

Wound Healing by MG53 Protein - Mediated Cell Membrane Repair

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ABSTRACT

Cell membrane repair is an important aspect of physiology and disruption of this process can result in pathophysiology in a number of different tissues repair including wound healing, chronic ulcer and scarring. Recent studies identified a novel tripartite motif family protein, MG53, as an essential component of the cell membrane repair machinery. Mitsugumin 53 (MG53), a muscle-specific TRIM family protein, is vital element of the cell membrane repair. This human gene product can regulate wound healing and may control scarring in people recovering from severe injuries and damages to certain internal organs. The protein, MG53, release throughout the bloodstream and helps the body fix skin, heart, and other organs injuries without causing scars. Application of mentioned protein, as new biotechnological bioproduct, can assist the open wounds healing and decrease recovery time after surgery and reduce the spread of infections.

Keywords: Wound Healing, MG53, Cell Membrane, Repair