

FIG. 1A

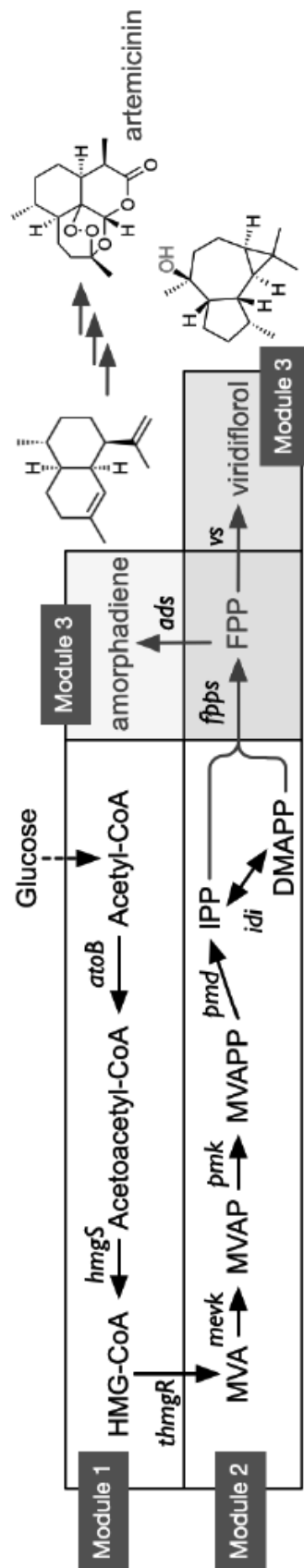


FIG. 1B

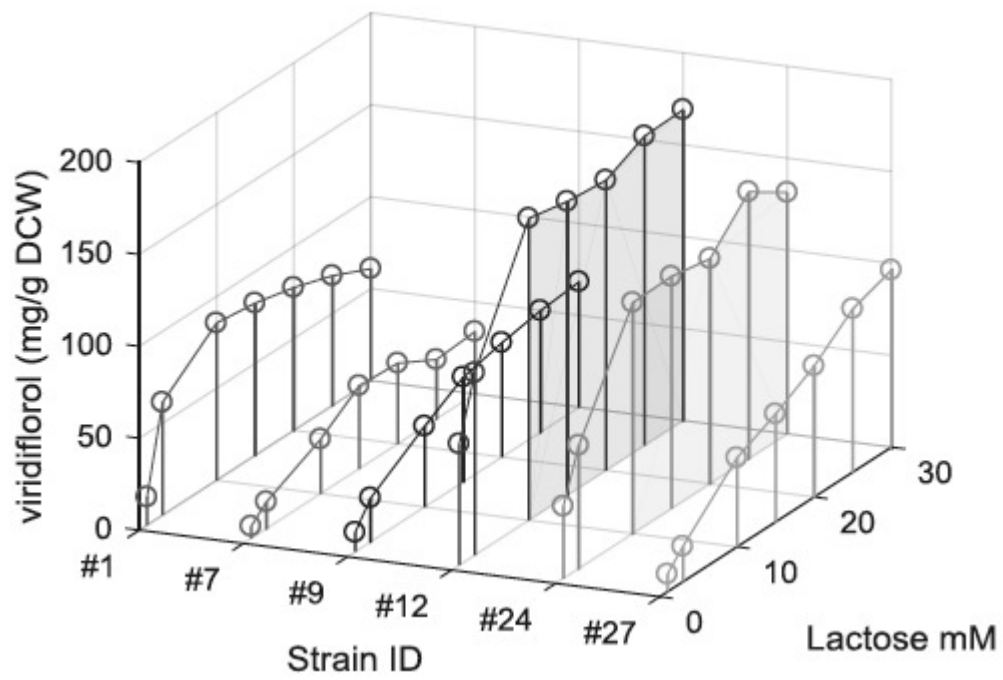


FIG. 1C

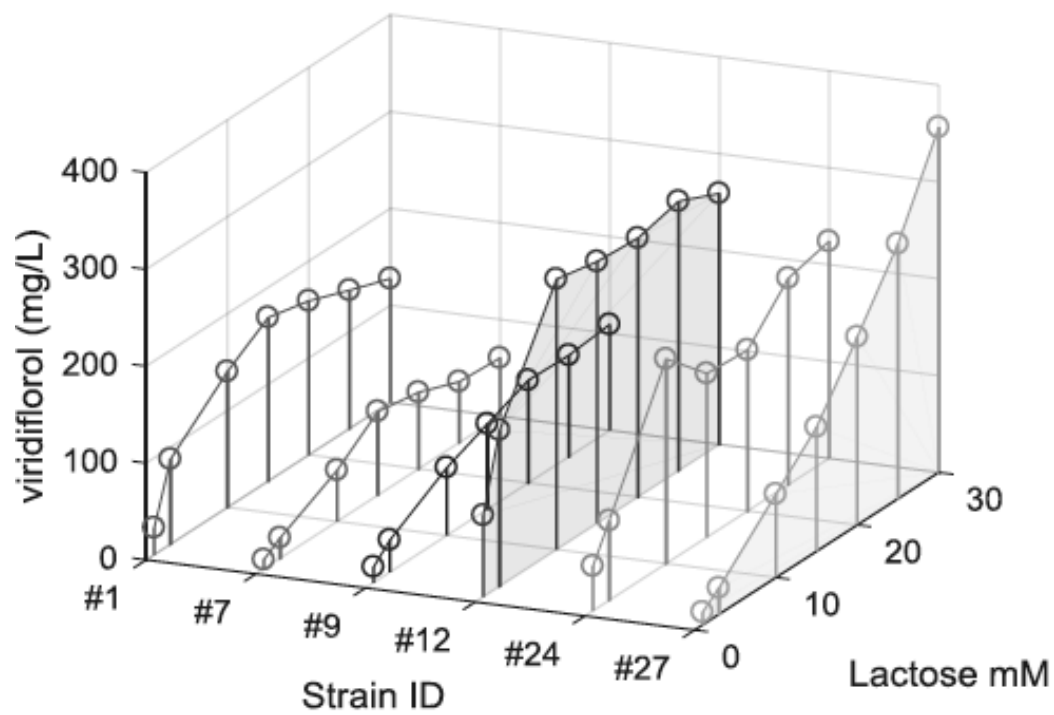


FIG. 1D

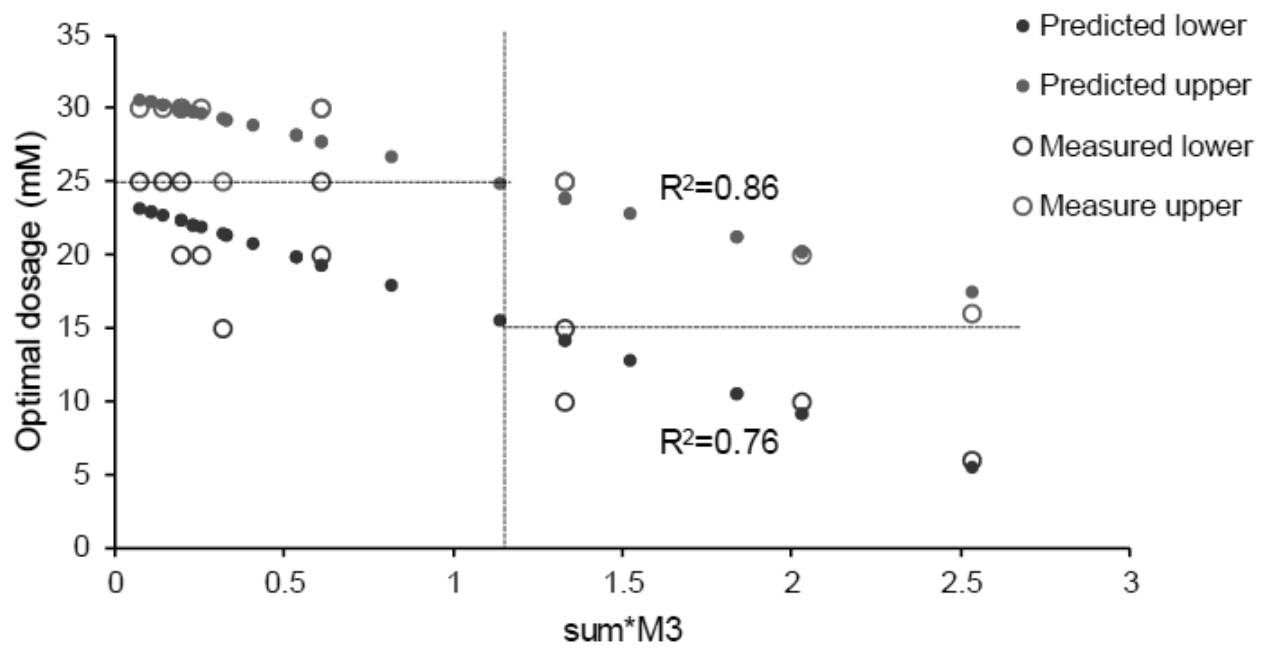


FIG. 1E

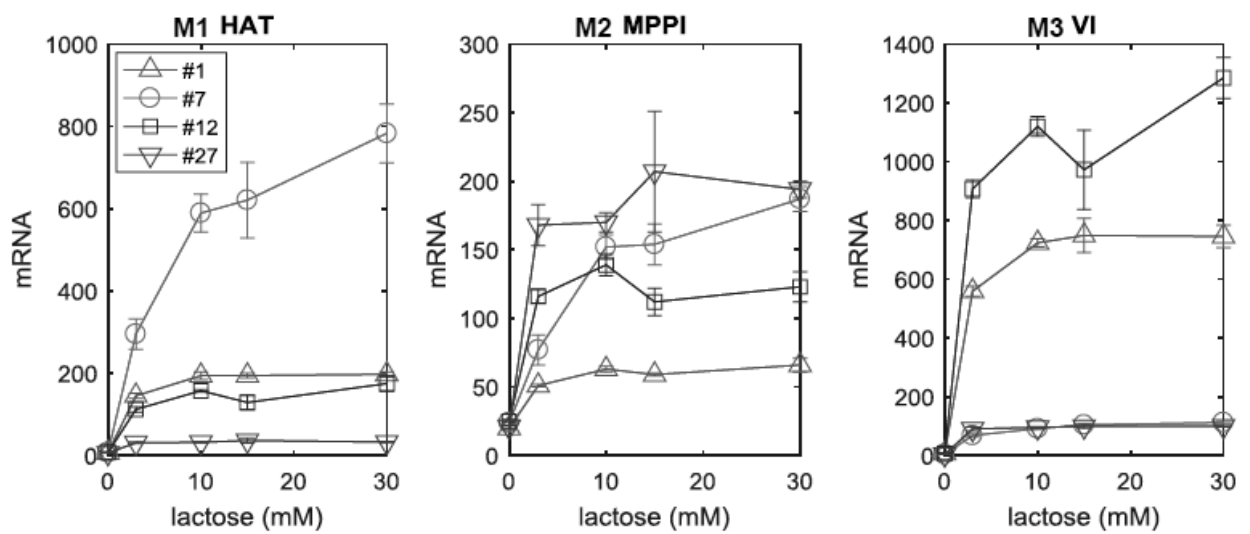


FIG. 2A

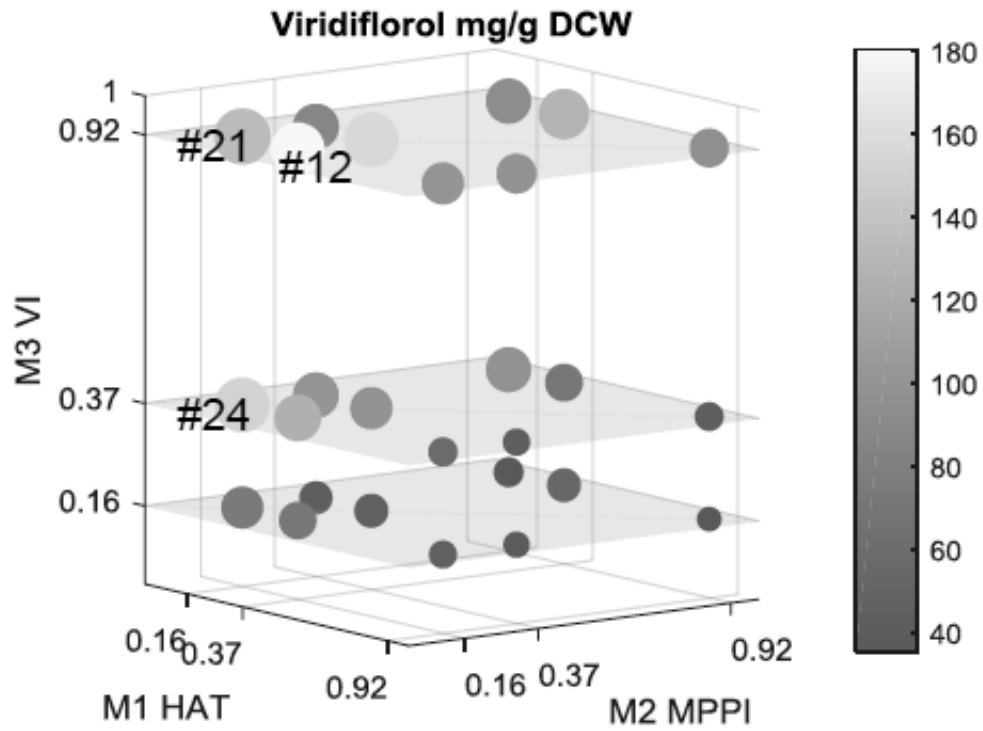
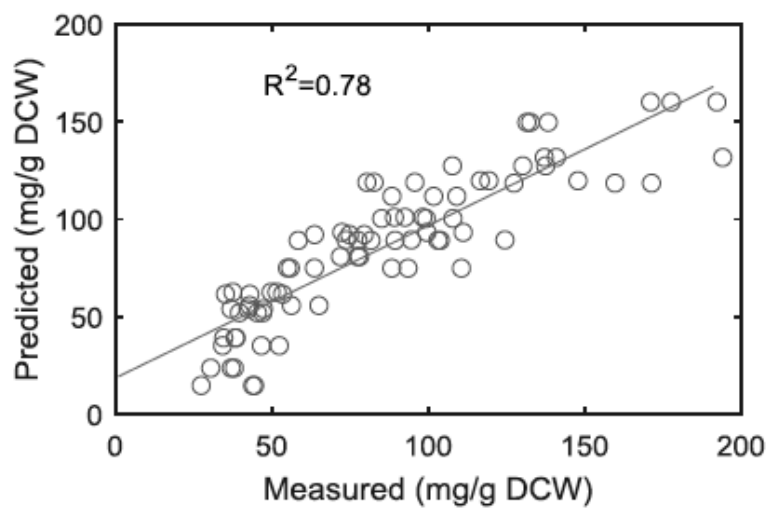


