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(54) Title: LIQUID BUFFERED GDF-5 FORMULATIONS

FIGURES

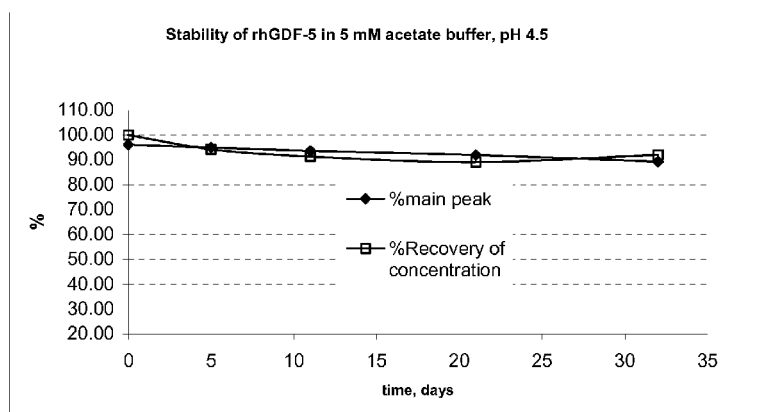


Figure 1. Stability of 0.1 mg/ml rhGDF-5 in 5 mM acetate buffer solution at pH 4.5 after 32 days storage at 37 degrees Celsius, as evidenced by HPLC.

(57) Abstract: Improved formulations and methods are provided for stabilizing a solution of bone morphogenetic protein. The compositions comprise an acetate buffered solution of GDF-5 and other excipients wherein the solution has a pH of from about 4.2 to about 5.3, thereby providing for a biologically isotonic solution having improved stability of the GDF-5 protein during storage, handling, and use.