

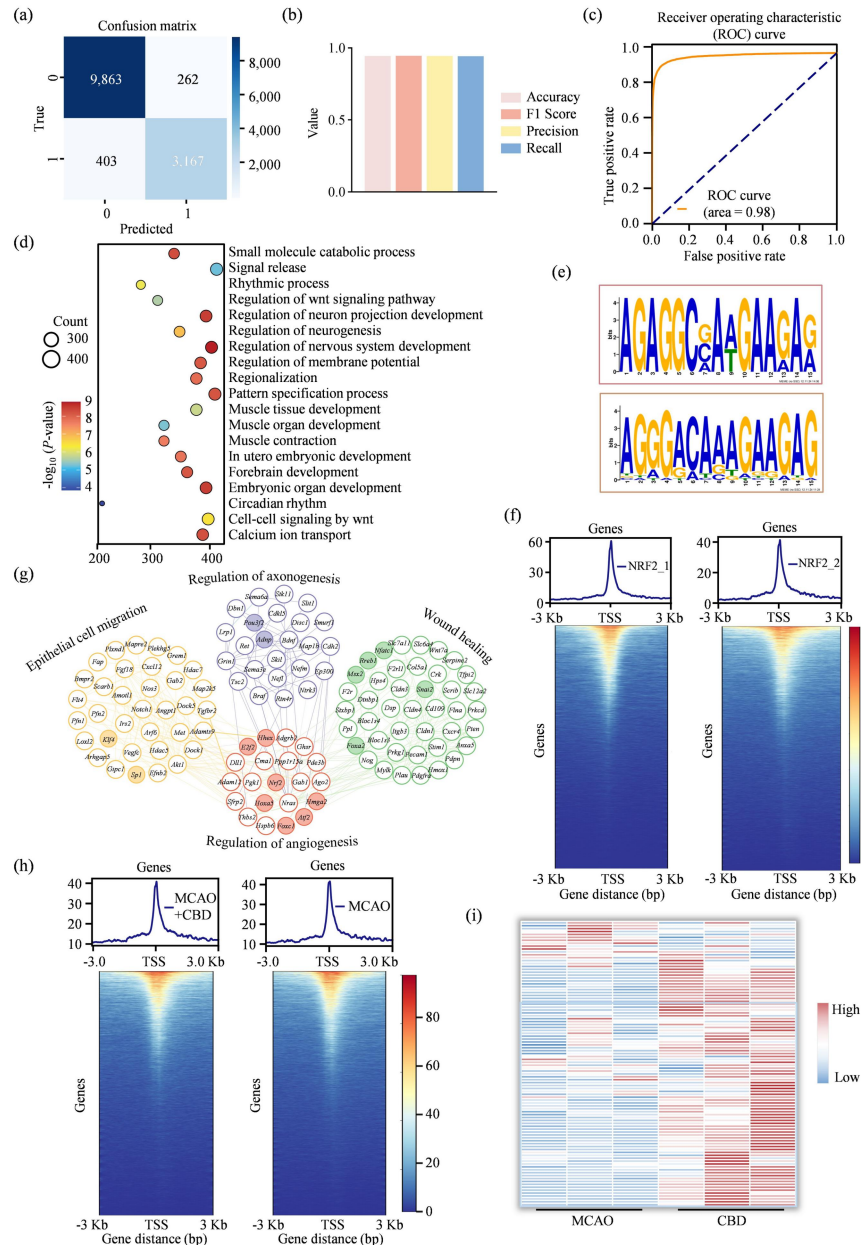


Fig. S10. Deep learning combined with CUT&Tag and RNA-seq was used to screen the downstream target genes of NRF2 activated by CBD. a. Confusion matrices of DeepD2V for predicting NRF2 downstream genes on the test set. b. Test-set performance of the DeepD2V. c. ROC curves on the test set of DeepD2V d. GO enrichment of genes predicted to bind by NRF2 by deep learning model. e. Comparison of motifs predicted by deep learning with motifs measured by CUT&Tag experiments for NRF2. f. Peak distribution of NRF2-binding sites in the brains of mice in sham group obtained by CUT&Tag sequencing. g. GO enrichment of genes regulated by NRF2 in the mouse brain. h. Peak distribution of NRF2-binding sites in the brains of mice in MCAO and MCAO + CBD groups obtained by CUT&Tag sequencing. i. Heat maps of RNA-seq of mice in the MCAO and MCAO + CBD groups.