FIG. 2B



$$\begin{aligned} \text{Viridiflorol} = & a * M1 + b * M2 + c \\ & * M3 + d * M1^2 + e \\ & * M2^2 + g * M3^2 \\ & + h * M1 * M2 + i * M2 \\ & * M3 + j * M3 * M1 \end{aligned}$$

FIG. 2C

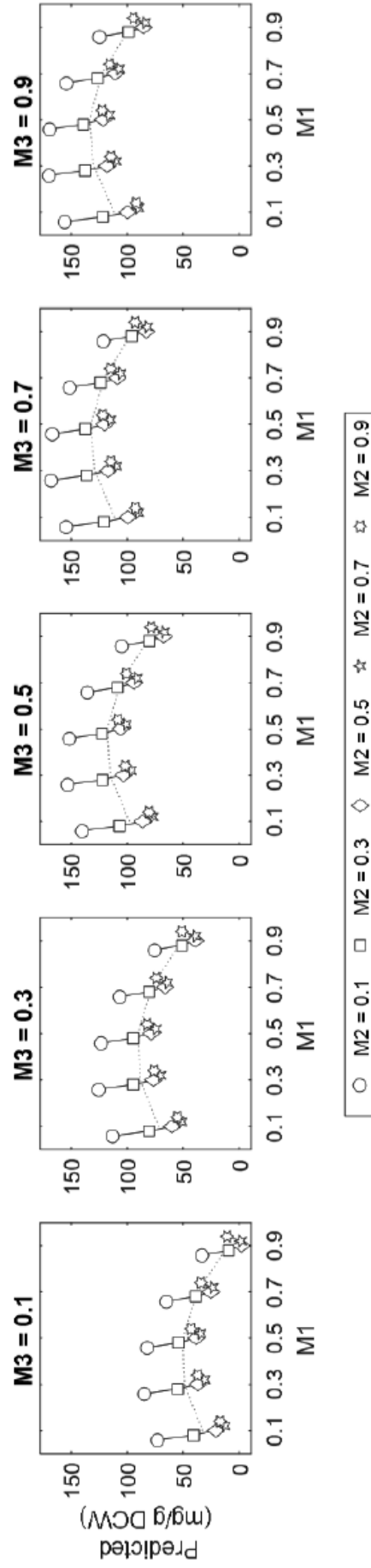


FIG. 2D

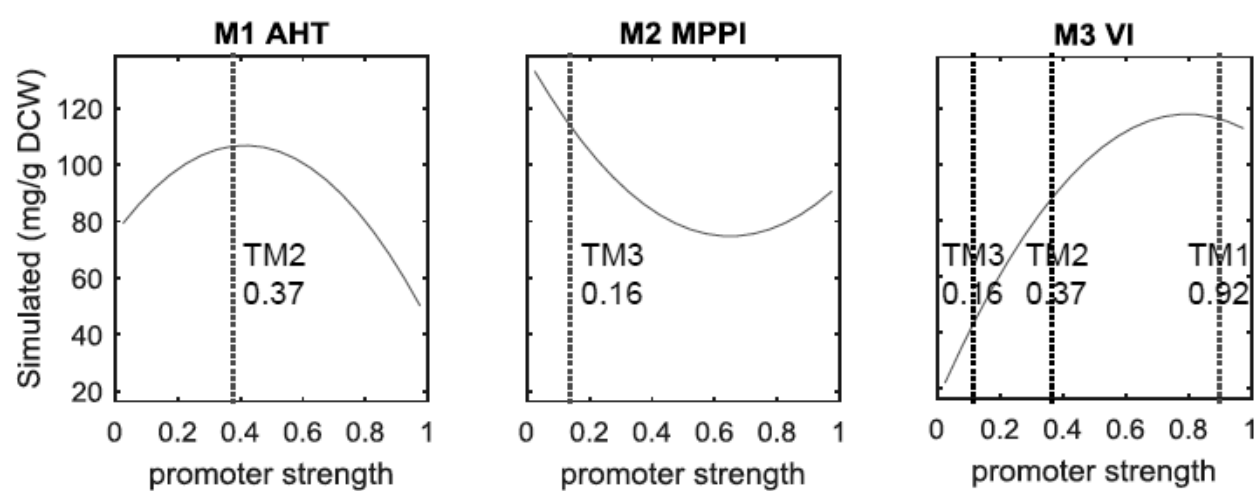


FIG. 2E

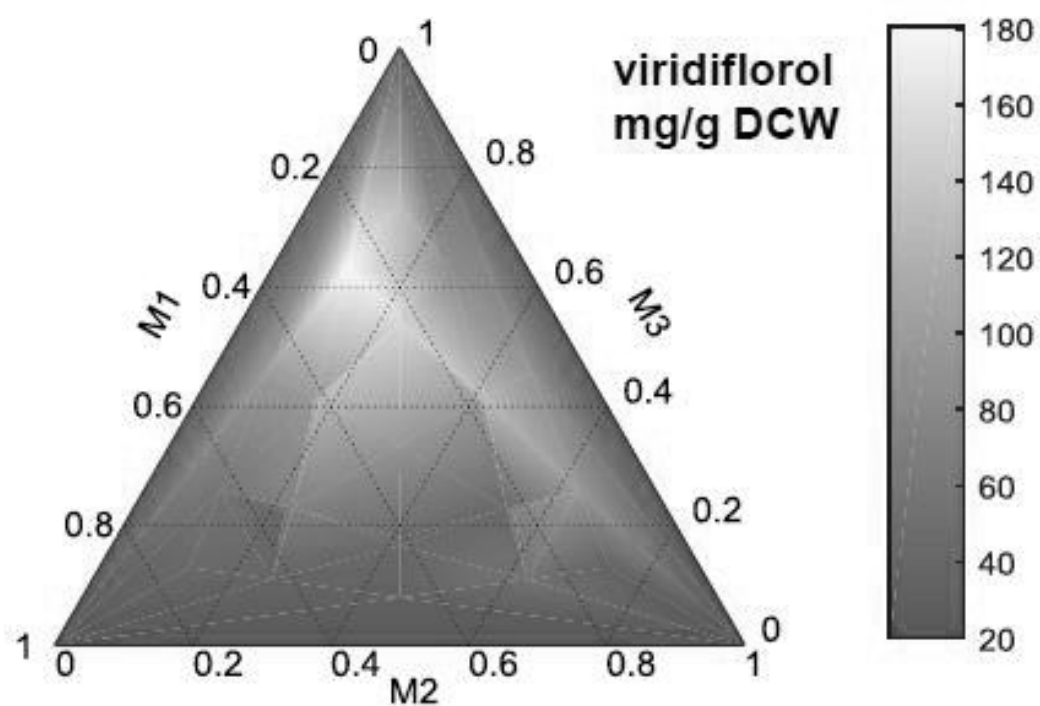


FIG. 3A

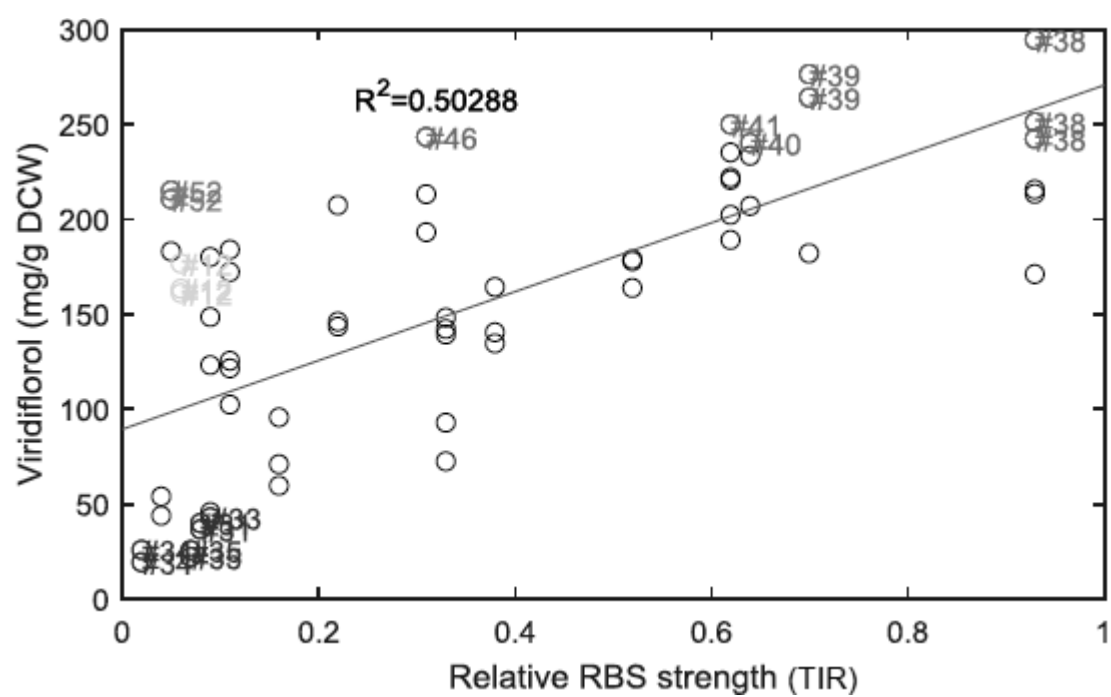


FIG. 3B

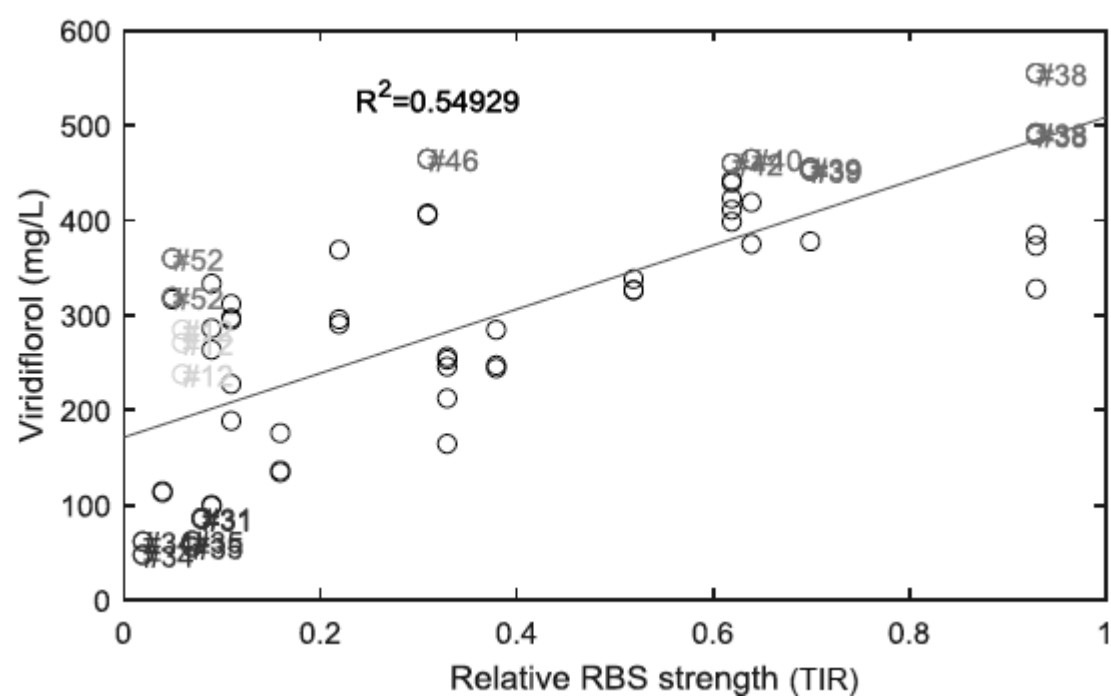


FIG. 3C

	Strain ID	RBS Sequence	TIR (a.u.)	TIR %
SEQ ID NO: 1	#12*	AAGAAGAGGCCTAAA	11608	6%
SEQ ID NO: 2	#31	AGGAAGAGGCCTAAA	15207	8%
SEQ ID NO: 3	#32	ATGAAGAGGCCTAAA	8742	5%
SEQ ID NO: 4	#33	TAGAAGAGGCCTAAA	17801	10%
SEQ ID NO: 5	#34	TGGAAGAGGCCTAAA	4411	2%
SEQ ID NO: 6	#35	TTGAAGAGGCCTAAA	13650	7%
SEQ ID NO: 7	#36	AAGAAGAGGCCTAAA	65013	35%
SEQ ID NO: 60	Design 1	WDGAAGAGGCCTAAA	/	/

FIG. 3D

	Strain ID	RBS Sequence	TIR (a.u.)	TIR %
SEQ ID NO: 8	#37	ATAAGGAGGTATAAA	186206	100%
SEQ ID NO: 9	#38	CTAAGGAGGTATAAA	186206	100%
SEQ ID NO: 10	#39	TTAAGGAGGTATAAA	140236	75%
SEQ ID NO: 11	#40	GTAAGGAGGTATAAA	128165	69%
SEQ ID NO: 12	#41	CGAAGGAGGTATAAA	123633	66%
SEQ ID NO: 13	#42	TGAAGGAGGTATAAA	123633	66%
SEQ ID NO: 14	#43	GGAAGGAGGTATAAA	103730	56%
SEQ ID NO: 15	#44	CTAAAGAGGTATAAA	75021	40%
SEQ ID NO: 16	#45	ATAAAGAGGTATAAA	73351	39%
SEQ ID NO: 17	#46	AGAAGGAGGTATAAA	62661	34%
SEQ ID NO: 18	#47	TTAAAGAGGTATAAA	49810	27%
SEQ ID NO: 19	#48	GTAAAGAGGTATAAA	43716	23%
SEQ ID NO: 20	#49	CGAAAGAGGTATAAA	32923	18%
SEQ ID NO: 21	#50	TGAAAGAGGTATAAA	23598	13%
SEQ ID NO: 22	#51	GGAAAGAGGTATAAA	17066	9%
SEQ ID NO: 23	#52	AGAAAGAGGTATAAA	10309	6%
SEQ ID NO: 61	Design 2	NKAARGAGGTATAAA	/	/

