

Fidgetin-like 2 as a target to enhance wound healing

Detailed description of invention

Wound healing as an intricate multi-stage process that relies heavily on the delivery of new cells to the wound zone. Two key elements of the wound healing response are fibroplasia and epithelialization when fibroblasts and epithelial cells, respectively, enter the wound to form a protective barrier from the external environment. This is stimulated by cell proliferation and migration from the wound edge. The identification of agents that elevate these activities to increase the rate at which cells invade and close a wound would represent a major advance in wound healing therapeutics. Ideally, this would be an agent applied topically that stimulates the production and migration of fibroblasts and wound edge epithelial cells. Our unpublished analyses of the novel microtubule regulator in humans, Fidgetin-like 2, indicate a highly promising target for the development of such a therapy. We know that, at present, no papers have been published on human Fidgetin-like 2, but the mouse homologue has been reported as highly expressed in most tissues (with the exception of testes).