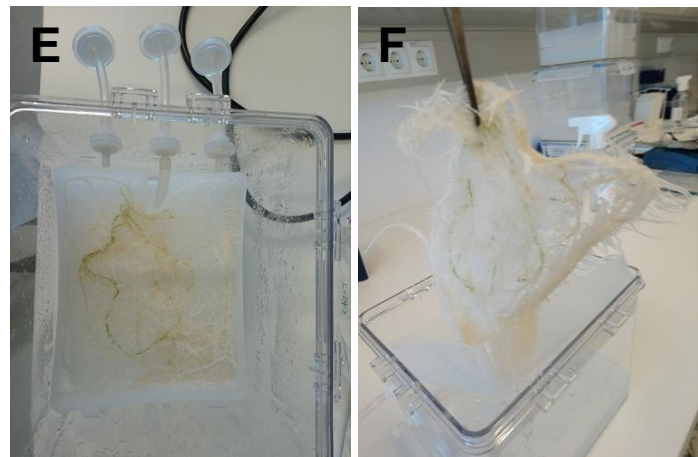
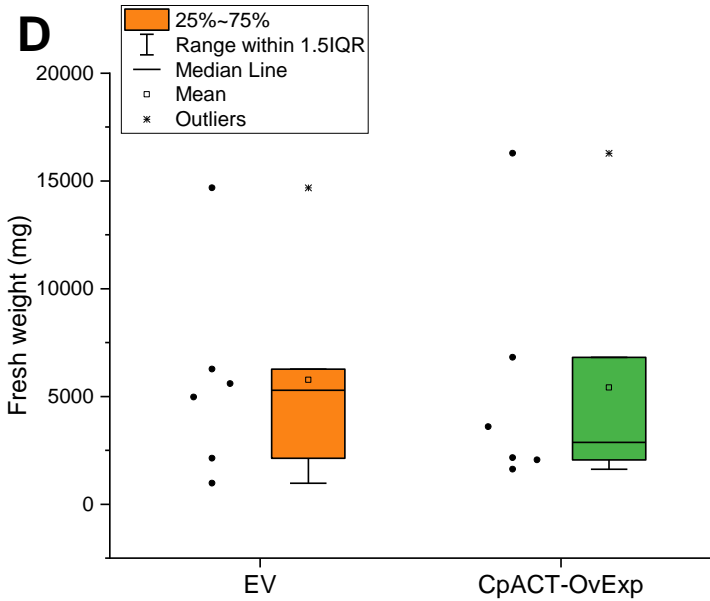


Fig. S1

Species	Tissue	Number	Transgenic hairy roots generated	Transformation efficiency
<i>Iberis umbellata</i>	Stem	26	2	7,69% (succeeded once)
<i>Iberis umbellata</i>	Leaf	16	1	6,25% (succeeded once)
<i>Cucurbita pepo</i>	Cotyledon	20	14 \pm 4,32	46,66 \pm 14,40%



Construct	Initial fresh weight (mg)	Final Fresh weight (mg)	Weight gain fold	Final dry weight (%)
EV	848.98±41.68	3990±2306	4.78±2.75	9.76±1.6%
CpACT-OvExp	Not measured	3248±2129	Not measured	10.42±2.01%