FIG. 4A

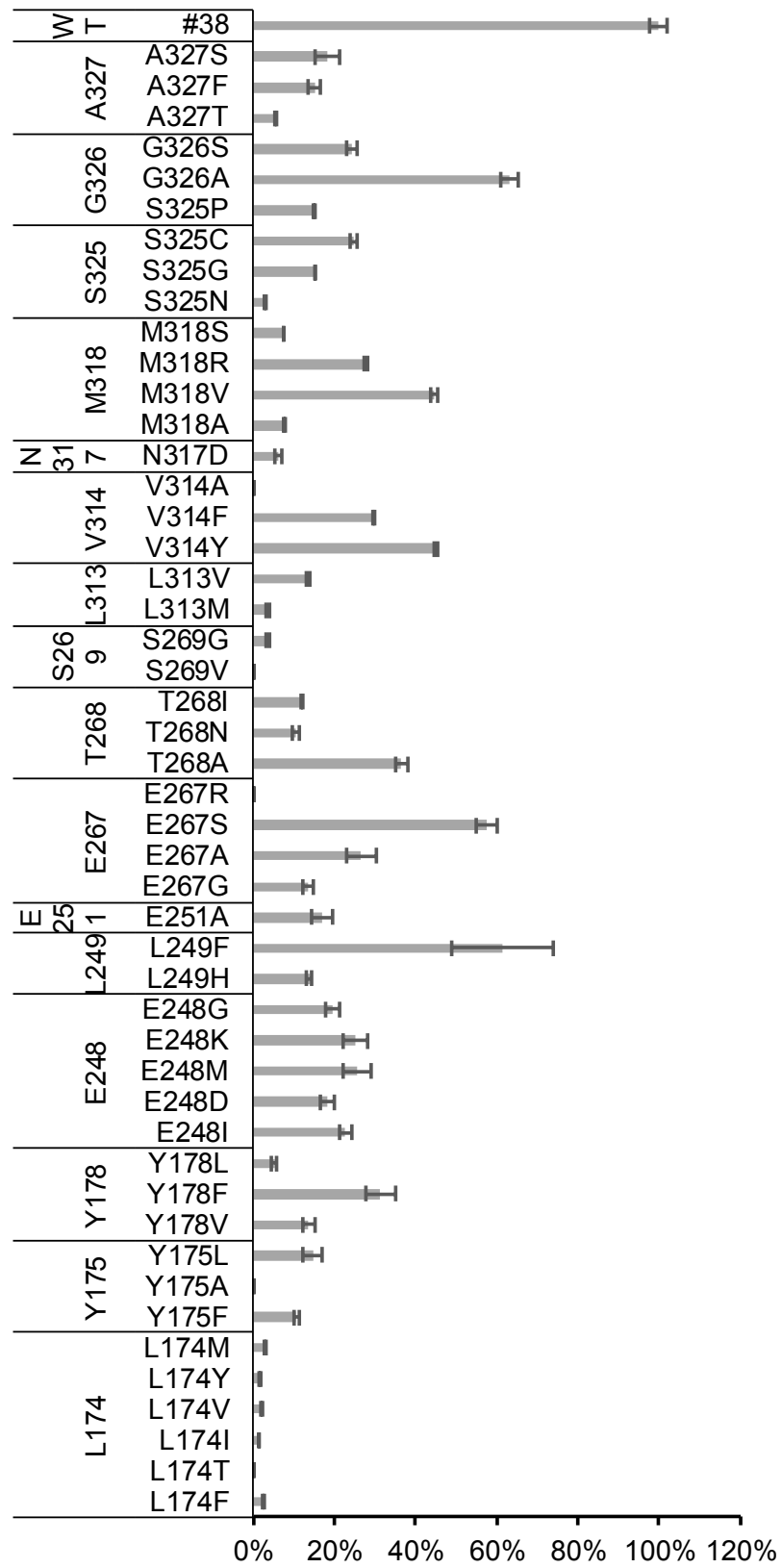


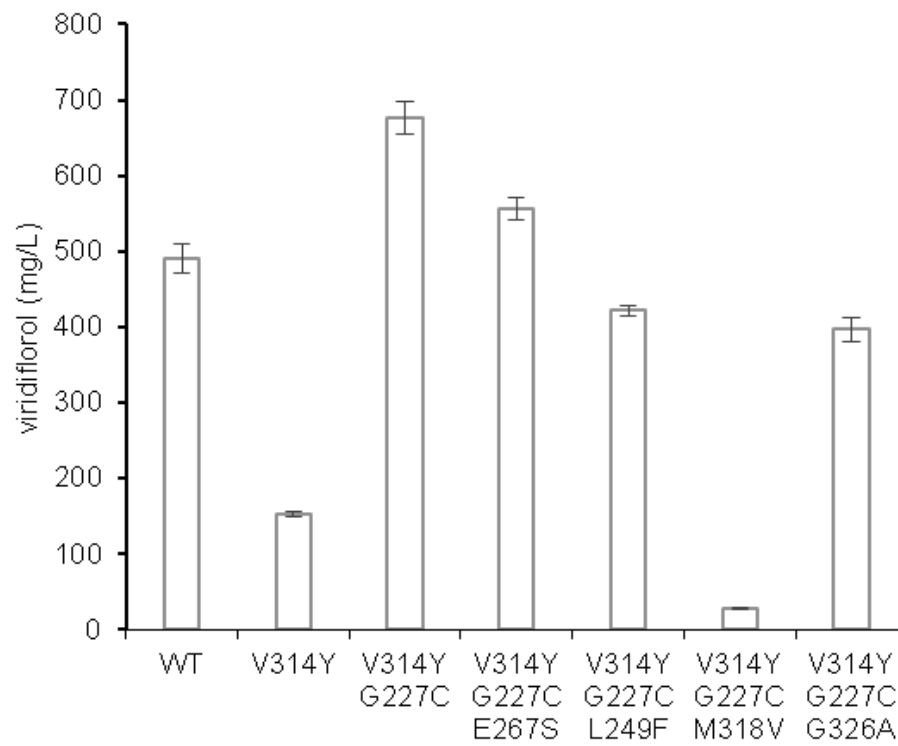
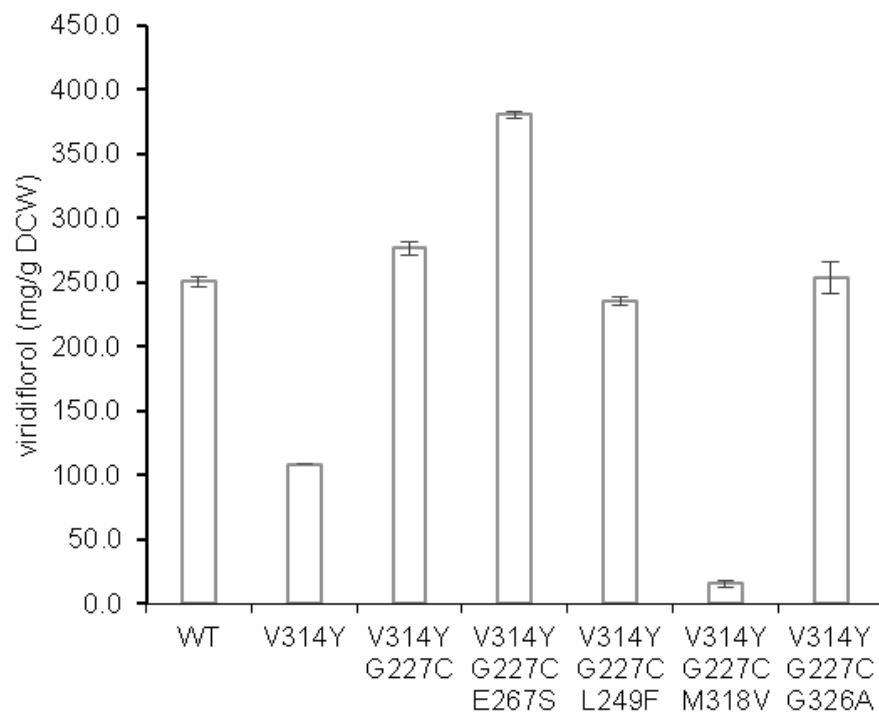
FIG. 4B**FIG. 4C**

