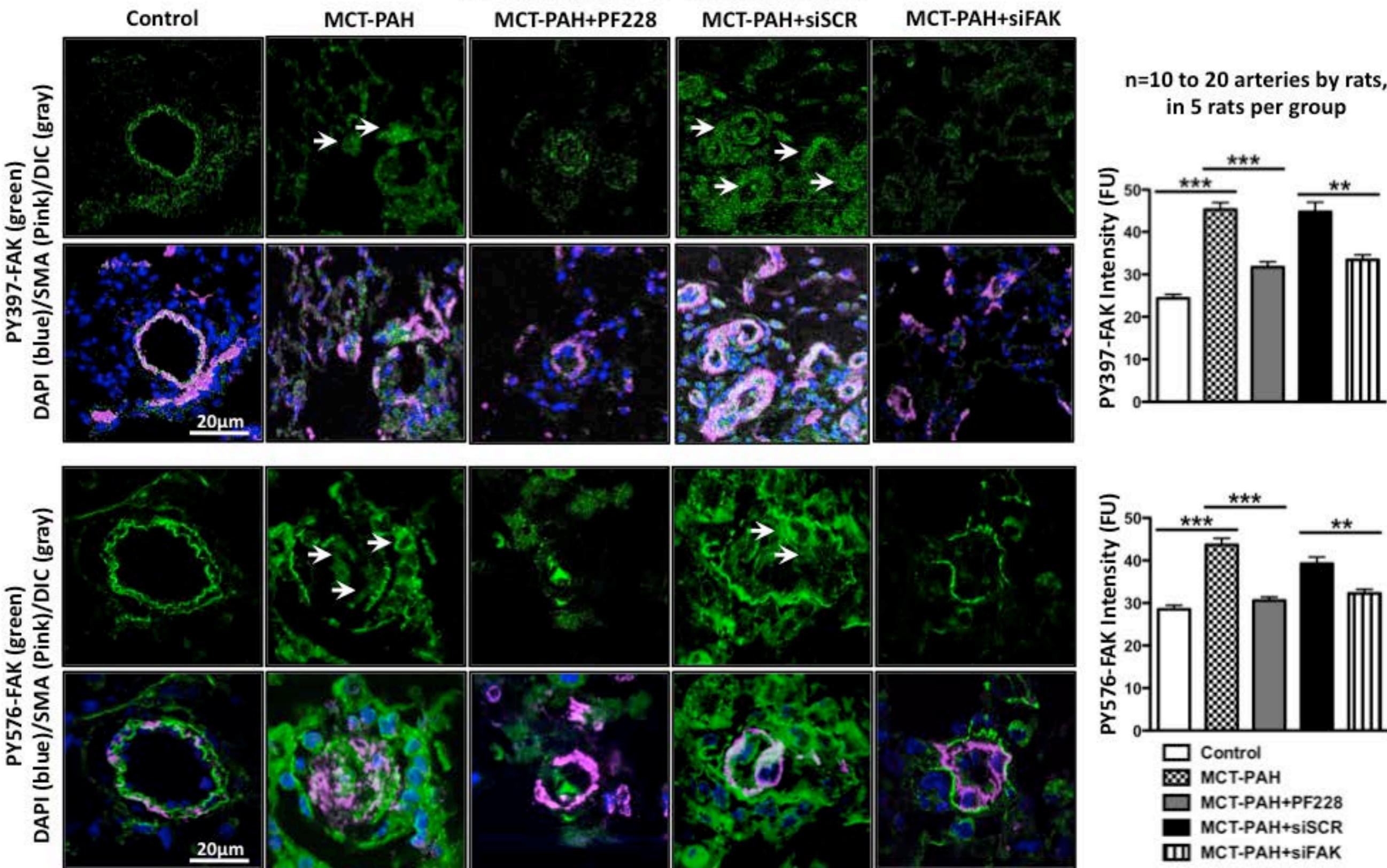
Supplemental Figure 2

PY576-FAK is increased in distal arteries of human PAH



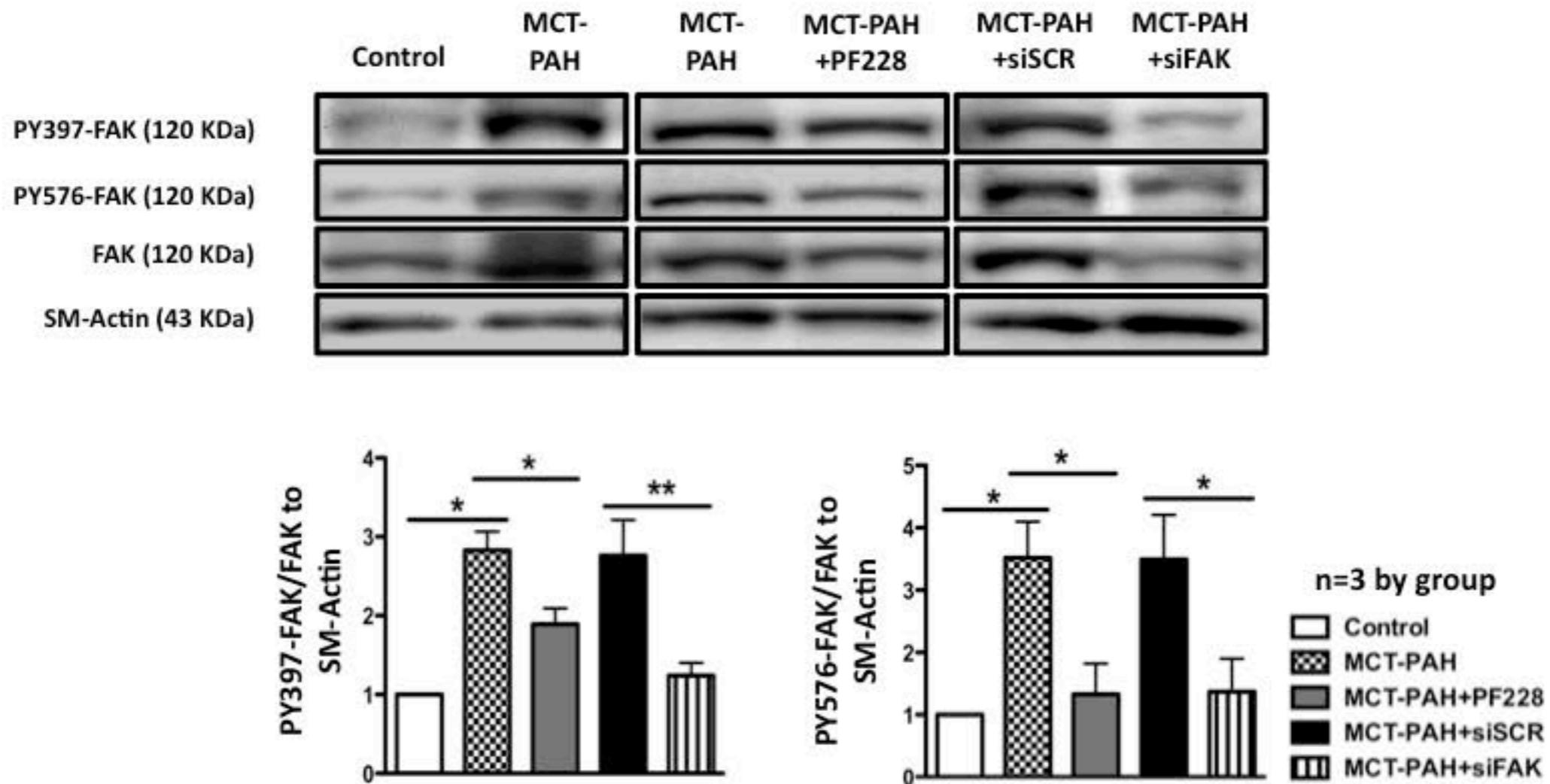
Supplemental Figure 3

PY397 and PY576-FAK are increased in resistance PAs of MCT-PAs rats and inhibited by siFAK or PF-228 treatments.