Fig. S2

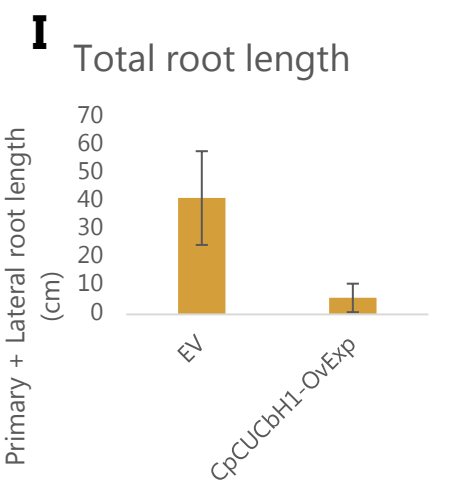
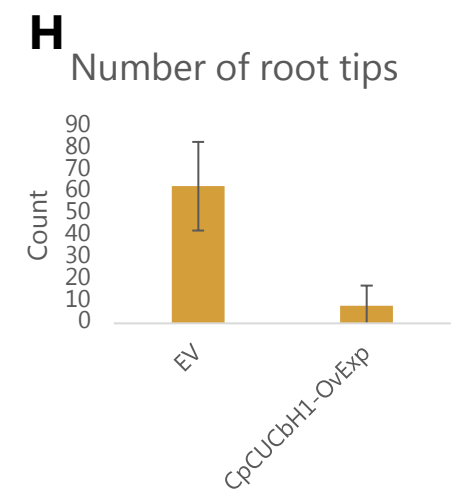
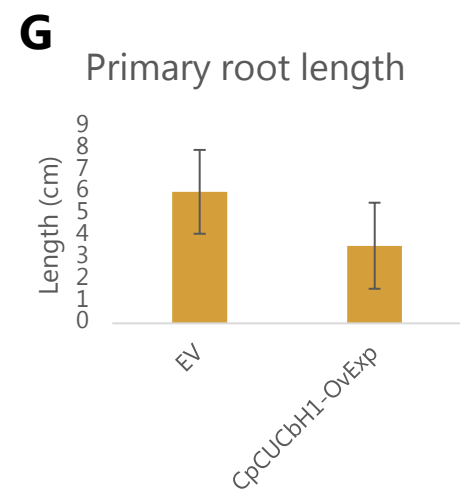
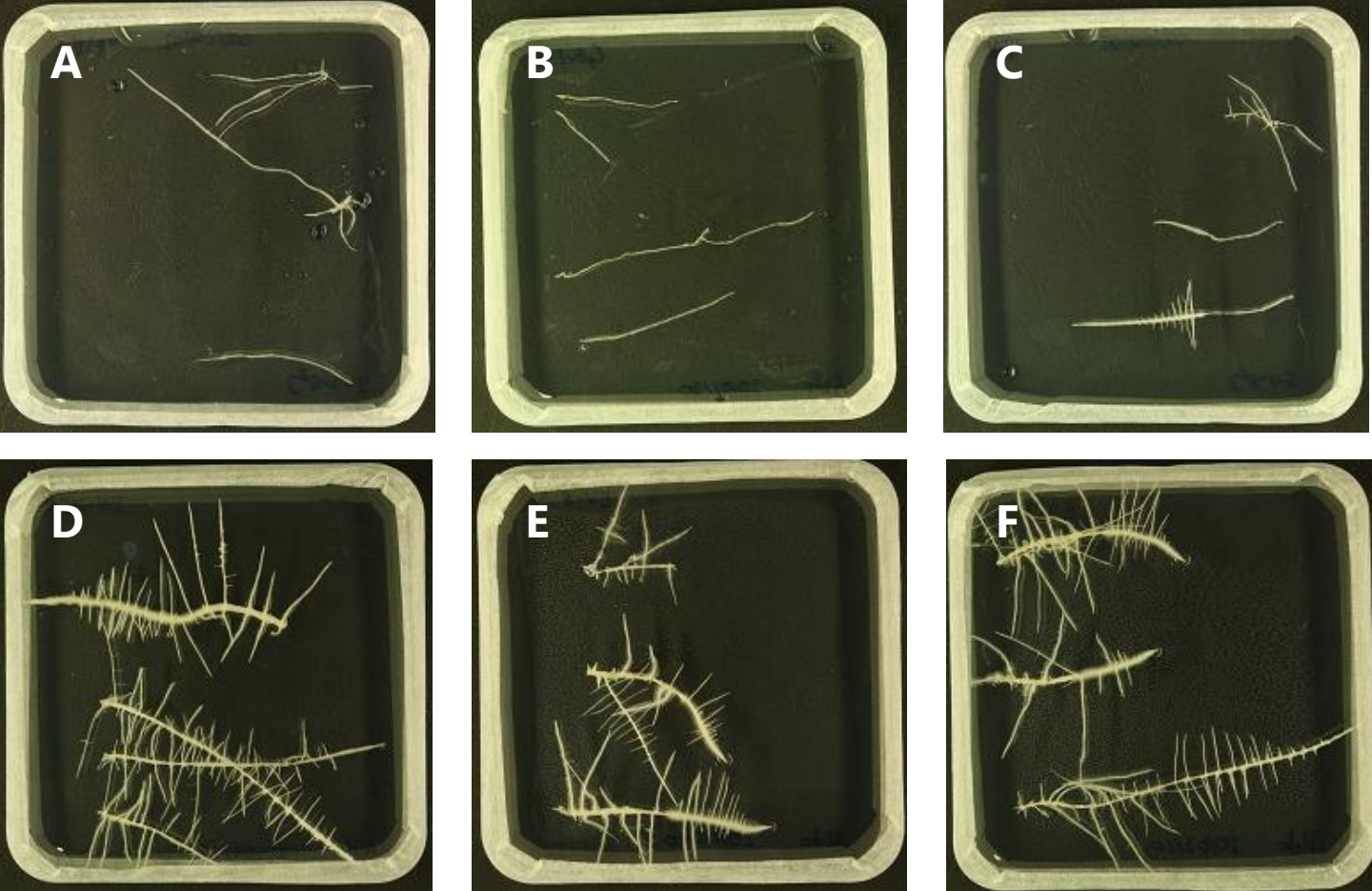