FIG. 4D

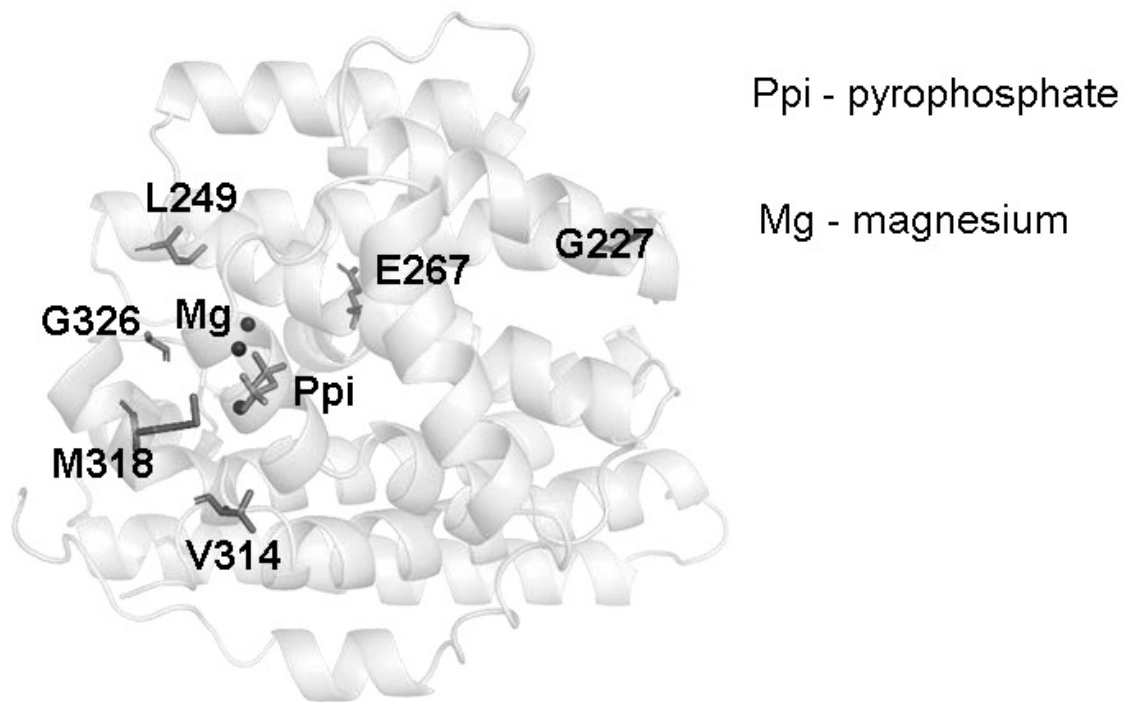


FIG. 4E

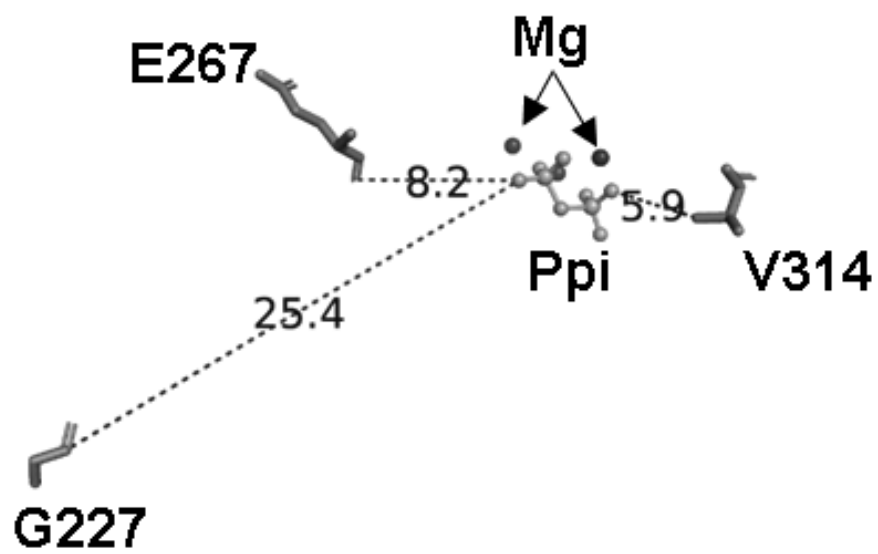


FIG. 5A

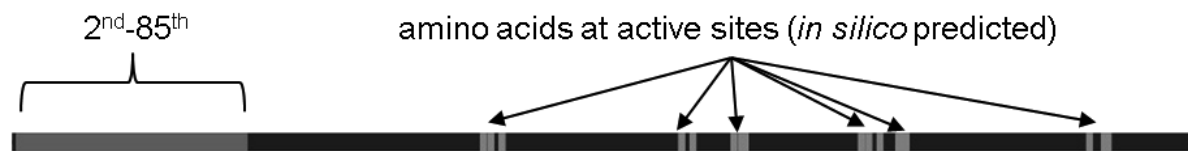


FIG. 5B

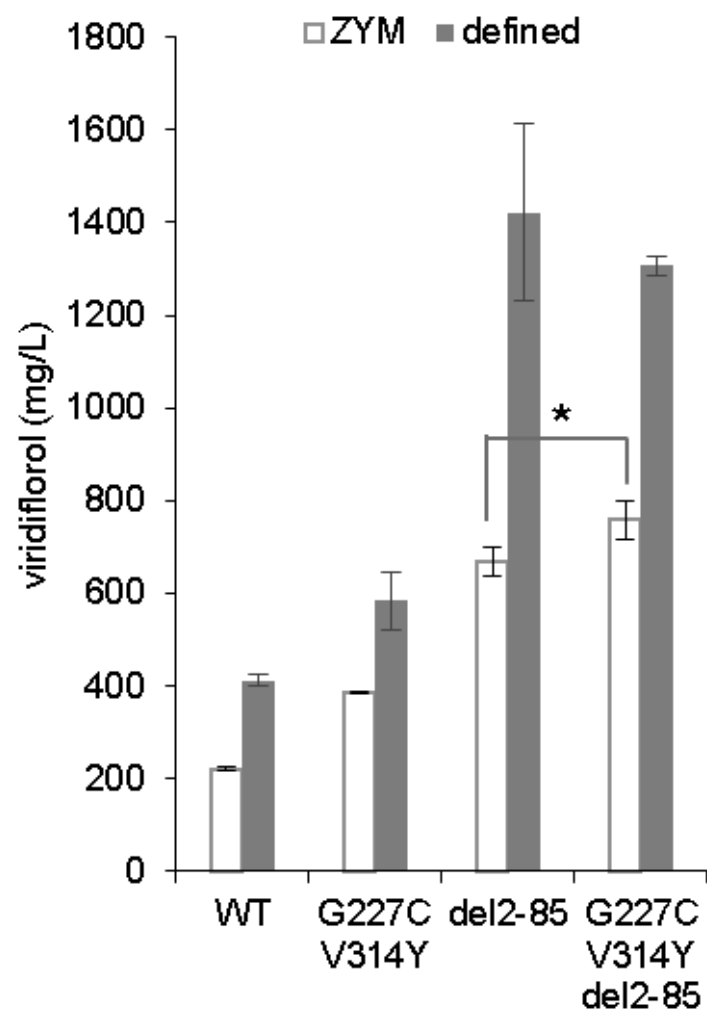


FIG. 5C

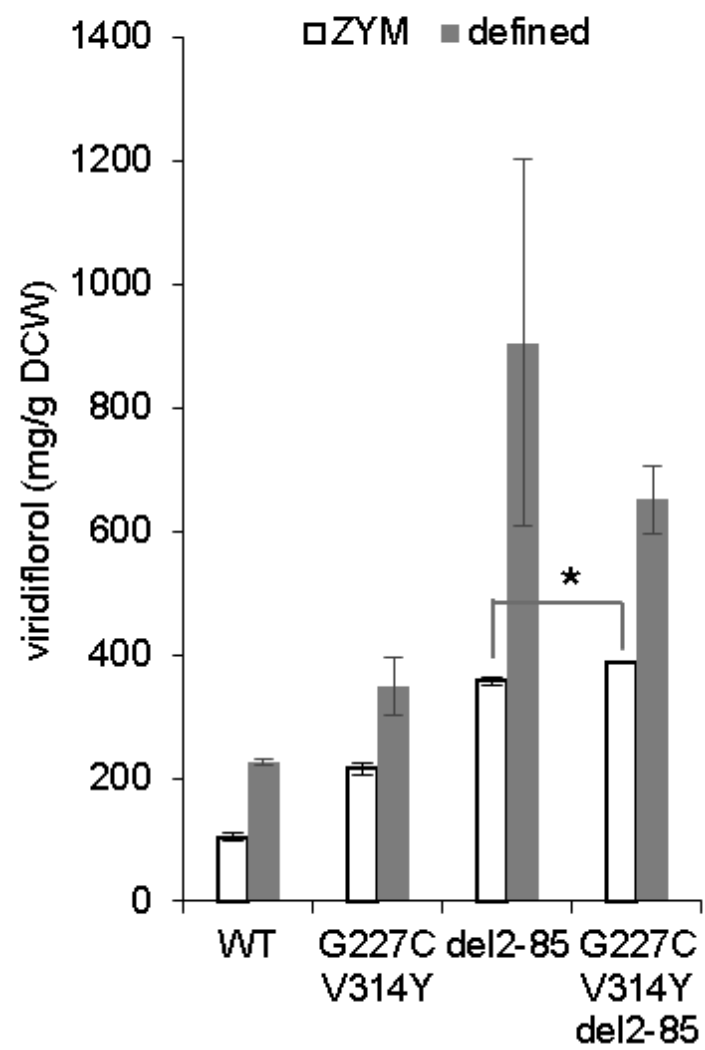


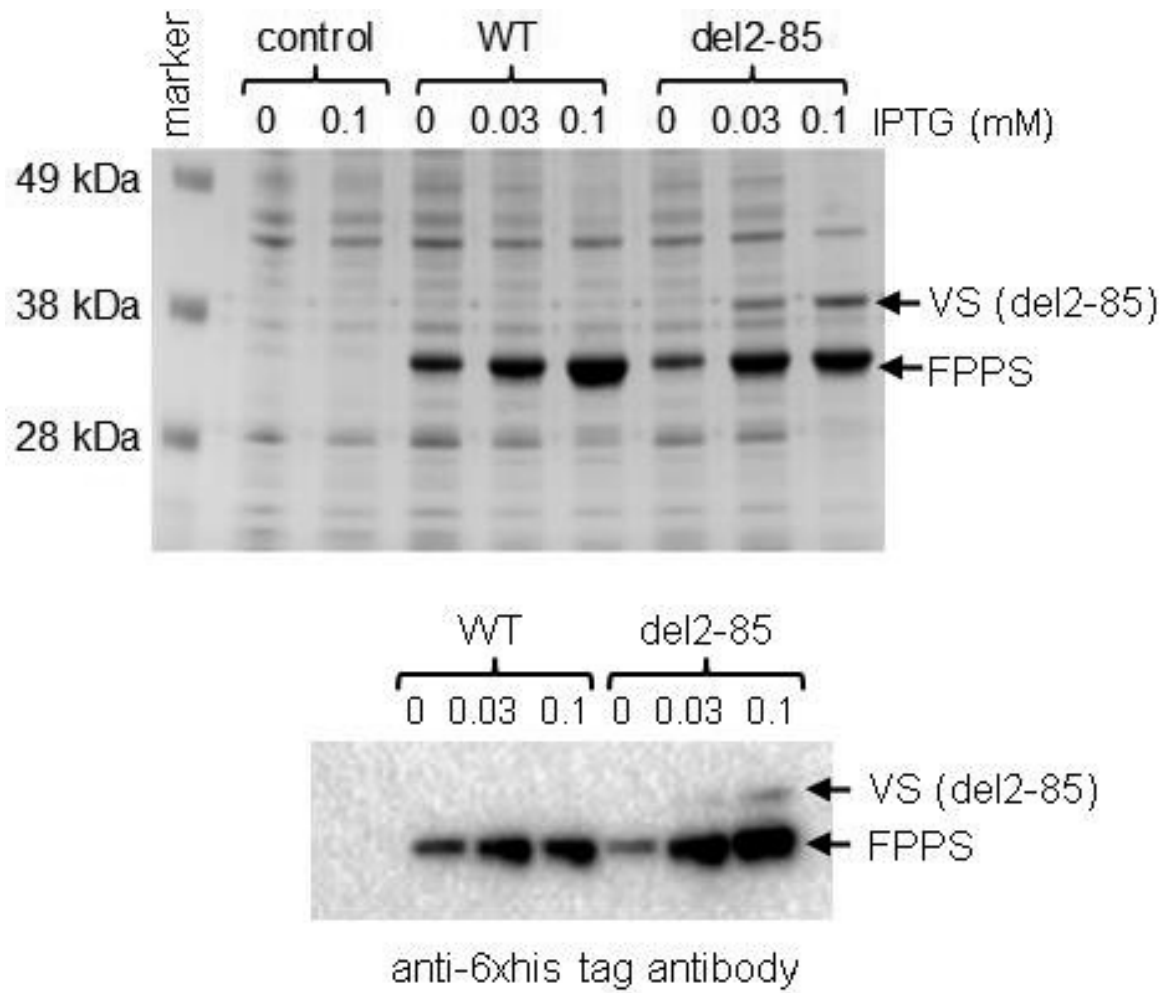
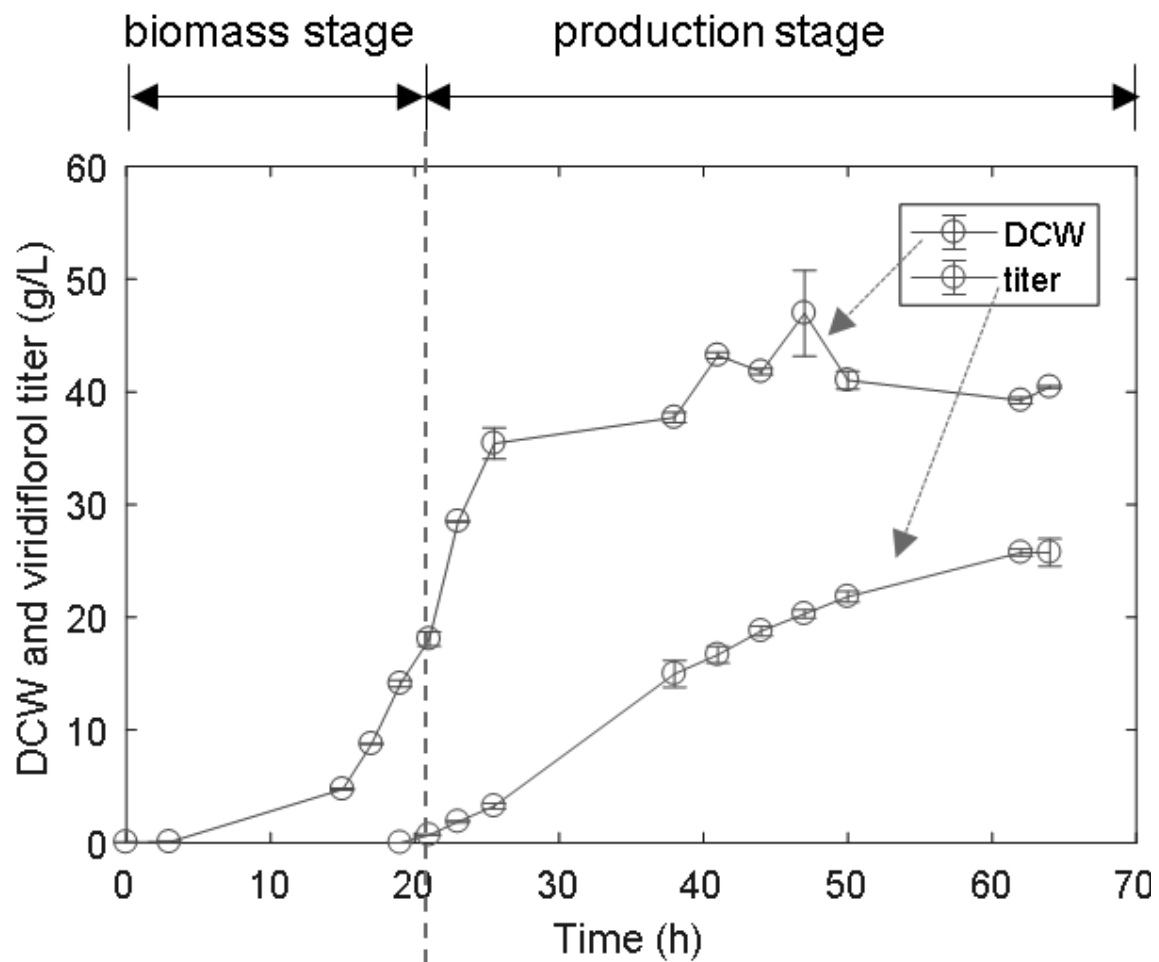
FIG. 5D

FIG. 6A



"TRY" data	Viridiflorol
titre (g/L)	25.7
productivity (g/L/h)	0.42
yield (g/g glucose)	0.22
specific yield (g/g DCW)	0.64

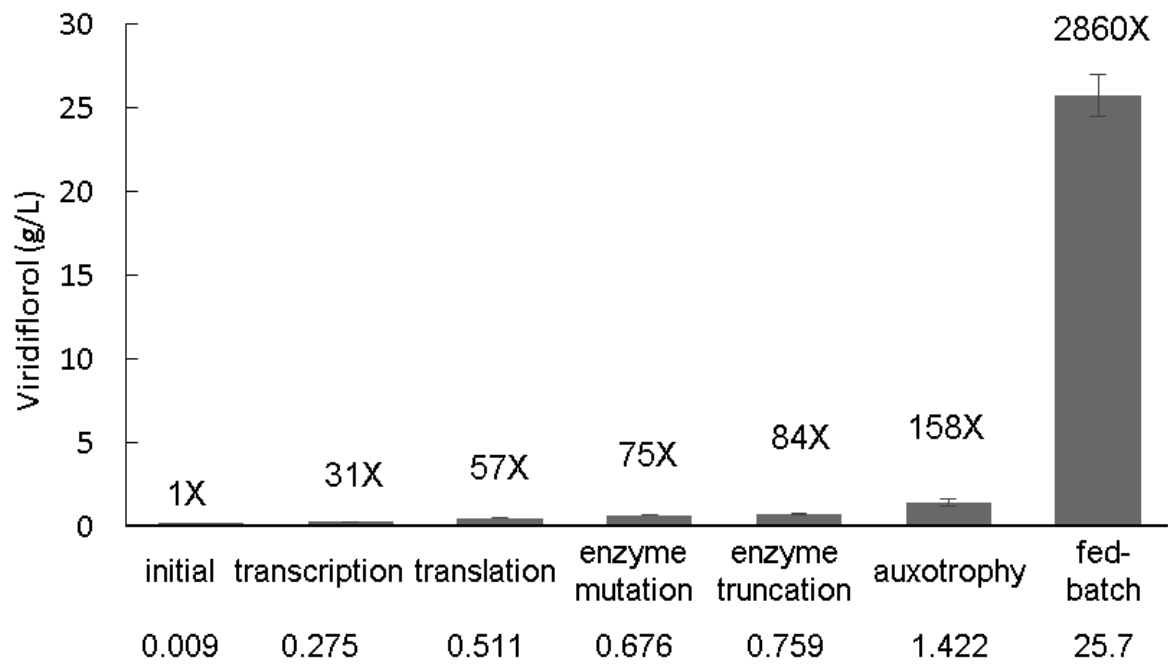
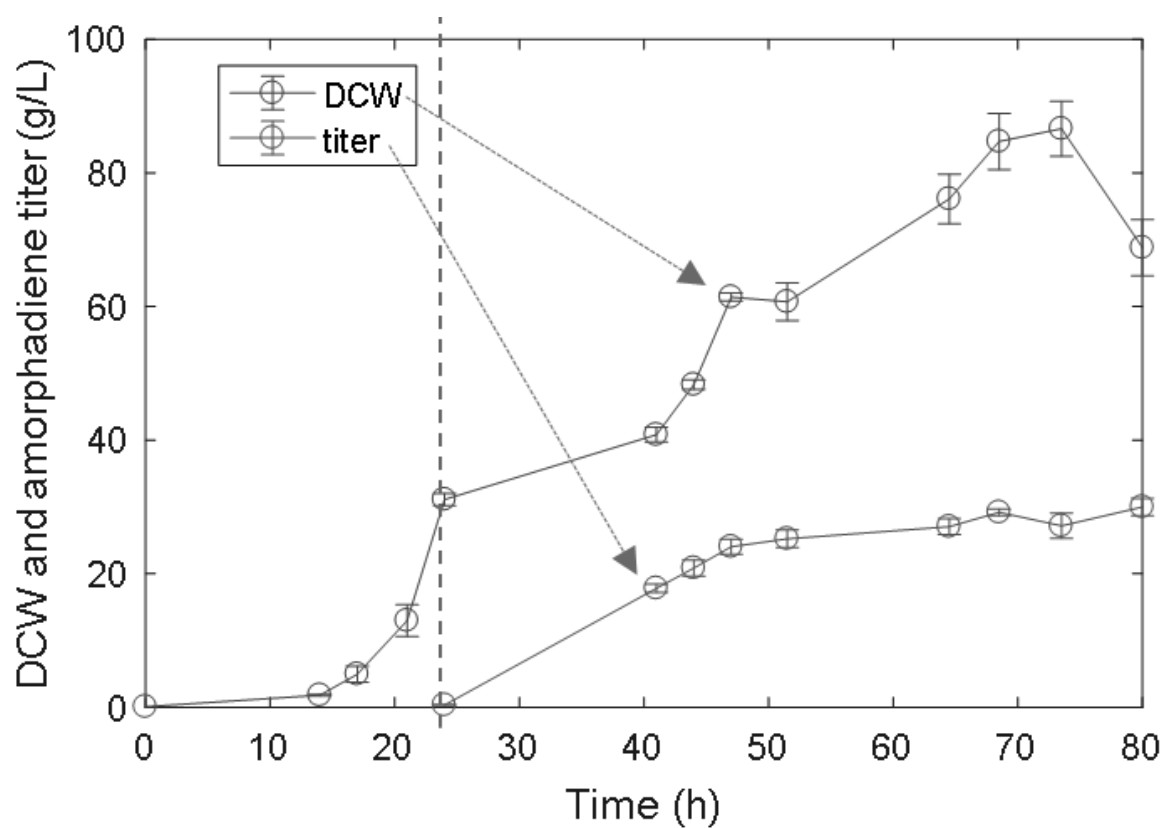
FIG. 6B