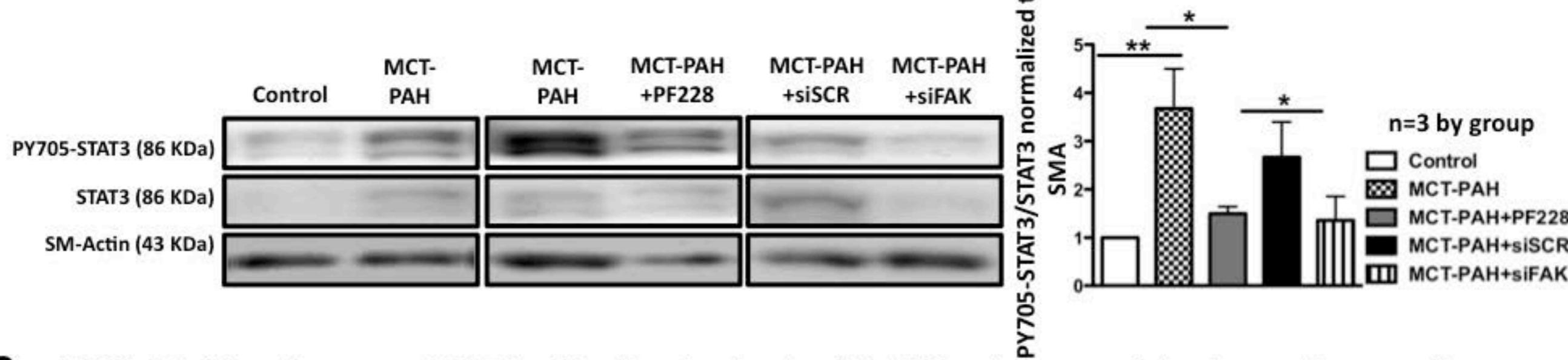
Supplemental Figure 4

PY397 and PY576-FAK are increased in PAs of MCT-PAs rats and inhibited by siFAK or PF-228 treatments.

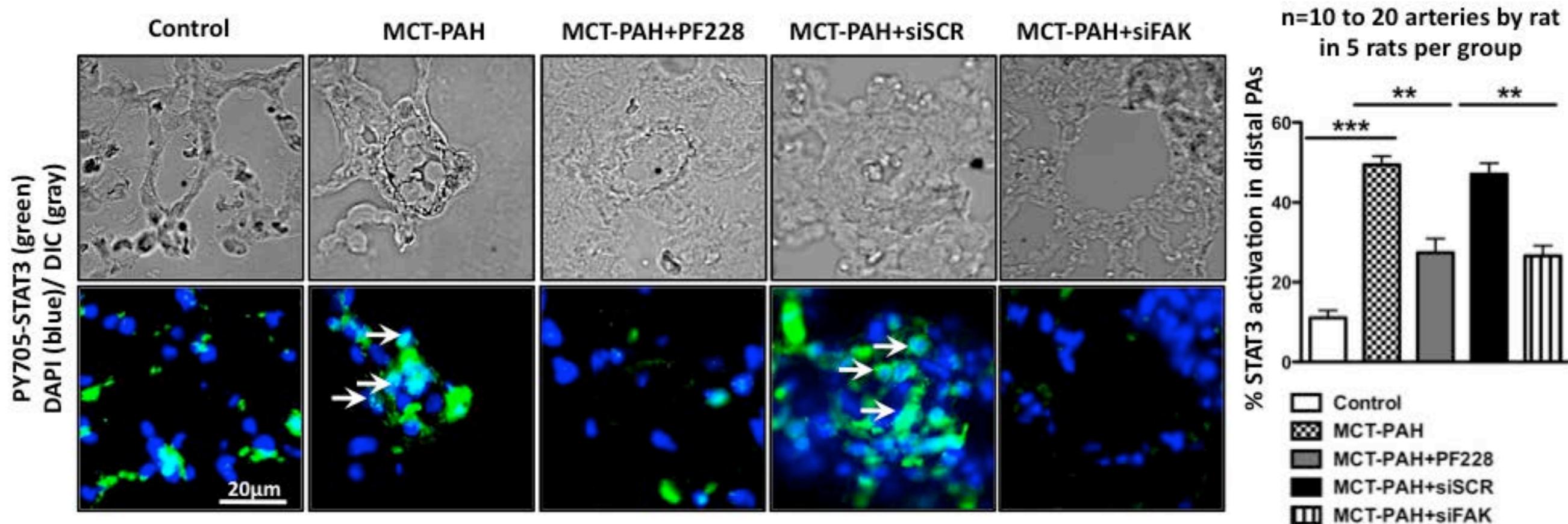


Supplemental Figure 5

A FAK inhibition decreases STAT3 activation *in vivo* in distal PAs- Western Blot on PAs.