Fig. S3

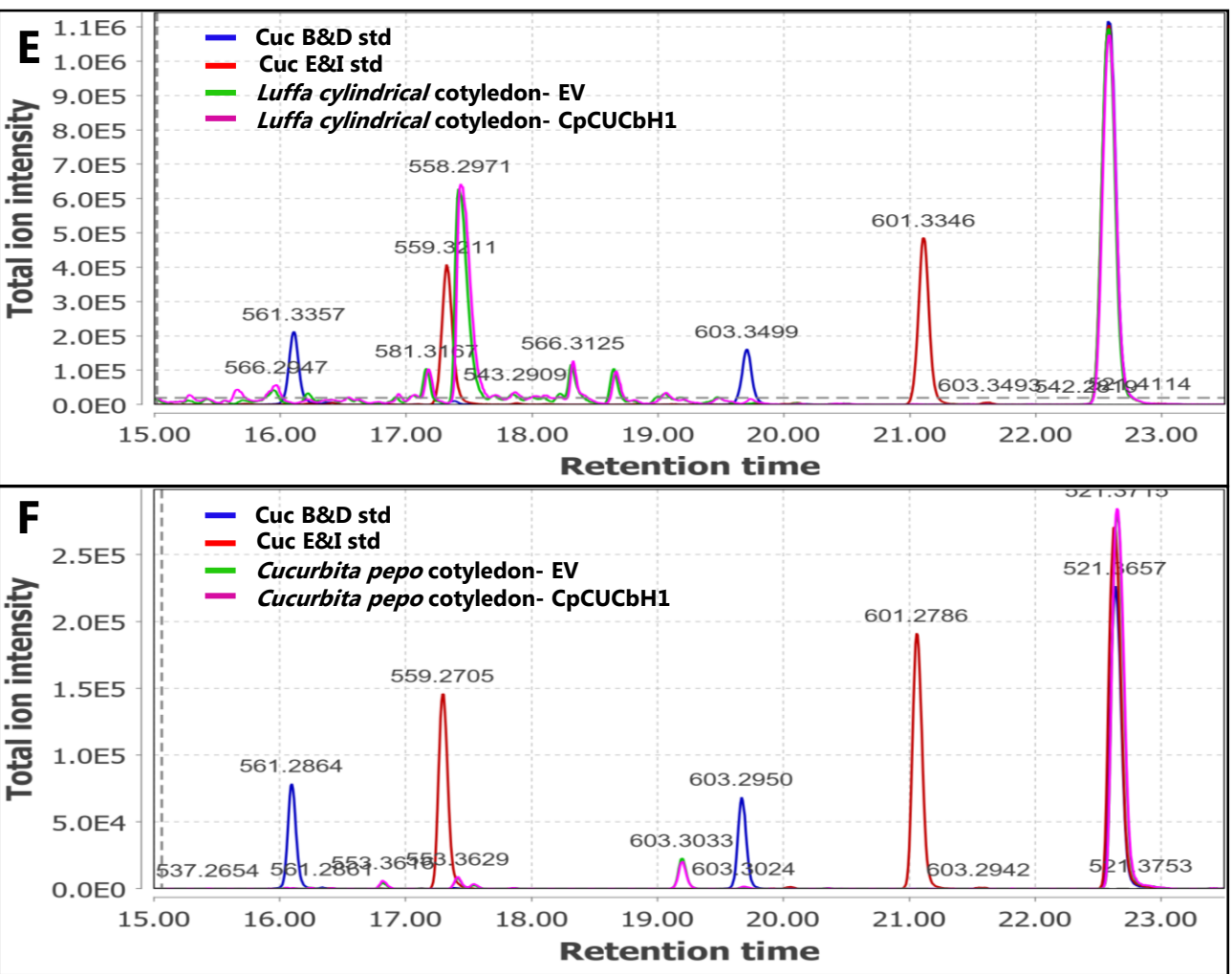
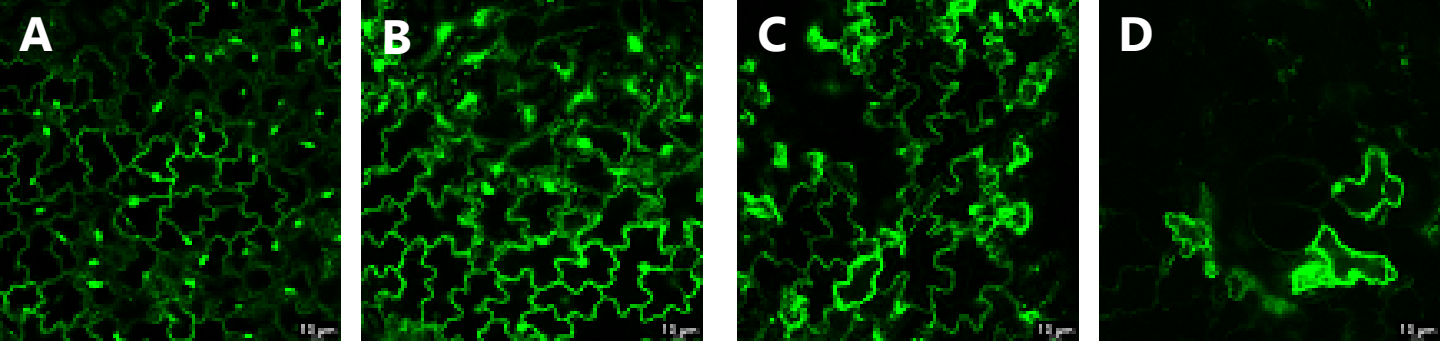