FIG. 6C



"TRY" data	Amorpha-4,11-diene
titre (g/L)	30
productivity (g/L/h)	0.38
yield (g/g glucose)	0.19
specific yield (g/g DCW)	0.44

FIG. 7

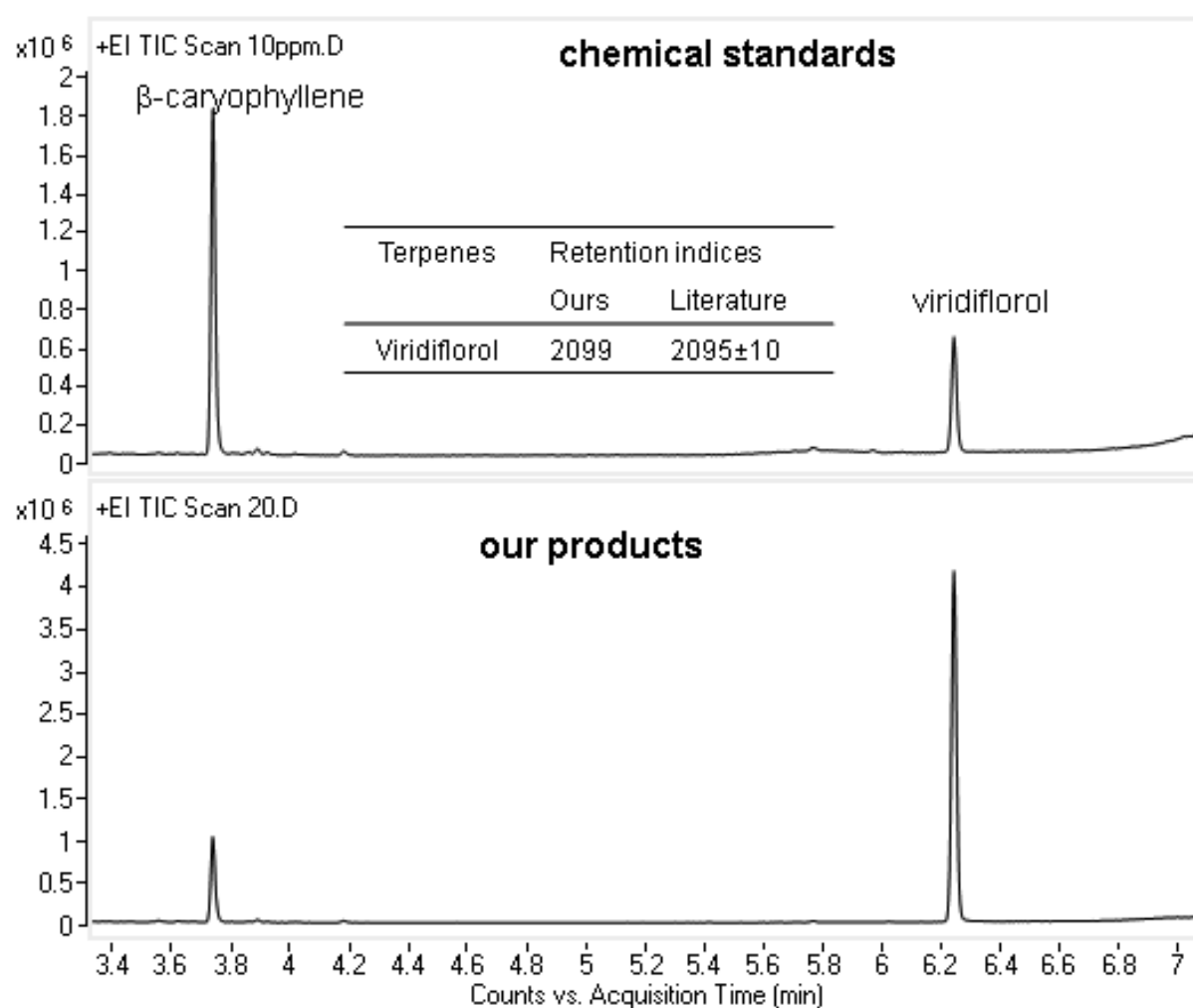


FIG. 7 (cont'd)

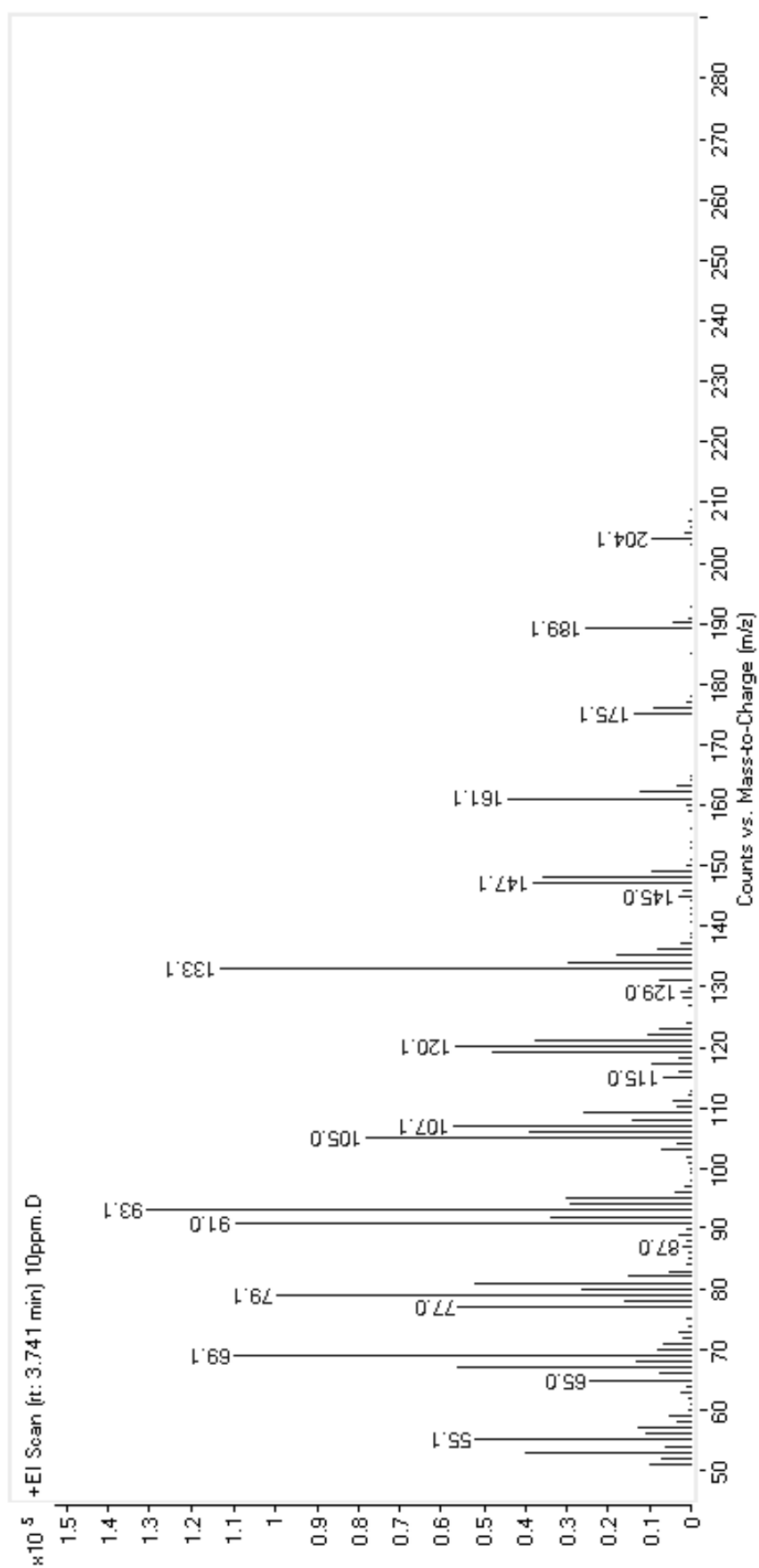
 β -caryophyllene

FIG. 7 (cont'd)

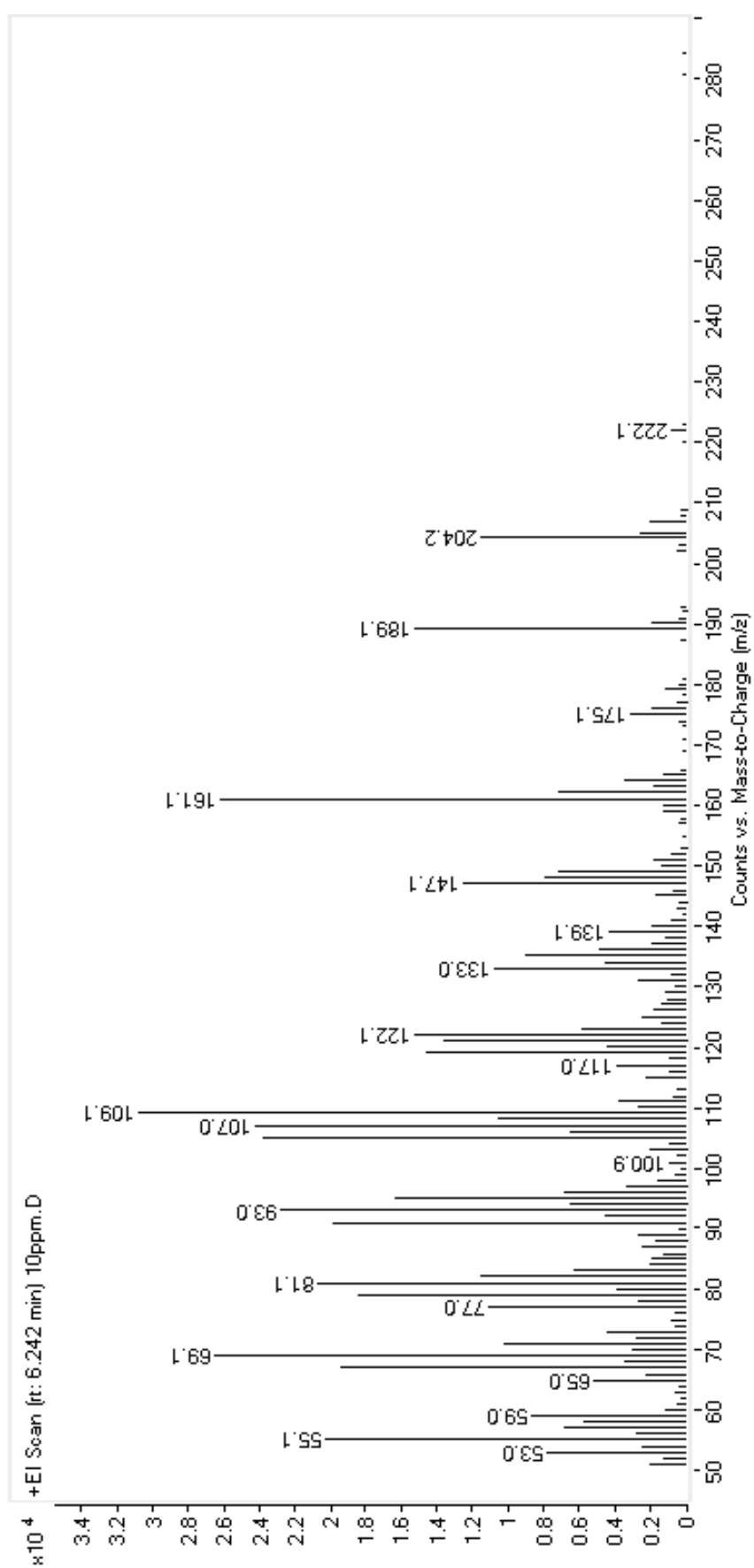
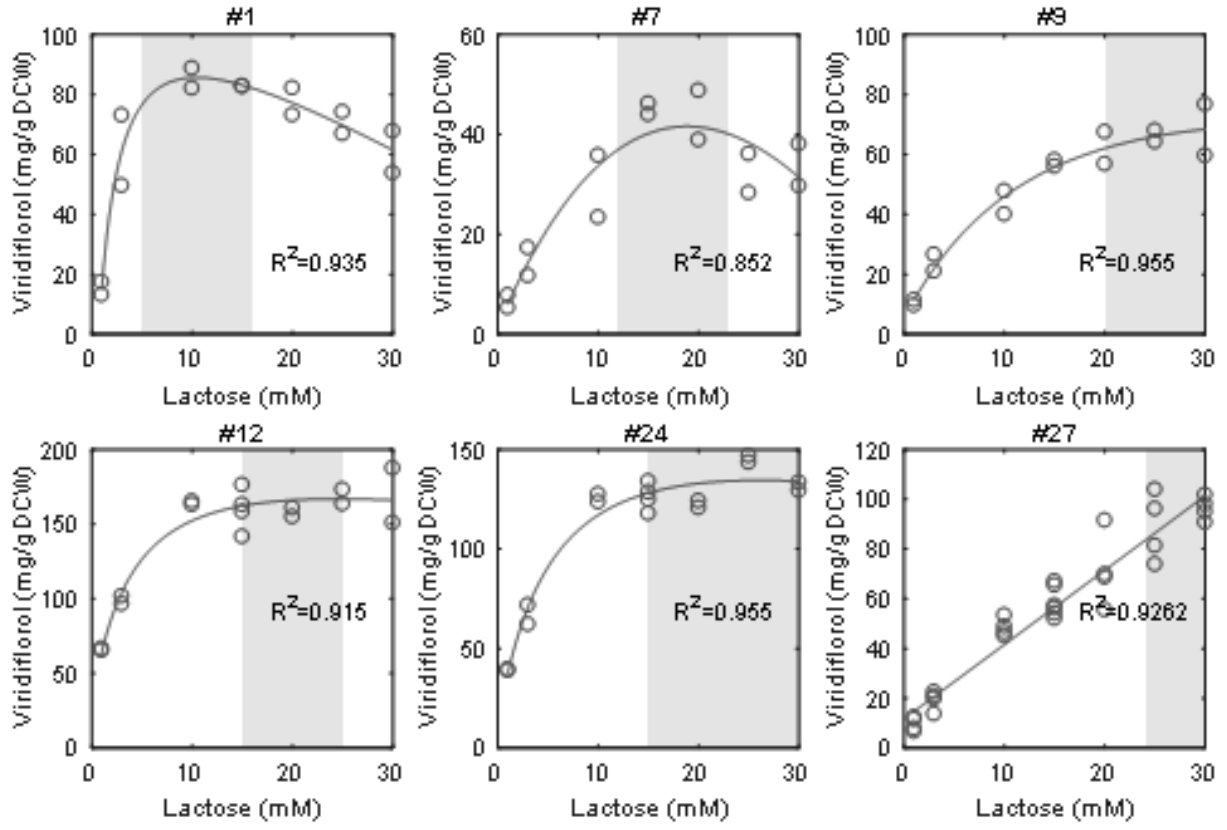
viridiflorol

