

## **BAB V**

### **PENUTUP**

#### **V.1 Kesimpulan**

Kesimpulan yang dapat diambil dari temuan dan diskusi penelitian ini adalah sebagai berikut:

1. Potensi bakteri halofilik *Bacillus clausii* J1G-0%B dalam menghasilkan protease ditunjukkan oleh terbentuknya zona bening pada skrining protease dan nilai Indeks Proteolitik (IP) 2.
2. Protease halostabil yang dihasilkan oleh bakteri halofilik *Bacillus clausii* J1G-0%B memiliki aktivitas protease sebesar 11,785 U/mL, kadar protein sebesar 0,018 mg/mL, aktivitas spesifik sebesar 654,737 U/mg, dan kemurnian sebesar 18,576 kali.
3. Protease halostabil yang didapatkan mempunyai pH optimal 7; suhu optimal 50°C; kadar NaCl optimal 10%;  $K_M$  sebesar 0,164 mg/mL substrat;  $V_{maks} = 13,182 \mu\text{mol/mL}\cdot\text{menit}$ ;  $k_i$  sebesar  $0,0031 \text{ menit}^{-1}$ ;  $t_{1/2}$  sebesar 223,548 menit; dan  $\Delta G_i$  sebesar 105,84 kJ/mol.
4. Protease halostabil yang dihasilkan oleh bakteri halofilik *Bacillus clausii* J1G-0%B termasuk dalam jenis metaloprotease.

#### **V.2 Saran**

Berdasarkan penelitian yang telah dilakukan, maka disarankan untuk melakukan eksplorasi lanjutan dari protease halostabil yang dihasilkan oleh bakteri halofilik *Bacillus clausii* J1G-0%B dan melakukan penelitian tentang aplikasi atau penerapannya dalam bidang industri, seperti pada industri pengolahan limbah atau bioremediasi.

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