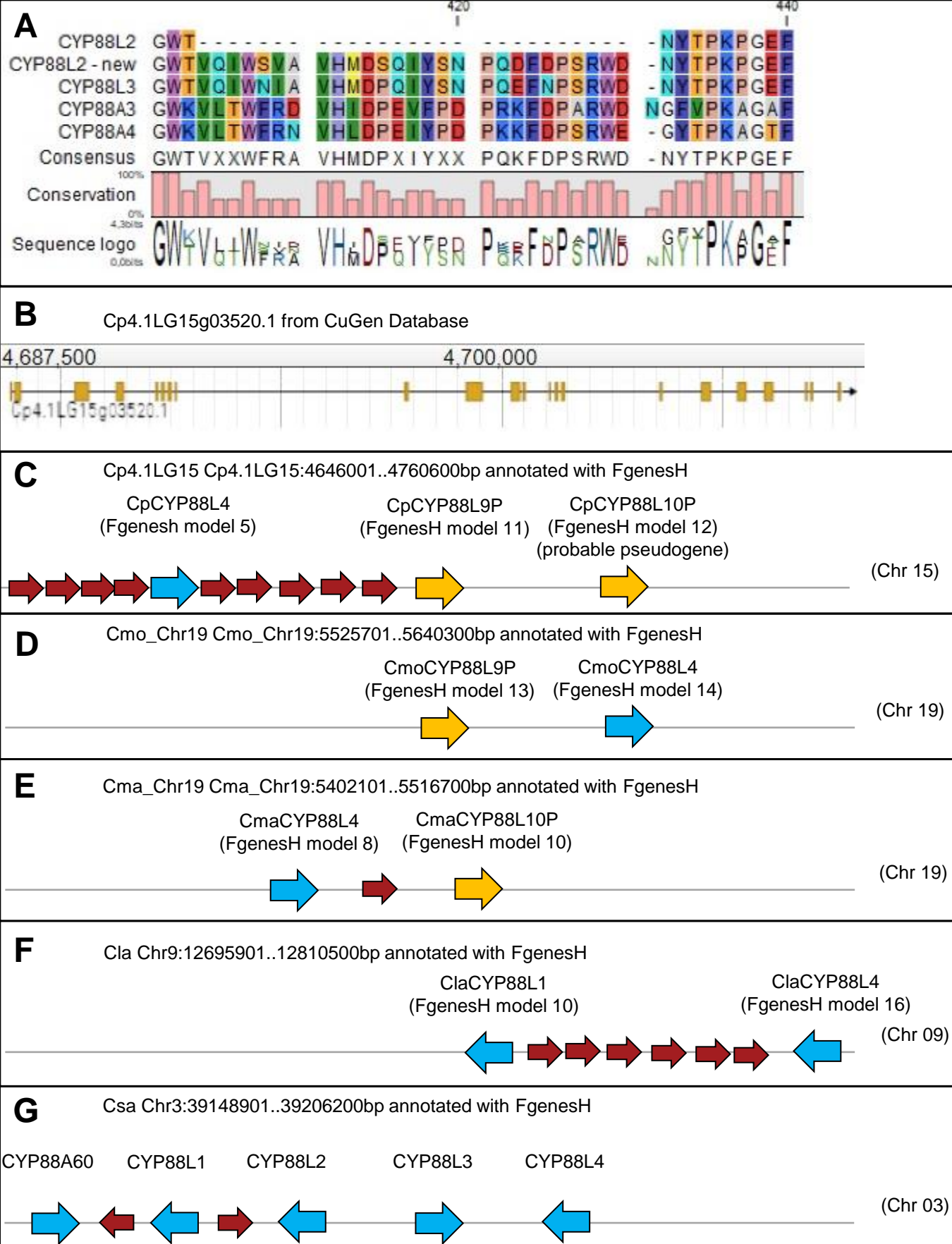
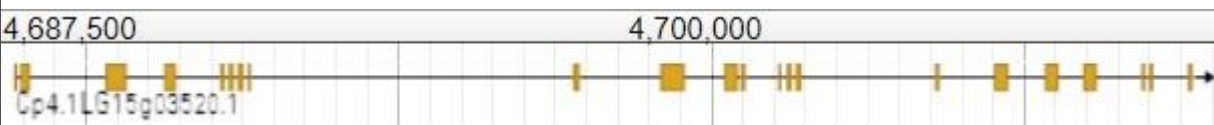