FIG. 8



$$\text{EQ1 } \text{Viridiflorol} = \frac{-lac^2 + a * lac + b}{c * lac + d}$$

$$\text{EQ2 } \text{Viridiflorol} = a * lac + b$$

Strain ID	M1 AHT	M2 MPPI	M3 VI
#1	0.92	0.92	0.92
#7	0.92	0.92	0.16
#9	0.92	0.16	0.16
#12	0.37	0.16	0.92
#24	0.16	0.16	0.37
#27	0.16	0.16	0.16

FIG. 9

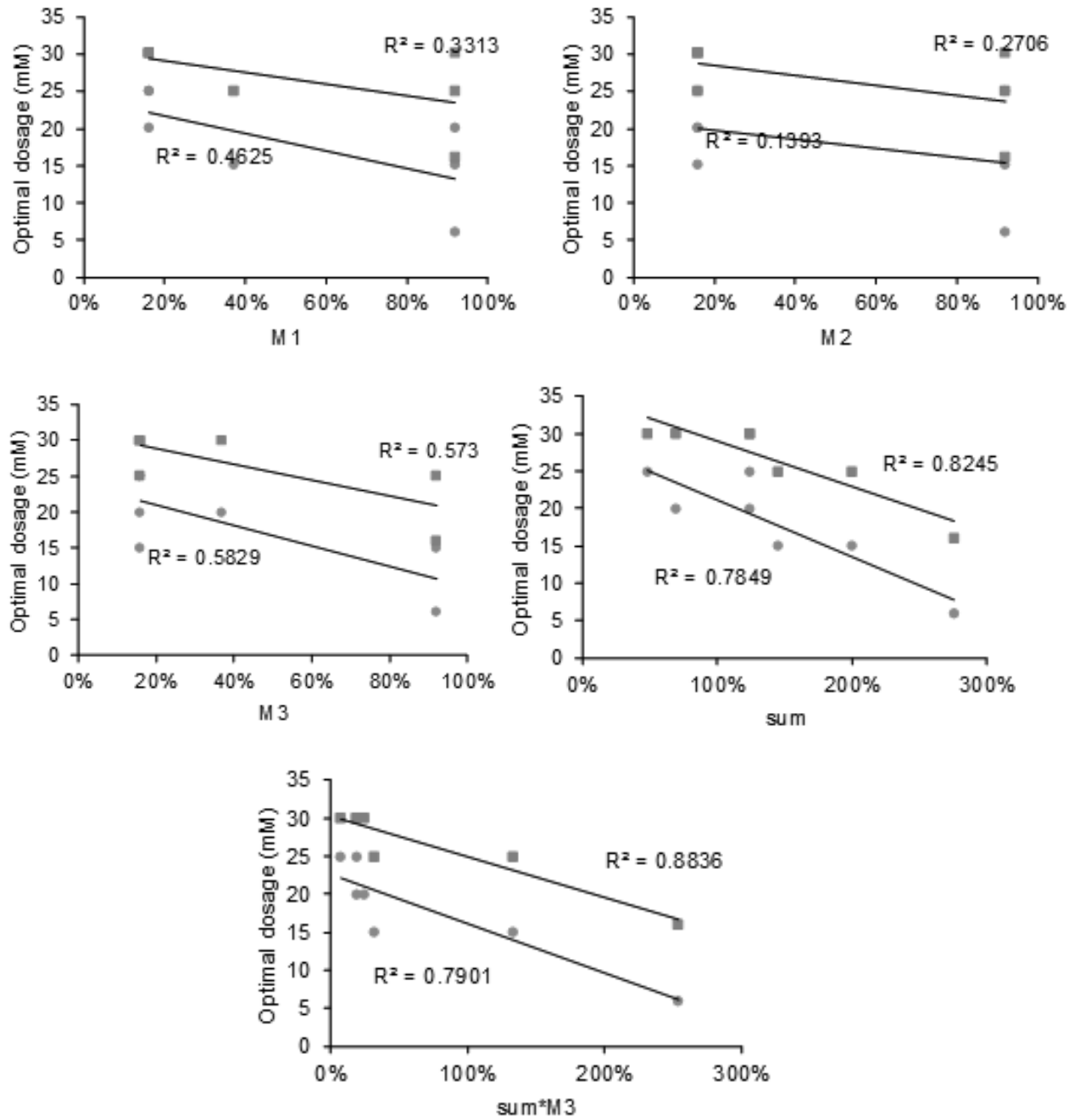


FIG. 10 A

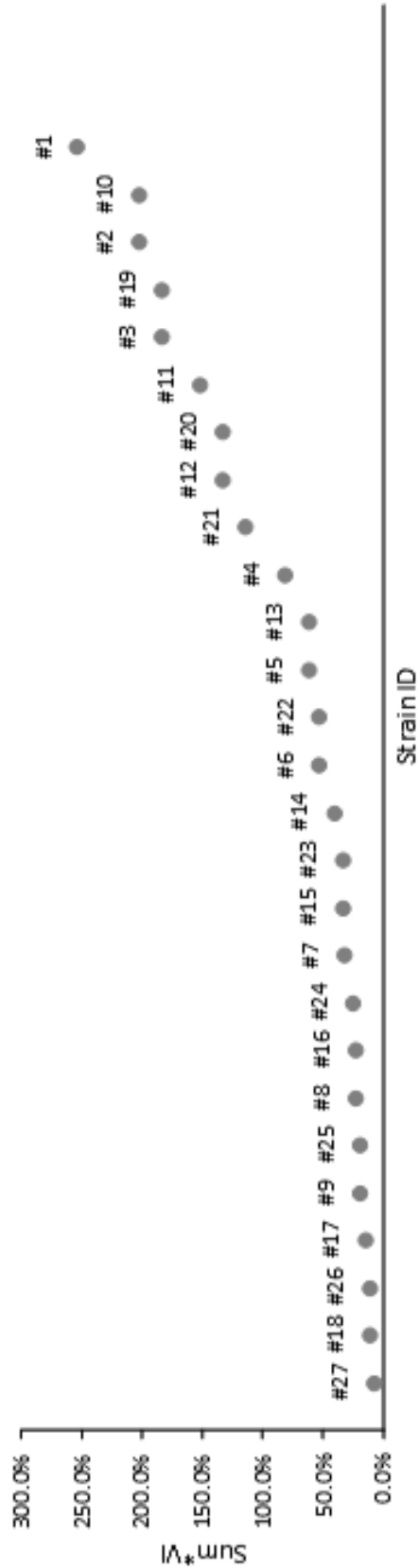


FIG. 10B

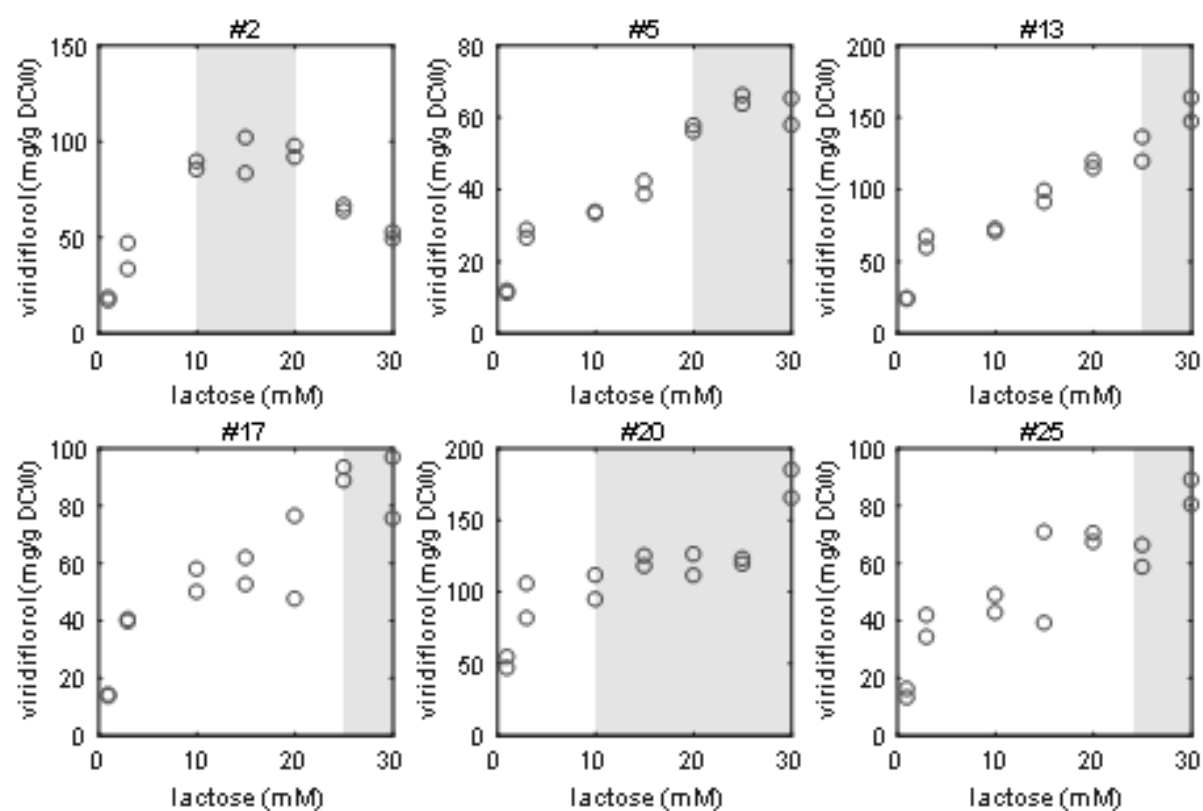


FIG. 10C

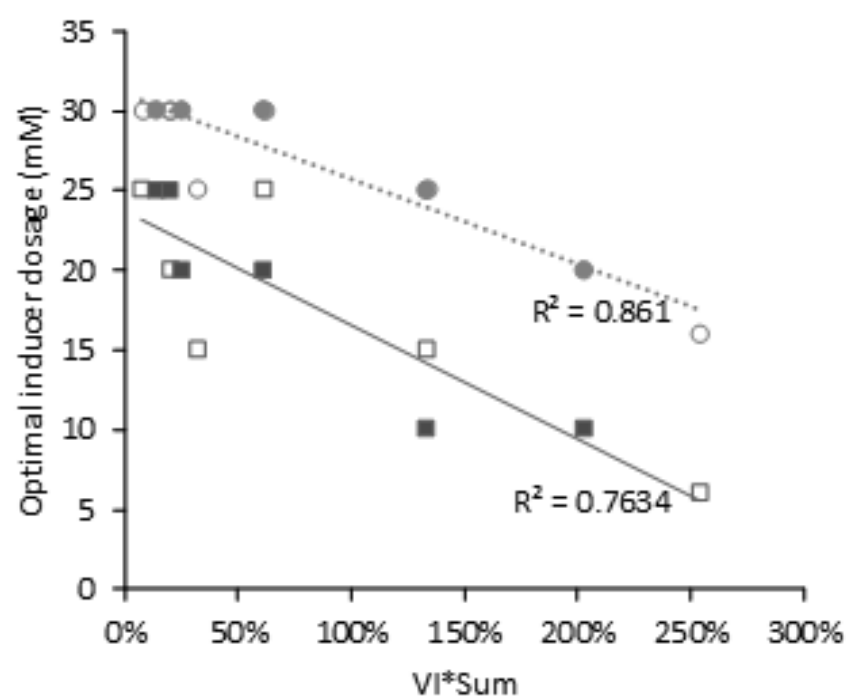


FIG. 11

