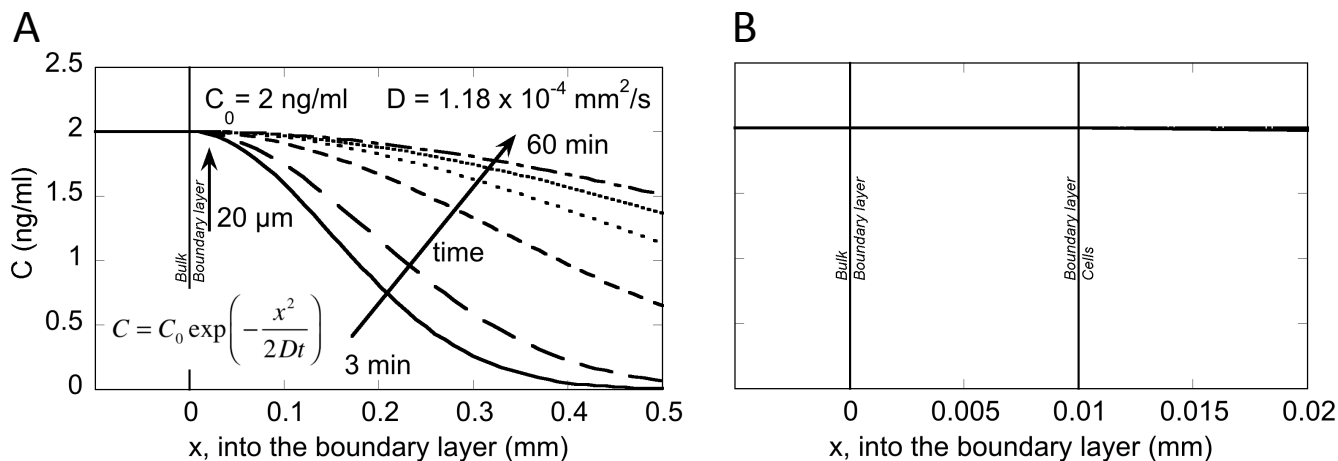
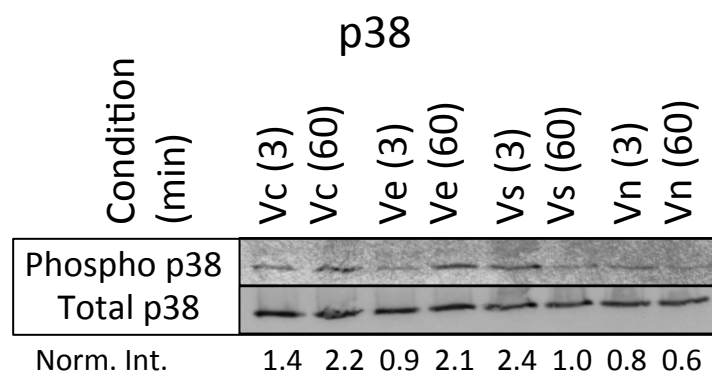


## Supplemental Figure 1



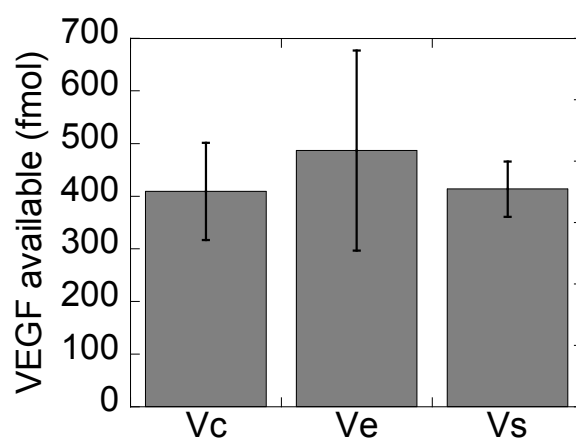
Supplemental Figure 1: Mass transfer analysis to determine appropriate soluble concentration for comparison to surface bound VEGF. (A) The plot traces the concentration of VEGF into an imaginary boundary layer of infinite thickness. Assuming the bolus solution is well-mixed, a boundary layer of  $x$  thickness would reduce the apparent VEGF concentration to the amount displayed. (B) A boundary layer thickness of 20  $\mu\text{m}$  leads to a 1% decrease in VEGF concentration at 3 minutes (shortest time point tested). The reported boundary layer thickness around cells is less than 10  $\mu\text{m}$ <sup>19</sup>. Therefore, the concentration of VEGF at the cell surface is not significantly affected by the boundary layer. This model does not account for reaction of VEGF at the cell surface. It was used to calculate an appropriate soluble concentration to match the surface concentration.

## Supplemental Figure 2



Supplemental Figure 2: p38 data run in a western blot together with all conditions at short and long time points for comparison purposes.

## Supplemental Figure 3



Supplemental Figure 3: The amount of radiolabeled VEGF available for the cells in the internalization study.