Fig. S4



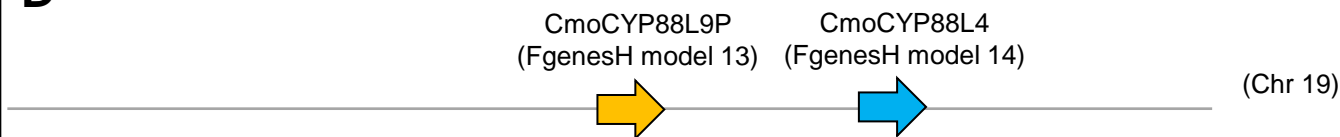
B Cp4.1LG15g03520.1 from CuGen Database



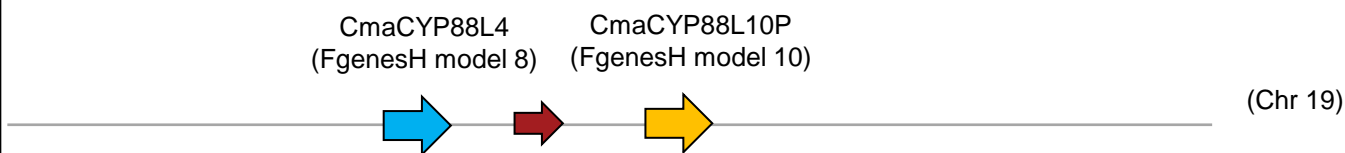
C Cp4.1LG15 Cp4.1LG15:4646001..4760600bp annotated with FgenesH



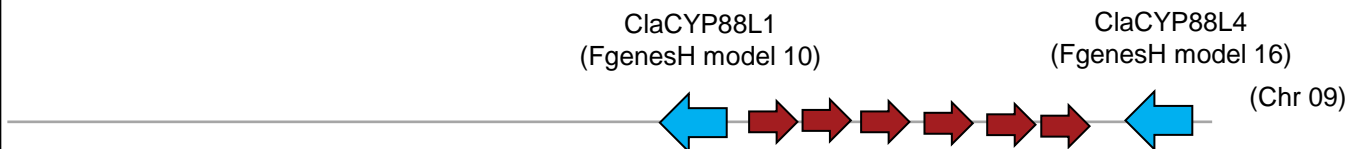
D Cmo_Ch19 Cmo_Ch19:5525701..5640300bp annotated with FgenesH



