Additional File 1 -







0.1

1.0

[Rapamycin (nanomolar)]

10

20

0 -

0.01







Additional File 1 continued –

Additional File 1 – Determination of methylnaltrexone (MNTX) synergistic effects with rapamycin on inhibition of VEGF-induced human endothelial cell (EC) proliferation and migration. Panel 1: Bar graph representation of human EC assayed for VEGF (100 nM)-induced profileration (24 hours) in the presence or absence of 0.01,

6.

0.1, 1.0 or 10 nM rapamycin. Experiments were performed in triplicate. Error bars = standard deviation. Panel 2: Isobologram analysis of the combination of MNTX and rapamycin on inhibition of VEGF-induced proliferation. The dashed line indicates a zero interaction for the isobole. The shift to the left indicates a synergistic interaction. **Panel 3**: Bar graph representation of human EC assayed for VEGF (100 nM)-induced migration (24 hours) in the presence or absence of 0.01, 0.1, 1.0 or 10 nM rapamycin. Experiments were performed in triplicate. Error bars = standard deviation. Panel 4: Isobologram analysis of the combination of MNTX and rapamycin on inhibition of VEGFinduced proliferation. The dashed line indicates a zero interaction for the isobole. The shift to the left indicates a synergistic interaction. Panel 5: Bar graph representation of human EC assayed for VEGF (100 nM)-induced profileration (24 hours) in the presence or absence of 10 nM MNTX, 100 nM MNTX, 10 nM naltrexone, 0.1 nM rapamycin, 10 nM MNTX + 0.1 nM rapamycin, 100 nM MNTX + 0.1 nM rapamycin or 10 nM naloxone + 0.1 nM rapamycin. Experiments were performed in triplicate. Error bars = standard deviation. Panel 6: Bar graph representation of human EC assayed for VEGF (100 nM)induced migration (24 hours) in the presence or absence of 10 nM MNTX, 100 nM MNTX, 10 nM naltrexone, 5 nM rapamycin, 10 nM MNTX + 5 nM rapamycin, 100 nM MNTX + 5 nM rapamycin or 10 nM naloxone + 5 nM rapamycin. Experiments were performed in triplicate. Error bars = standard deviation.