

First generation fibrinolytic enzyme from thermophilic *Streptomyces* sp

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Cardiovascular diseases are the major mortality world wide. Fibrinolytic enzyme has given key attention for the therapy as clot busting role to avoid surgical procedures. There are several thrombolytic agents are discovered from various sources. These agents has drawbacks such as indirect fibrin specificity, breeding complication and allergic nature, expensive etc. e.g. urokinase also over expressed and used in pure form to increase its activity but second generation recombinant form still has limitations. So protein engineering aspects used for designing of third generation molecules for its specificity, less breeding complication etc. Here fibrinolytic enzyme isolated and purified from thermophilic *Streptomyces* sp. is potent enzyme which shows fibrin specific nature, breeding complication will be rule out because the enzyme does not act on any plasma proteins, non-allergic in nature etc.

The molecules is purified and tested for purity. The clot lytic products are analysed for using analytic HPLC, and D-dimers are also semiquantitatively measured. The standard form of enzyme used as a control for comparison. The *in vitro* clot lytic activity tested repeatedly for its reproducibility and evaluation.

Biography

Dr Ratnakar Chitte received his Ph.D. degree in Microbiology 2002 from Agharkar Research Institute which is affiliated to Pune University Pune India. He received best Ph.D. thesis award for 2002 from Rotary club of Pune as well Scientist of the year in 2002. He also received the Young Scientist travel fellowship from IUBMB, UK in 2000 for presentation of work in International conference. Chitte did his post doc from Brookhaven National Lab New York and University of Pittsburgh USA. He returned back to India and joined as Research Scientist at ARI in 2006.

He has appointed as Scientist in 2010 at ARI Pune. He has also published many International and National paper in reputed journals. He has also presented his work in National and International conferences as a invited speaker. He has also given key note address speech at Biotechnology Dept. at BAMU University, Osmanabad India. He is also reviewer of several International Journals. He has more than 10 years research experience after doctoral degree.

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