

Figure 1

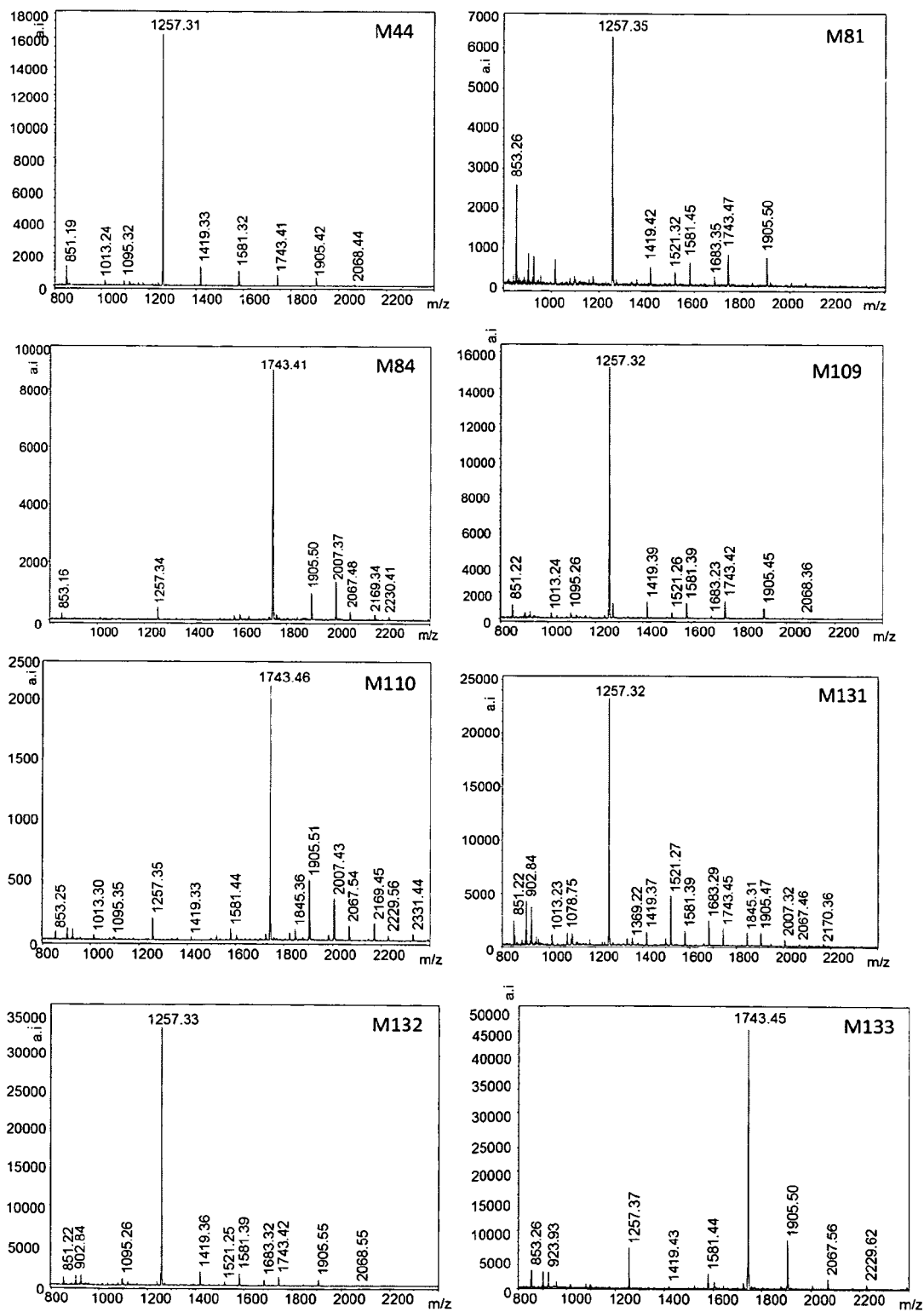


Figure 1, cont.