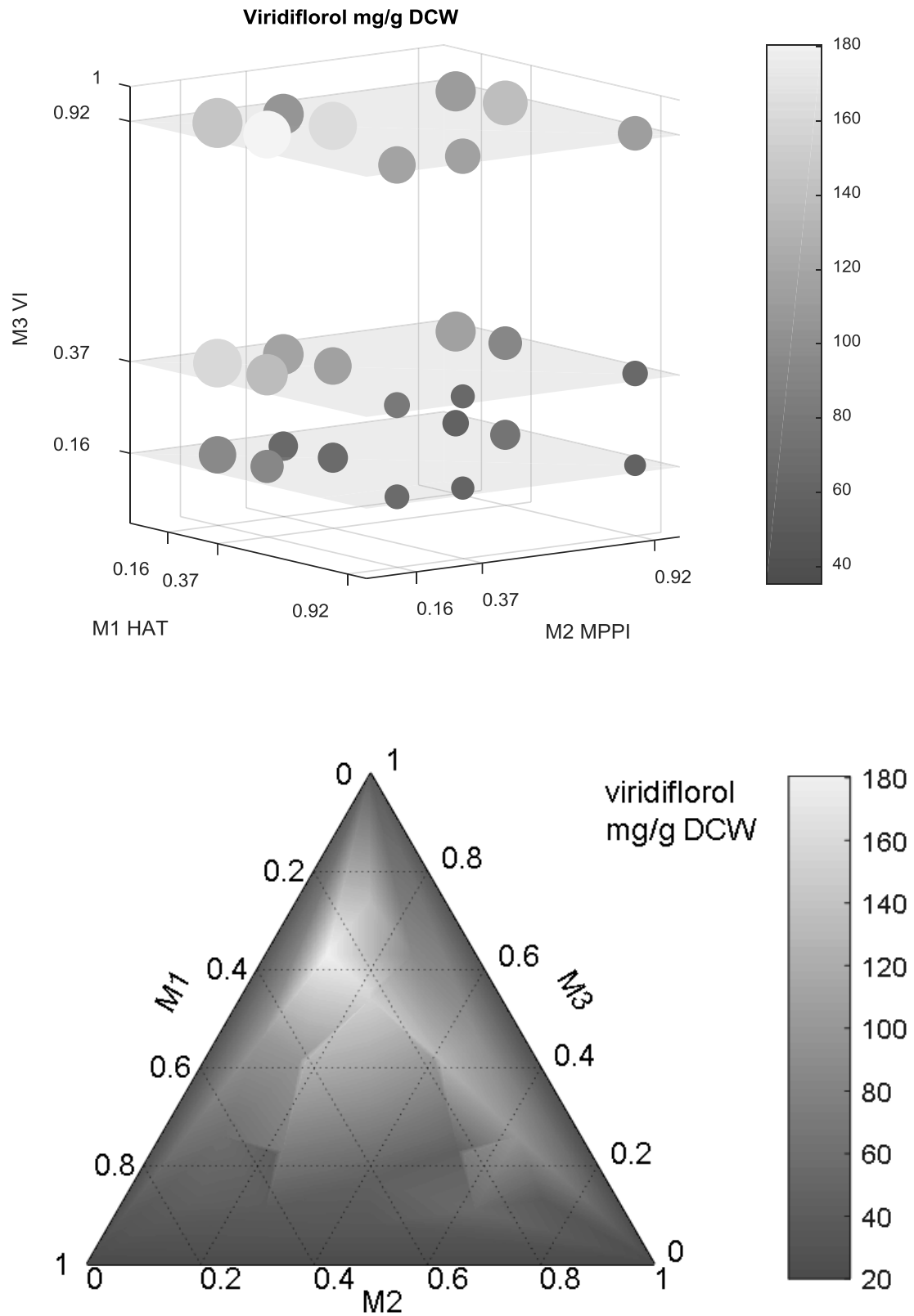


FIG. 12

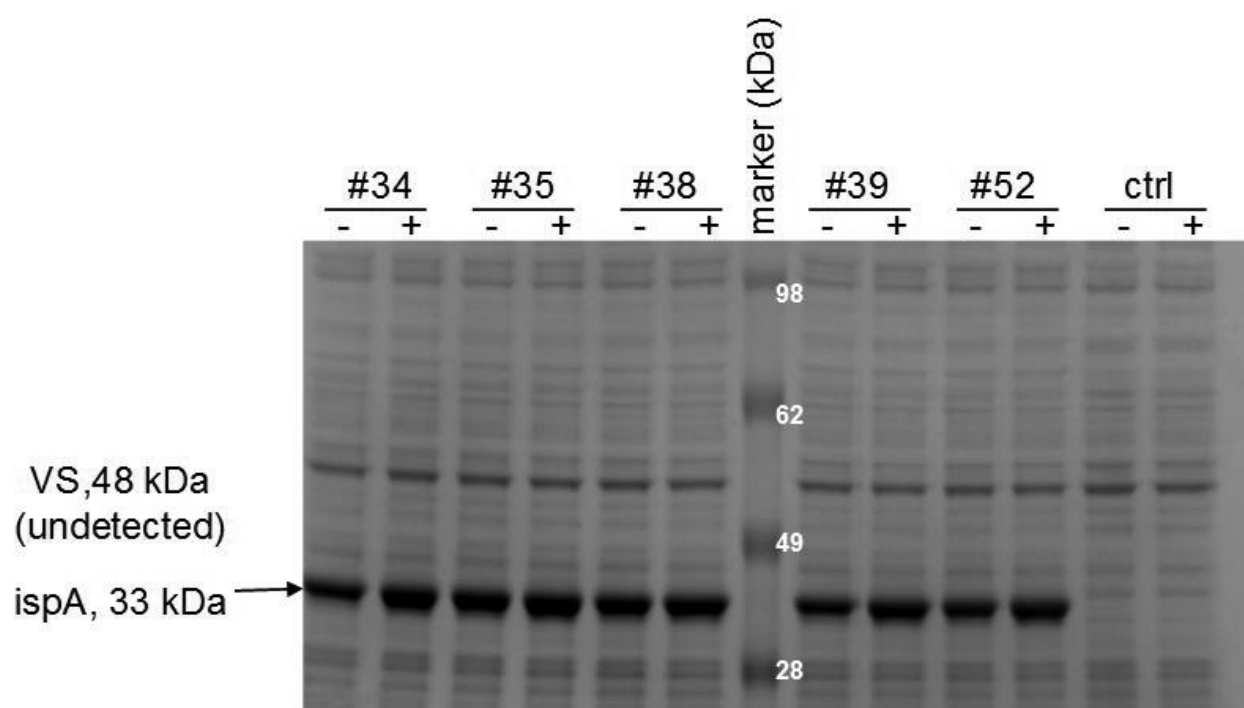


FIG. 13

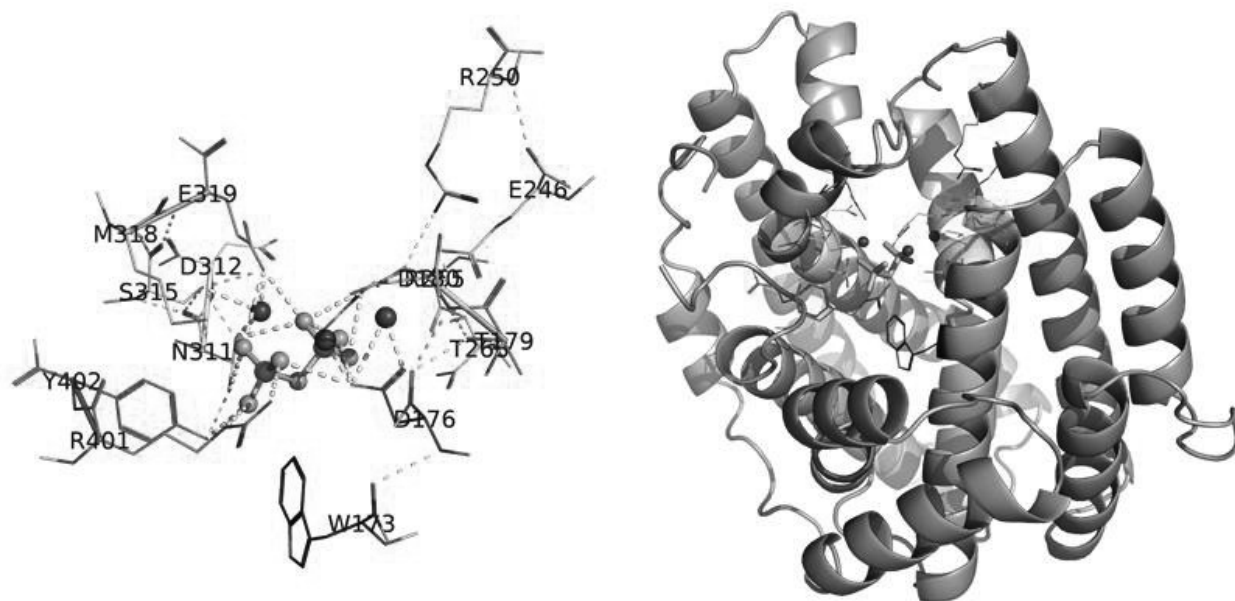


FIG. 14

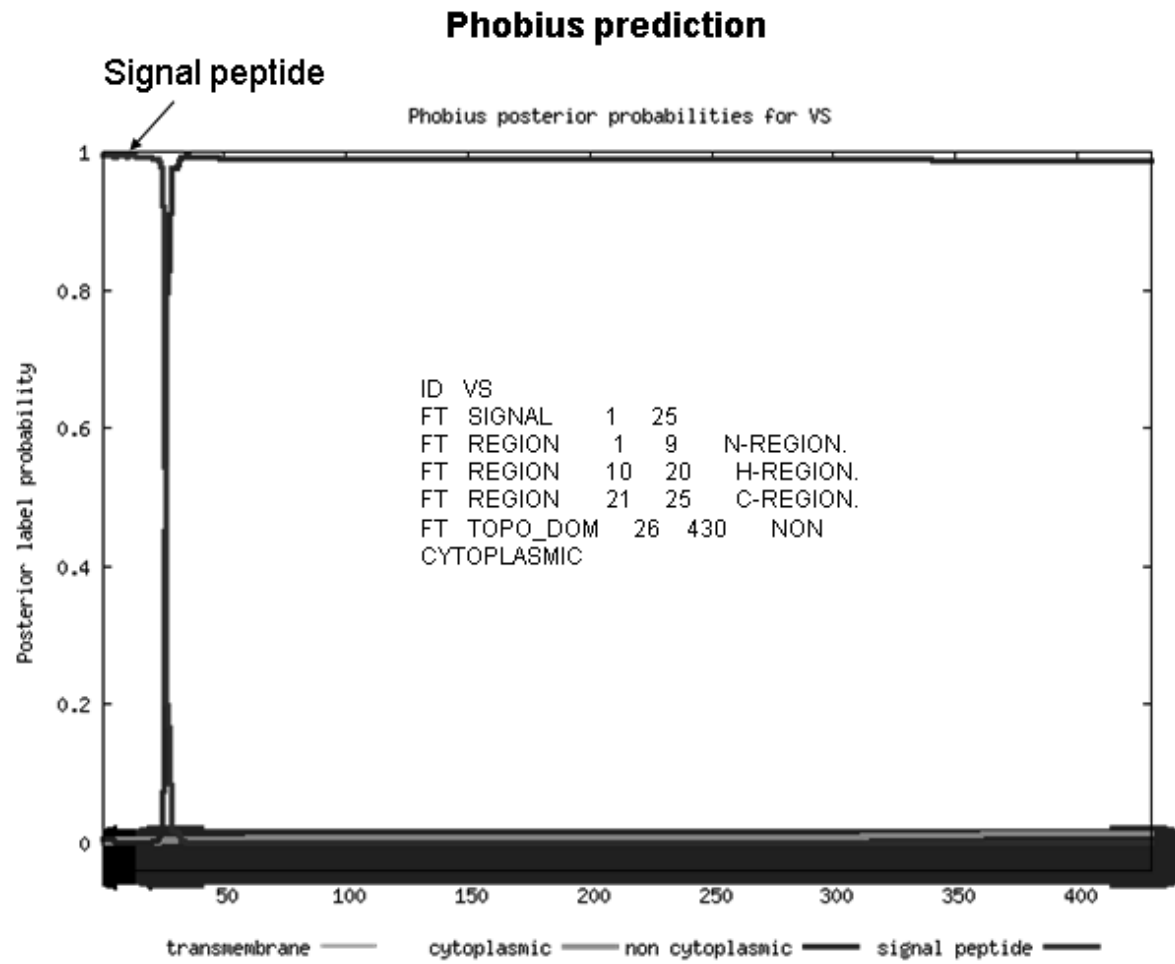
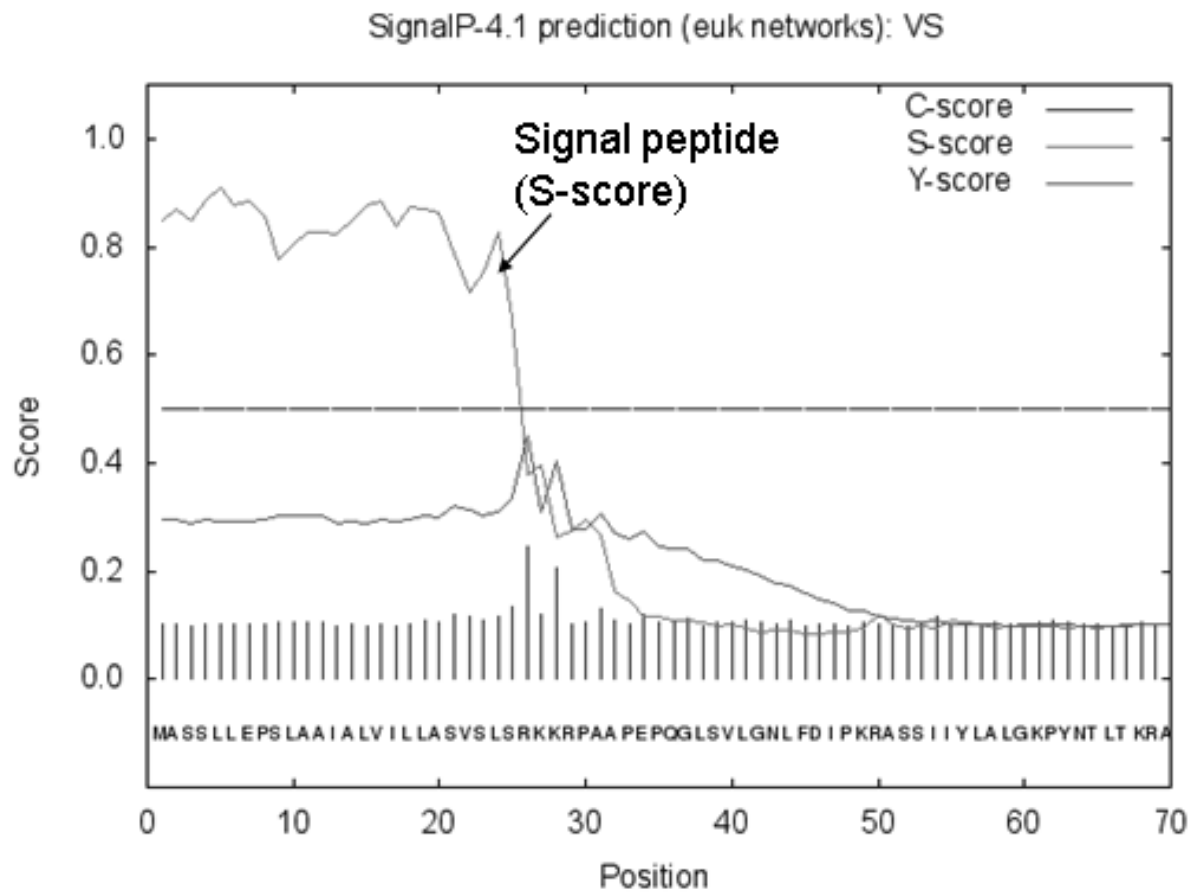


FIG. 14 (cont'd)

SignalP 4.1 Prediction

```
# Measure Position Value Cutoff signal
peptide?
max.C 26 0.244
max.Y 26 0.450
max.S 5 0.911
meanS 1-25 0.834
D 1-25 0.657 0.450 YES
Name=VS SP='YES' Cleavage site
between pos. 25 and 26: SLS-RKD=0.657 D-
cutoff=0.450 Networks=SignalP- noTM
```