E Cma_Ch19 Cma_Ch19:5402101..5516700bp annotated with FgenesH



F Cla Chr9:12695901..12810500bp annotated with FgenesH



G Csa Chr3:39148901..39206200bp annotated with FgenesH



Fig. S5

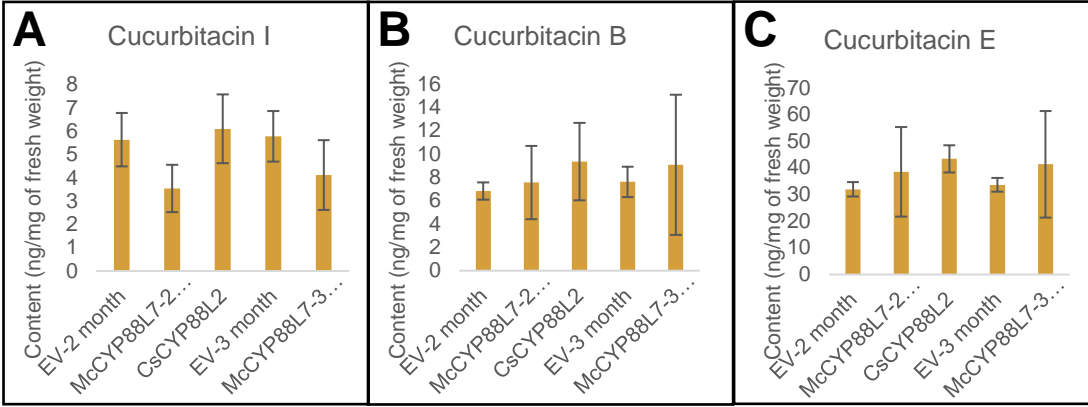


Fig. S6

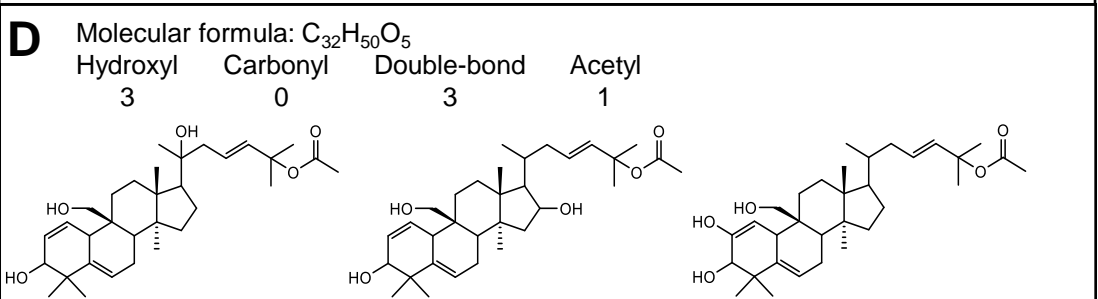
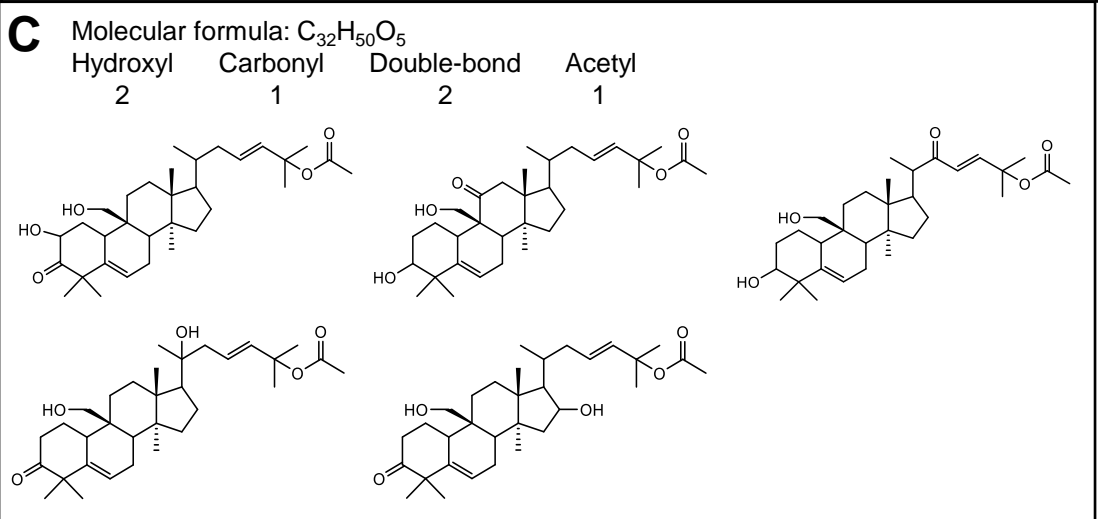
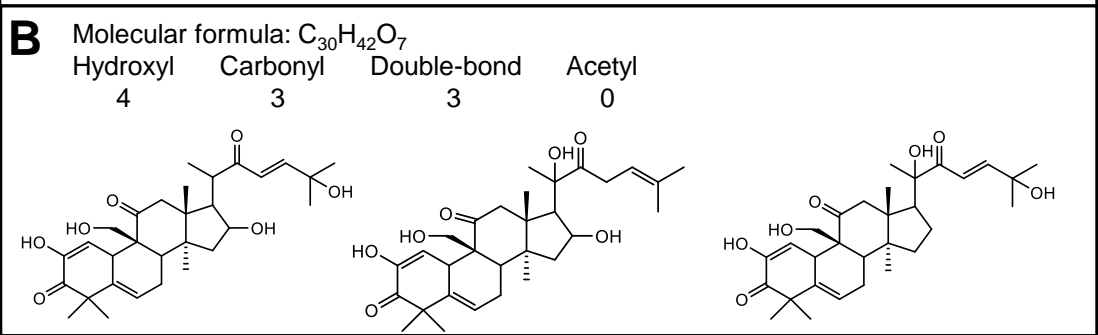
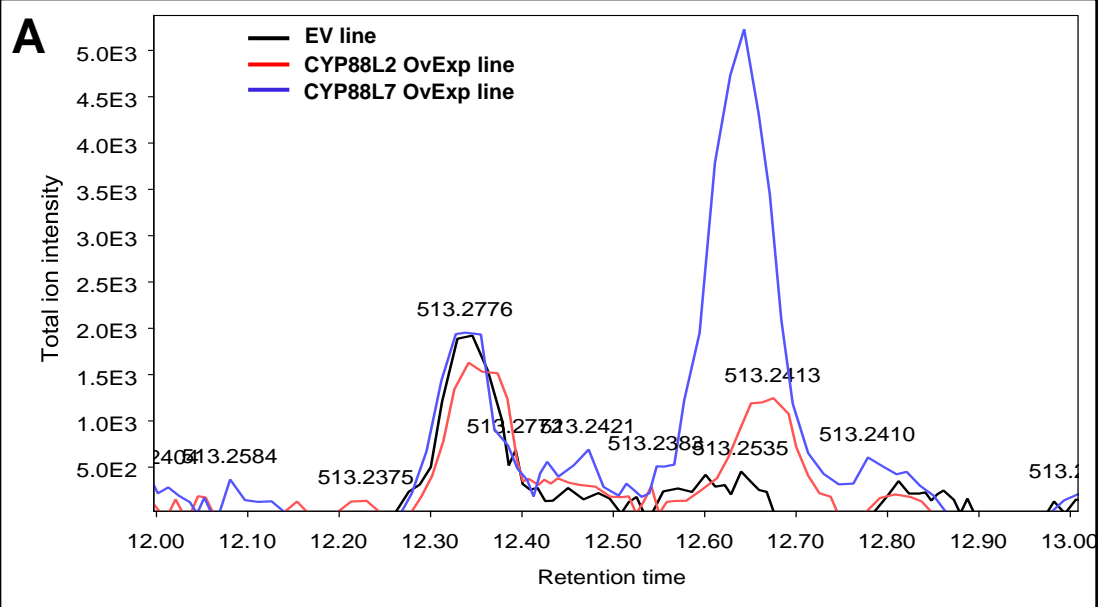


