

Citra Wulansari, 2007, Isolasi dan Pemurnian Parsial Enzim Hyaluronidase Lintah. Skripsi dibawah bimbingan: Drs. Ali Rohman, M.Si dan Drs. Sofijan Hadi, M.Kes. Jurusan Kimia Fakultas Matematika dan Ilmu Pengetahuan Alam. Universitas Airlangga.

ABSTRAK

Hyaluronidase lintah merupakan endo- β -glukuronidase yang spesifik mendegradasi hyaluronan menghasilkan unit-unit tetrasakarida sebagai produk utama. Pada penelitian ini telah dilakukan isolasi dan pemurnian parsial enzim hyaluronidase dari lintah. Enzim hyaluronidase diisolasi dari bagian anterior lintah dan ditentukan aktivitasnya menggunakan metode turbidimetri sebesar 158,1 unit. Ekstrak kasar hyaluronidase lintah diendapkan dengan amonium sulfat pada 5% hingga 100% kejenuhan amonium sulfat berdasarkan tabel pengendapan amonium sulfat (Scopes, 1982). Aktivitas hyaluronidase lintah tertinggi terdapat pada fraksi hasil pengendapan pada 95% kejenuhan amonium sulfat sebesar 160,4 unit. Berat molekul enzim hyaluronidase lintah ditentukan dengan elektroforesis SDS-PAGE dan analisis zimogram sekitar 50 KDa.

Kata kunci: hyaluronidase lintah, pengendapan amonium sulfat, turbidimetri

Citra Wulansari, 2007, Isolation and Partial Purification Leech Hyaluronidase Enzyme. The script is under guidance by Drs. Ali Rohman, M.Si and Drs. Sofijan Hadi, M.Kes. Department of Chemistry and Mathematics Natural Sciences Faculty. Airlangga University.

ABSTRACT

Leech hyaluronidase which is an endo- β -glucuronidase, spesifically cleave hyaluronan with tetrasaccharides as the main product. In this research, had been done isolation and partial purification of leech hyaluronidase. Hyaluronidase was isolated from anterior part of leech and its activity was determined with turbidimetric methode that was 158.1 unit. Crude extract of leech hyaluronidase precipitated with ammonium sulfate in 5% until 100% saturation of ammonium sulfate according to ammonium sulfate precipitation table (Scopes, 1982). The highest activity of leech hyaluronidase occur in fraction from precipitation in 95% saturation of ammonium sulfate that was 160,4 unit. The molecular weight of this enzyme was determined by SDS-PAGE electrophoresis and zymography analysis that was about 50 KDa.

Key word: leech hyaluronidase, ammonium sulfate precipitation, turbidimetric