

P010 The CXCR3 ligands IP-10, ITAC and MIG stimulate PI3K-dependent signalling events in intestinal myofibroblasts.

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Wound healing is a complex response that involves recruitment of inflammatory cells and the deposition of extracellular matrix by myofibroblasts. Several studies have shown that myofibroblasts express chemokines and chemokine receptors. The production of the IFN- γ inducible chemokines by human intestinal epithelium and the expression of their cognate receptor CXCR3 by intestinal myofibroblasts suggest that interactions between these cells can play a role in the wound healing process. Here we show, using primary intestinal myofibroblasts, that CXCR3 ligation with IP-10, ITAC or MIG stimulated a PI3K-dependent phosphorylation of ERK, PKB as well as the MAPK family member p38. Moreover, all phosphorylation events were found to be insensitive to the G α_i inhibitor pertussis toxin. *In vitro* assays also indicate activation of the class II PI3K isoforms in response to IP-10 and MIG. Interestingly, the CXCR3 ligands failed to initiate elevation of intracellular calcium levels. Finally, all chemokines induce stress fiber formation in intestinal myofibroblasts. This event was abrogated by the ROCK inhibitor Y27632 and Lantrunculin B and significantly attenuated by the PI3K inhibitors LY294002 and Wortmannin.