Fig. S7

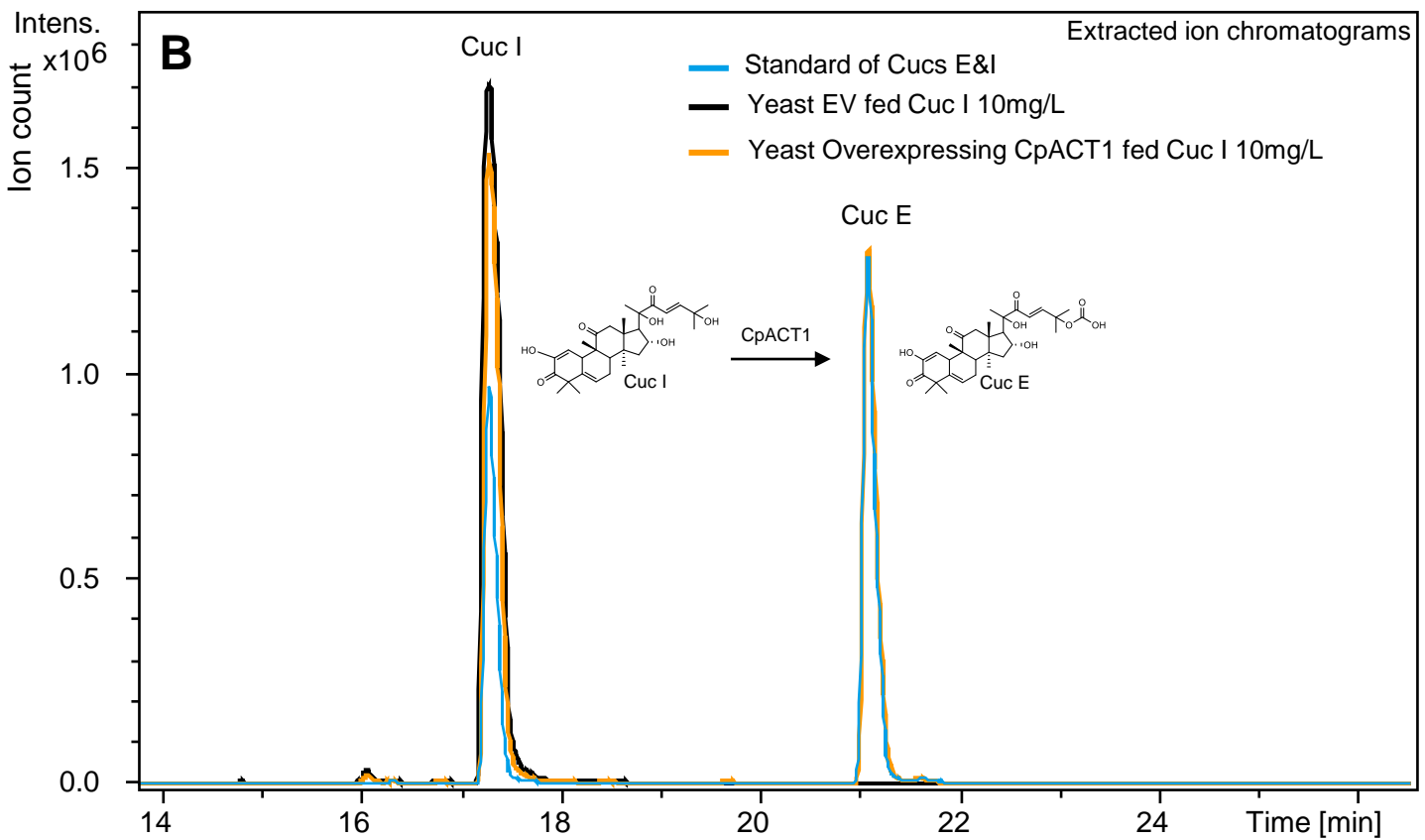
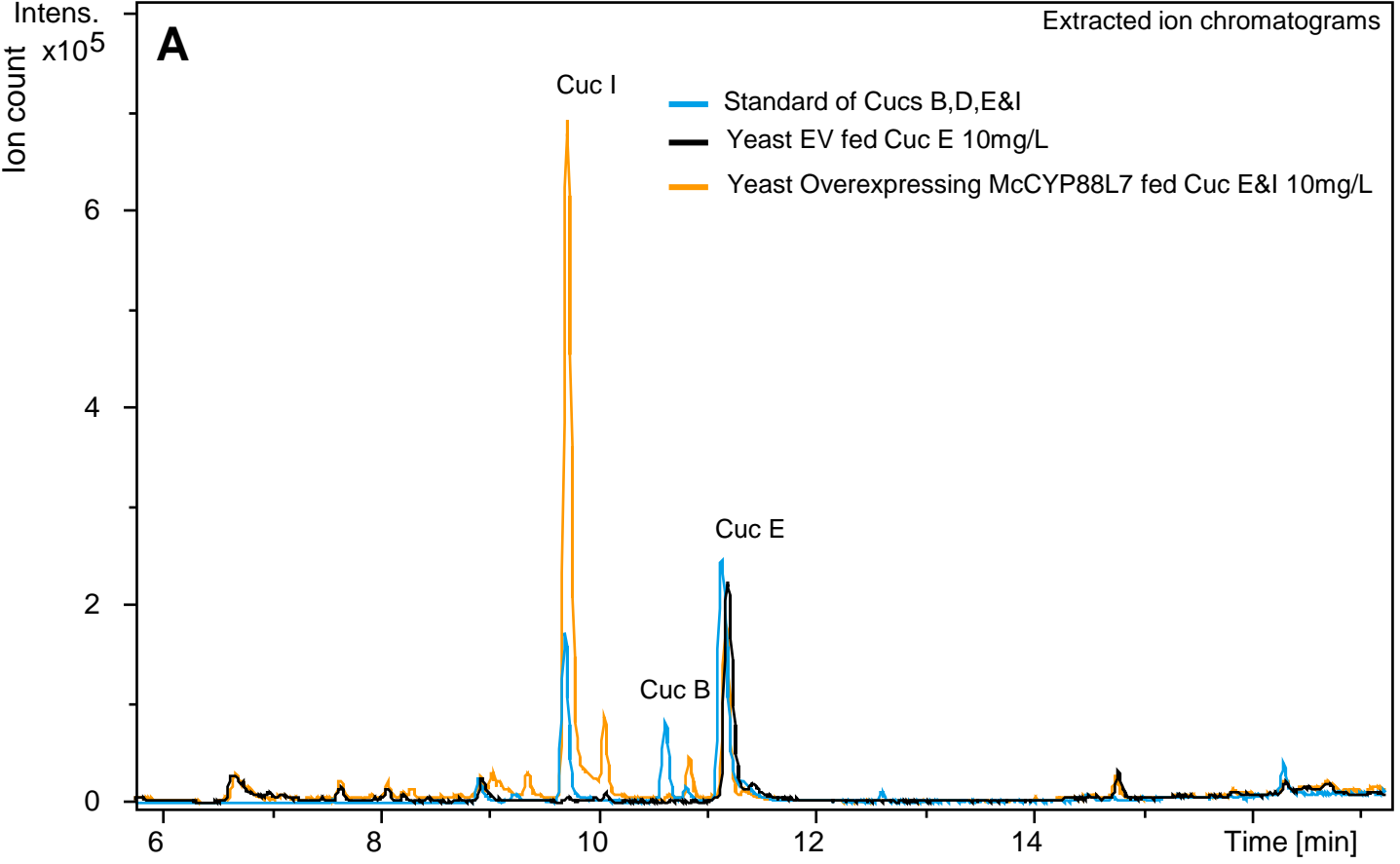


Fig. S8