

Invention relates to biotechnology, specifically to the production of proteolytic enzymes with fibrinogenolytic activity via microbial synthesis.

Proposed producer strain, *Bacillus licheniformis* IMB B-8008, allows for production of preparation with high fibrinogenolytic activity (8.6 units/mg of protein) from culture broth.

Enzyme preparation obtained from culture broth of *B. licheniformis* IMB B-8008 is capable of effectively degrading fibrinogen at medium pH values ranging from 5.0 to 9.0, with maximum activity at pH 8.0. Enzyme is stable at the specified pH values. Enzyme preparation effectively hydrolyzes fibrinogen at 37 °C.

Enzyme preparation suitable for use in medical and technological processes can be obtained from deep-liquid culture of proposed producer.