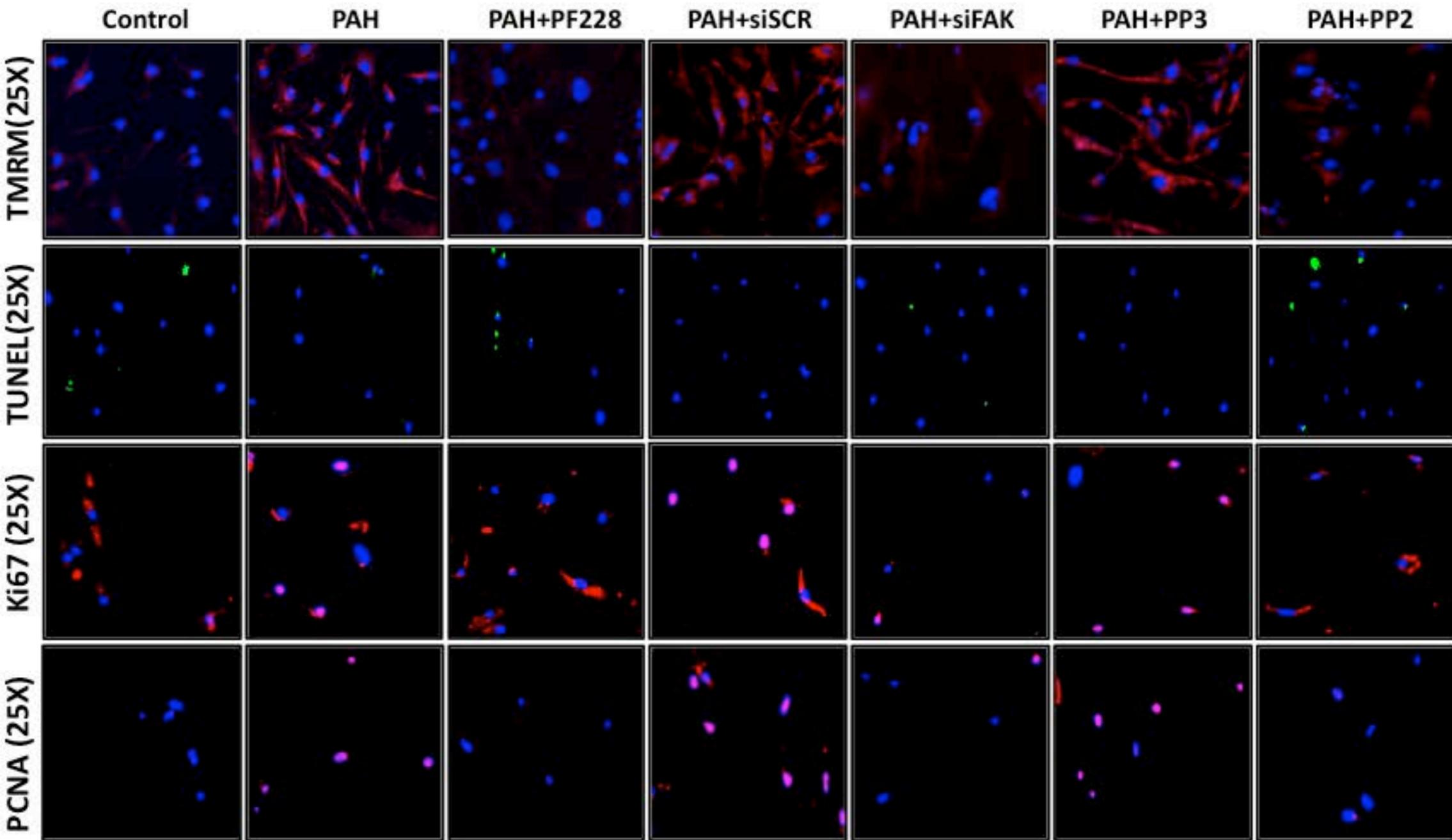


B FAK inhibition decreases STAT3 activation *in vivo* in distal PAs - Immunostaining on lung section.



Supplemental Figure 6

FAK inhibition increases PAH-PASMCs mitochondrial dependent apoptosis



Supplemental Figure 7

FAK inhibition treatments decreased PAECs proliferation in vivo.