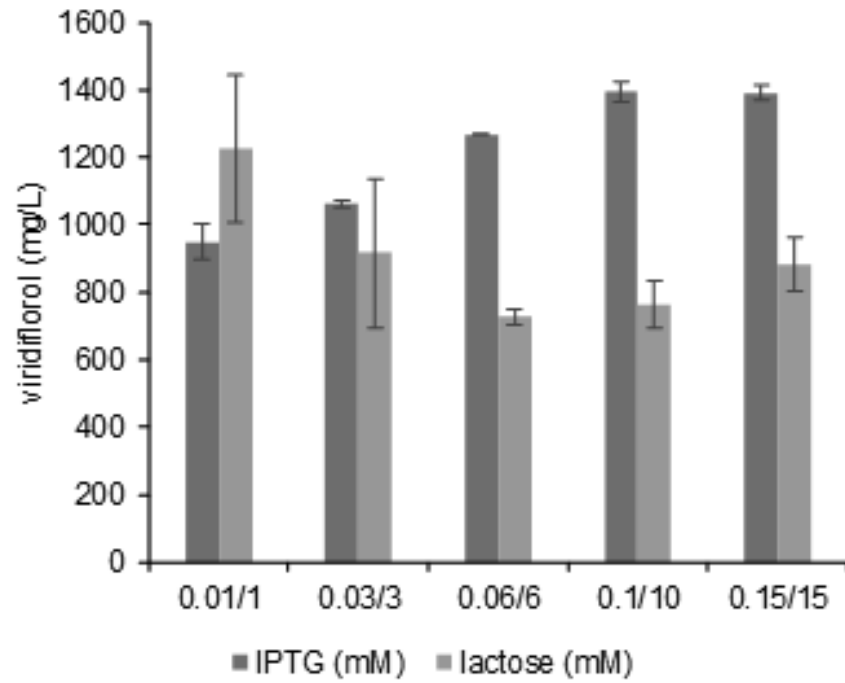
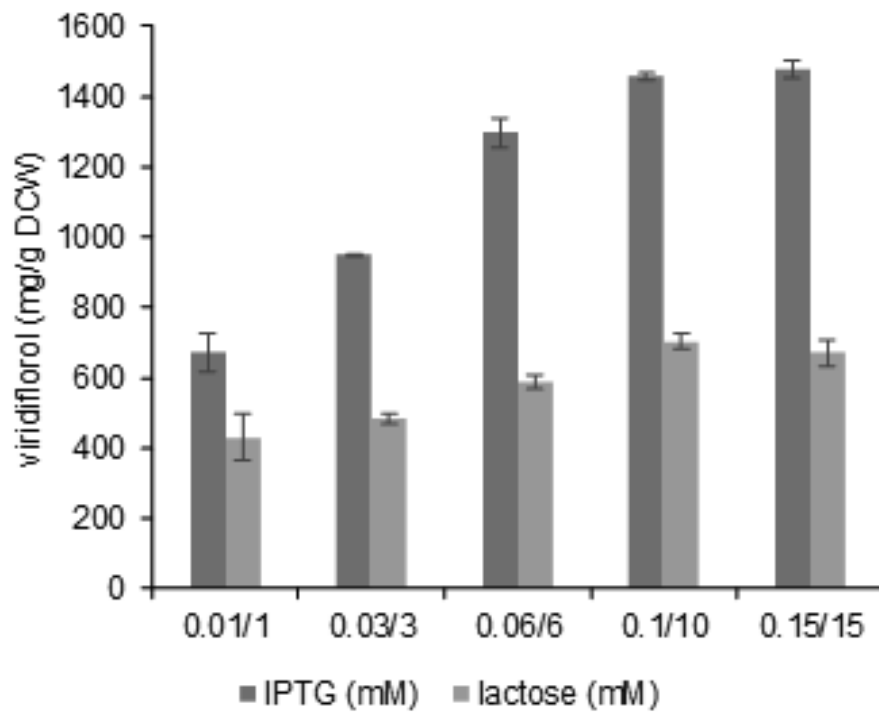
FIG. 15A**FIG. 15B**

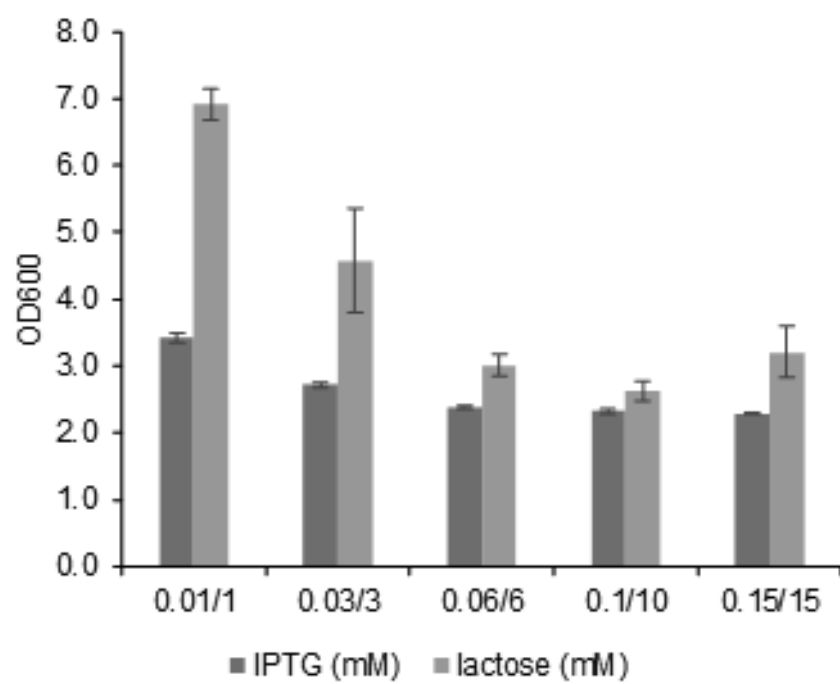
FIG. 15C

FIG. 16

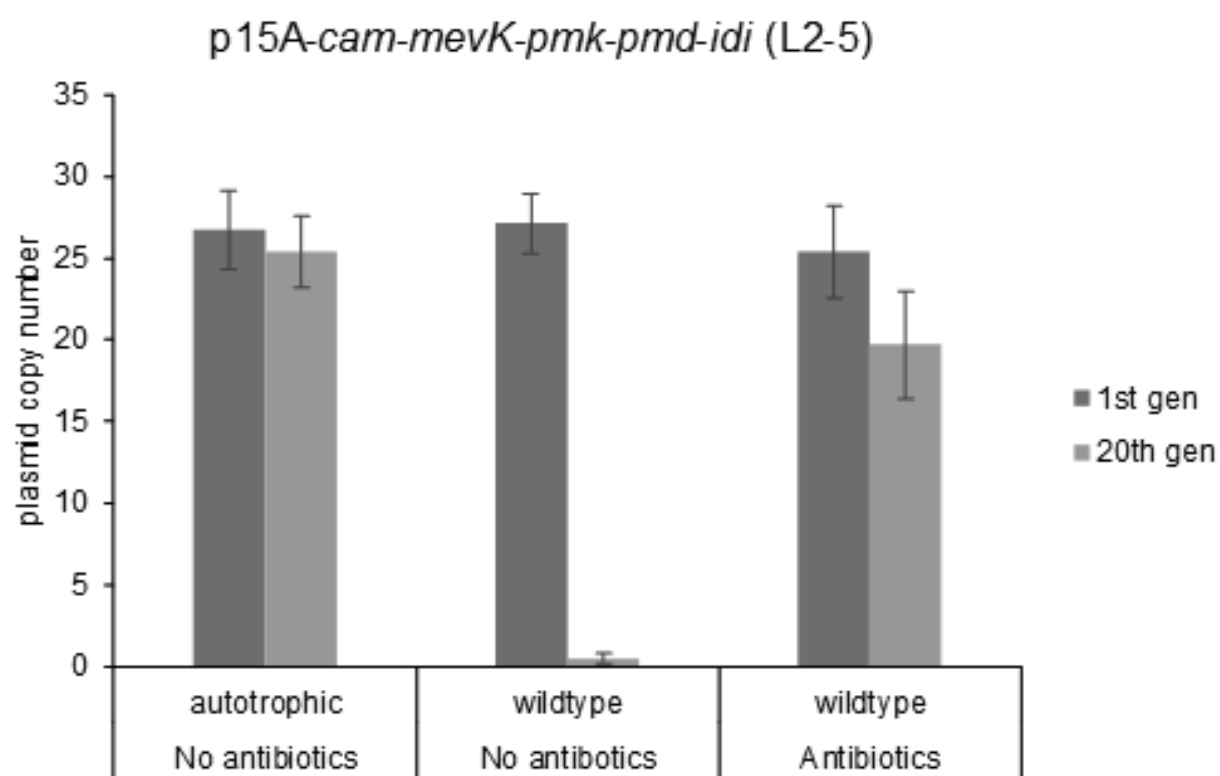


FIG. 17A

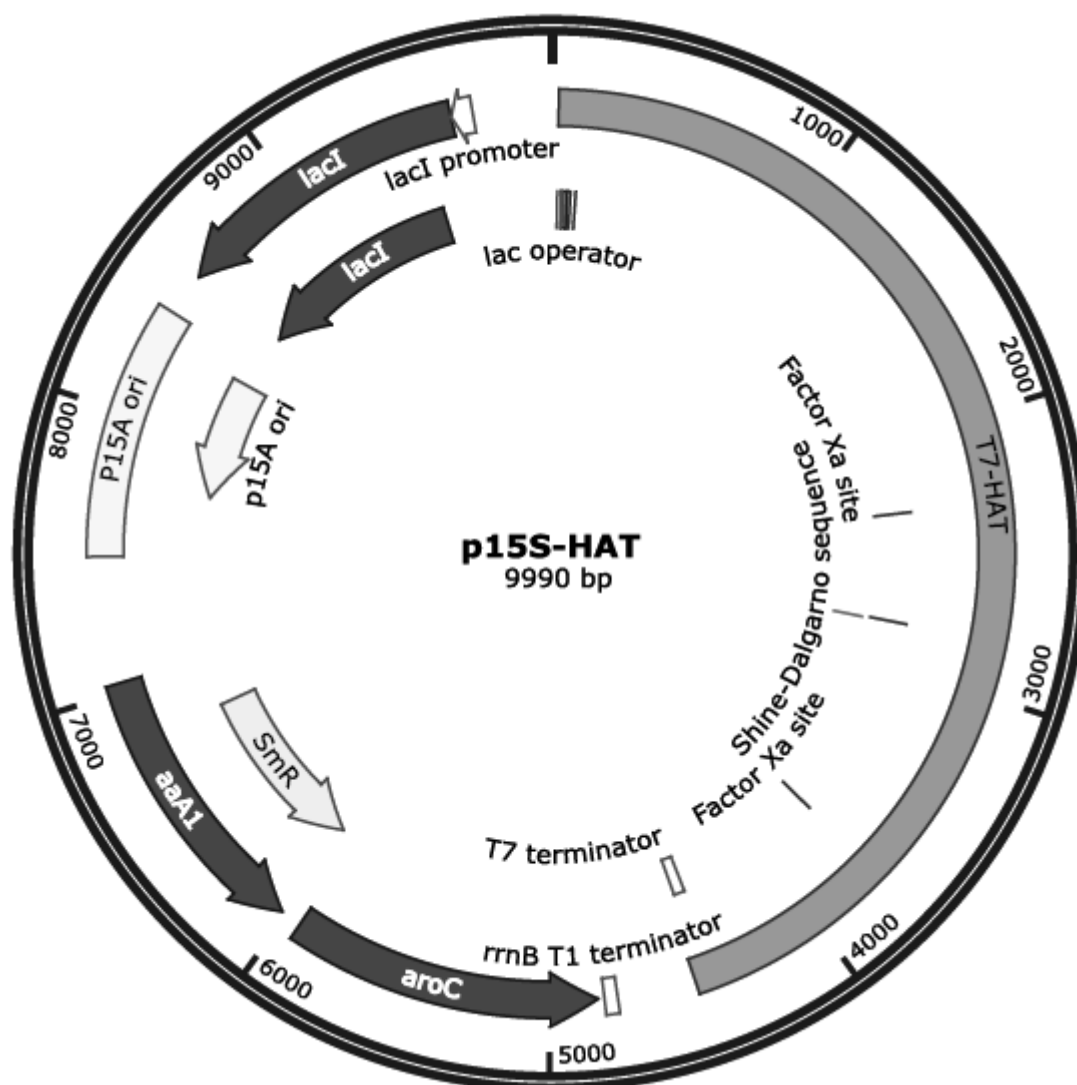


FIG. 17B

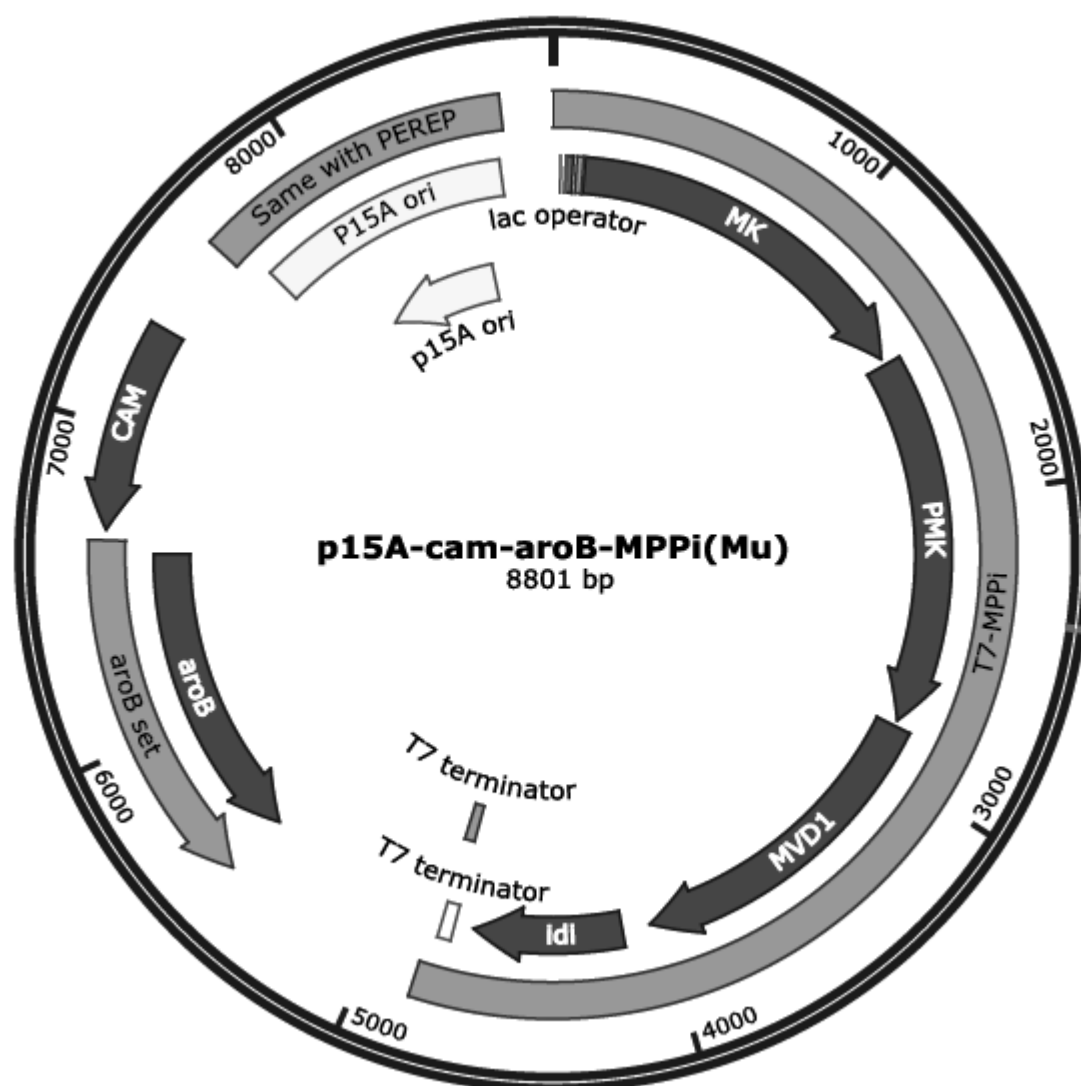


FIG. 17C

