

Dari table 6 kita dapat melihat rata-rata akurasi masing-masing data set sebesar 0.9826 data latih sedangkan untuk data uji sebesar 0.9863. Kernel terbaik untuk memprediksi turunan senyawa DPP-IV adalah kernel RBF dengan akurasi sebesar 0.9869, *precision* 0.9745, *recall* 1.0, dan *F1-Score* 0.9871 hasil dari data uji. Di urutan selanjutnya adalah kernel poly lalu di ikuti oleh kernel linear dengan akurasi sebesar 0.9851, *precision* 0.9744, *recall* 0.9963, dan *F1-Score* 0.9853. Berdasarkan hasil dari data latih dan data uji, setiap kernel menunjukkan konsistensi dalam memprediksi senyawa turunan DPP-IV

#### D. Kesimpulan

Senyawa inhibitor DPP-IV diketahui membawa kandidat obat anti diabetes baru menurut beberapa studi QSAR. Pada penelitian ini tahap seleksi fitur dilakukan dengan menghitung 100 korelasi tertinggi masing-masing deskriptor terhadap pIC50 menggunakan PCC dan menggunakan metode Algoritma Genetika (AG) untuk mendapatkan kombinasi deskriptor terbaik dari dataset tersebut. Model prediksi berhasil dibangun menggunakan metode AG dan SVM. AG berhasil mendapatkan kombinasi fitur yang baik dan SVM dapat digunakan untuk memprediksi aktifitas inhibitor DPP-IV dengan akurasi rata-rata sebesar 0.983 untuk data latih dan 0.986 untuk data uji. Hasil juga menunjukkan bahwa kernel RBF merupakan kernel terbaik dalam memprediksi senyawa DPP-IV dengan akurasi sebesar 0.9869, *precision* 0.9745, *recall* 1.0, dan *F1-Score* 0.9871.

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