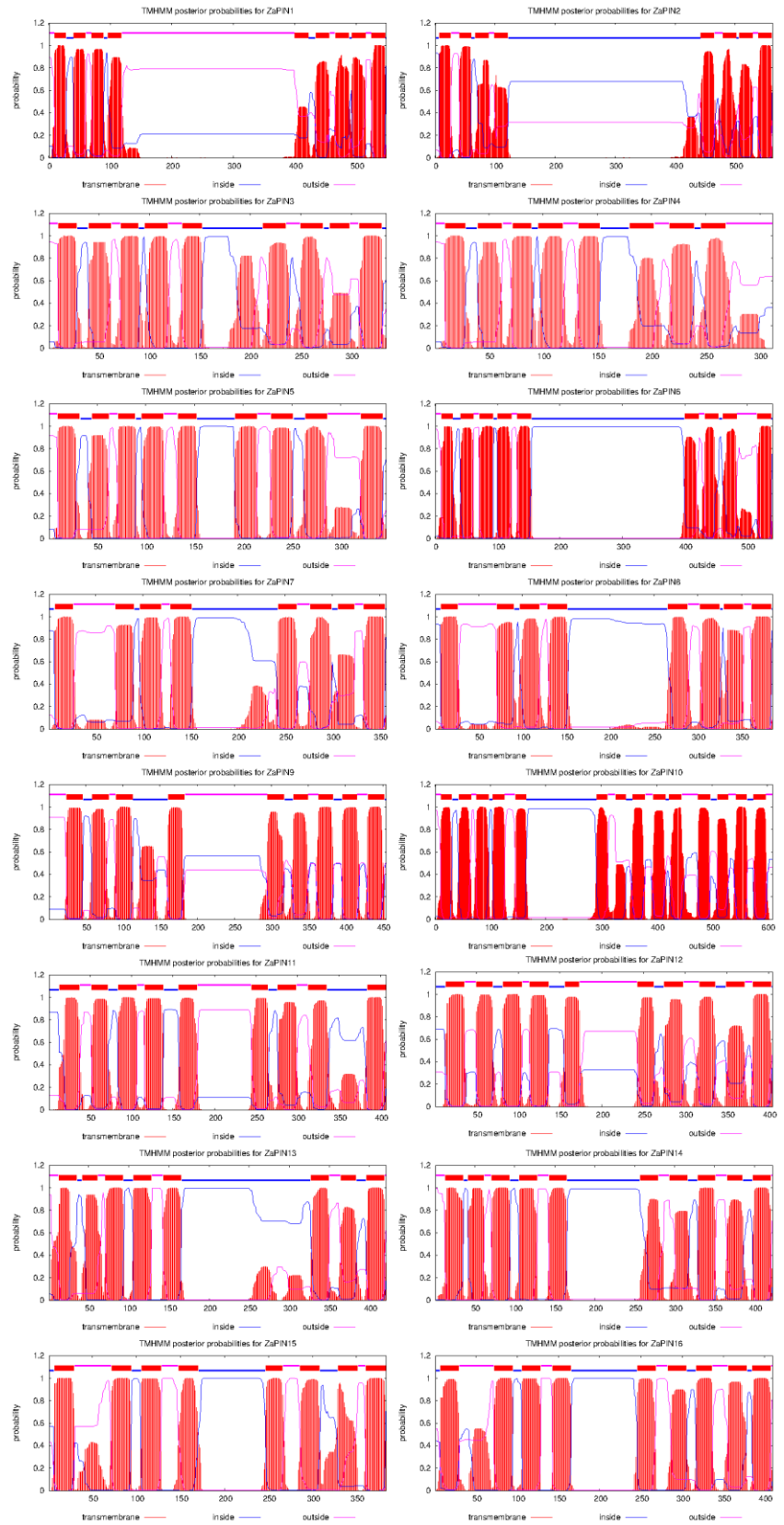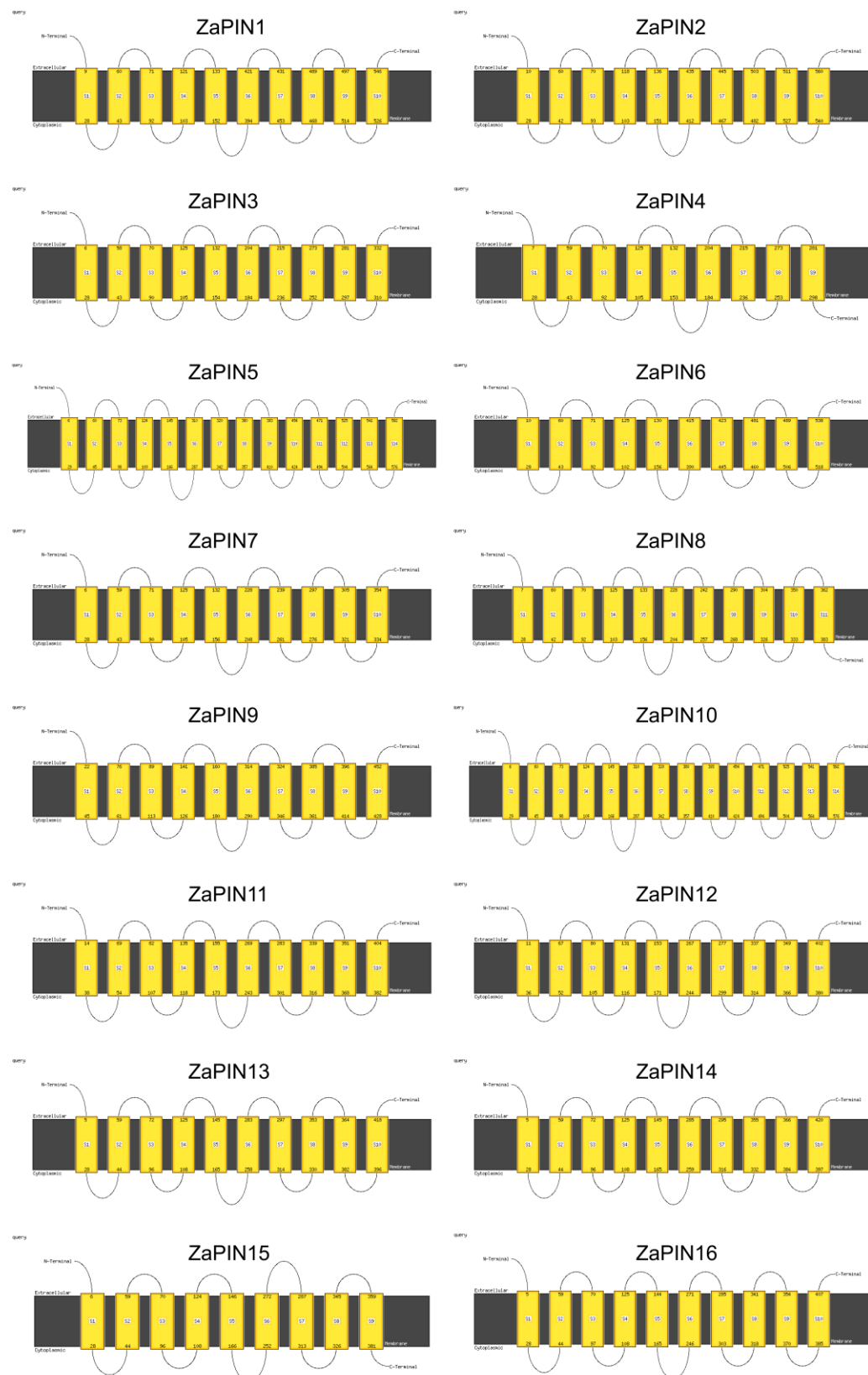## Supplementary Materials

Figure S1. Prediction of transmembrane structure character of ZaPINs.
The red peak represents the transmembrane domain of the protein.

Figure S2. Predicted TM helix of ZaPINs. The cytoplasmic and extracellular sides of the membrane are labeled, and the start and end of each transmembrane helix are indicated with a number.

Table S1. PIN gene of *Citrus sinensis* renamed.

Gene name	Gene ID
CsPIN1	*Cs_ont_2g012470.2*
CsPIN2	*Cs_ont_1g029550.1*
CsPIN3	*Cs_ont_6g012520.3*
CsPIN4	*Cs_ont_4g013510.1*
CsPIN5	*Cs_ont_7g019650.1*
CsPIN6	*Cs_ont_3g000440.1*
CsPIN7	*Cs_ont_6g001790.1*
CsPIN8	*Cs_ont_6g023470.1*
CsPIN9	*Cs_ont_6g023600.1*
CsPIN10	*Cs_ont_4g025100.1*
CsPIN11	*Cs_ont_6g023630.1*
CsPIN12	*Cs_ont_3g007910.1*
CsPIN13	*Cs_ont_6g004690.1*