

## BAB 5

### KESIMPULAN DAN SARAN

#### 5.1 Kesimpulan

Berdasarkan hasil penelitian penambatan molekul terhadap 14 senyawa kandungan Cinamomi Cortex dengan epitop *Respiratory Syncytial Virus* (RSV) memberikan hasil :

1. Terdapat 4 senyawa ligan dari kandungan Cinnamomi Cortex yang memiliki afinitas ikatan ( $\Delta G$ ) lebih rendah yaitu pada senyawa (+)-epikatekin  $\Delta G$  -5,77 kkal/mol, beta-kariofilen memiliki nilai  $\Delta G$  -5,45 kkal/mol, (+)-katekin memiliki nilai  $\Delta G$  -5,17 kkal/mol, (-)-katekin memiliki  $\Delta G$  -5,09 kkal/mol.
2. Terdapat 4 senyawa ligan dari kandungan Cinnamomi Cortex yang memiliki konstanta inhibisi ( $K_i$ ) yang lebih rendah yaitu pada senyawa (+)-epikatekin 59,43  $\mu M$ , beta-kariofilen 100,45  $\mu M$ , (-)-katekin 162,53  $\mu M$ , (+)-katekin 186,98  $\mu M$ .
3. Terdapat interaksi ikatan hidrogen pada residu asam amino THR108 dengan gugus hidroksil pada ketiga senyawa (+)-epikatekin, (+)-katekin, (-)-katekin. Interaksi ikatan hidrofobik pada residu asam amino PRO149 yang memiliki c alkil yang berikatan dengan c rangkap pada keempat senyawa (+)-epikatekin, beta-kariofilen, (+)-katekin, (-)-katekin.

## **5.2 Saran**

1. Dalam penelitian ini dapat dilanjutkan studi molekular dengan simulasi dinamika
2. Dapat dilanjutkan dengan uji *in vitro* dan *in vivo* untuk mengetahui aktivitas senyawa hasil analisis penambatan molekul yang berpotensi sebagai imunomodulator.

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