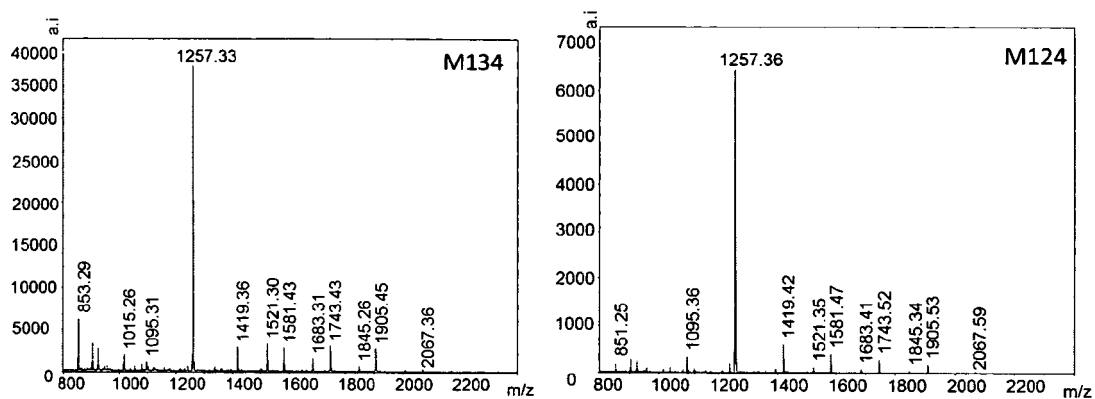


Figure 2

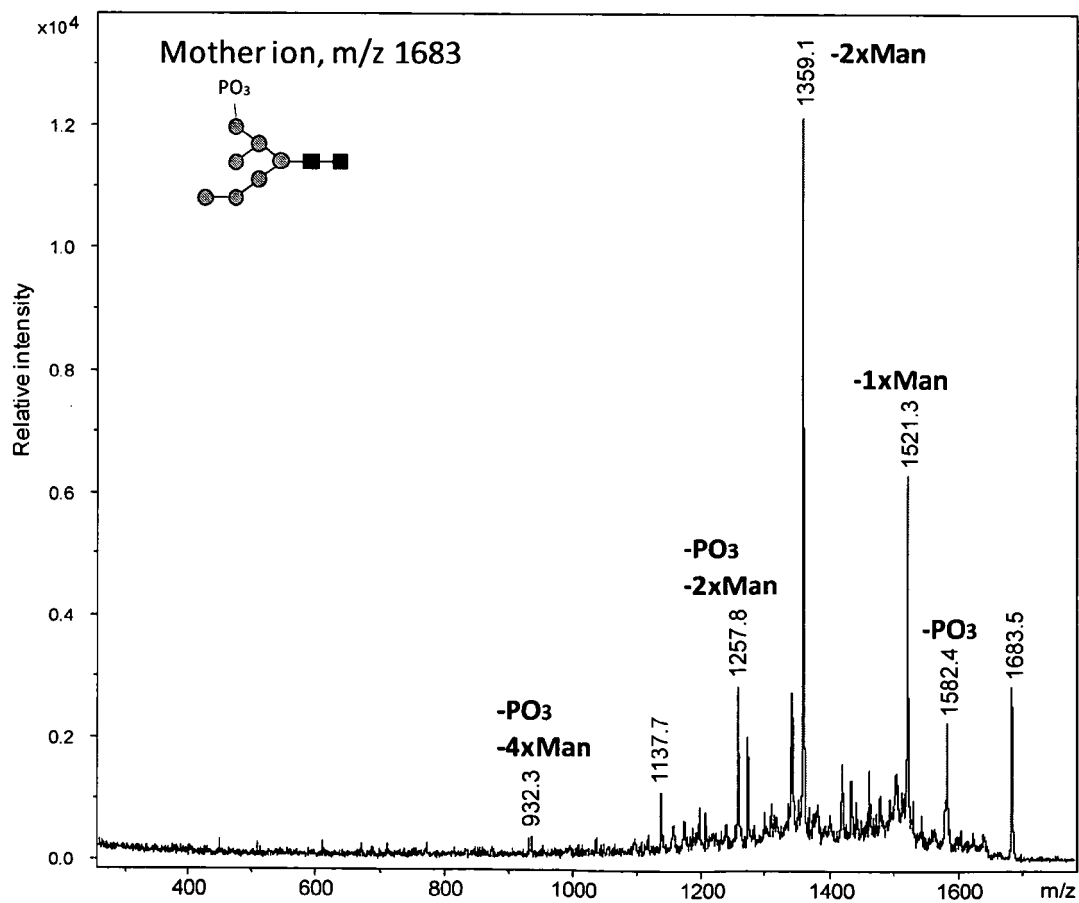


Figure 3

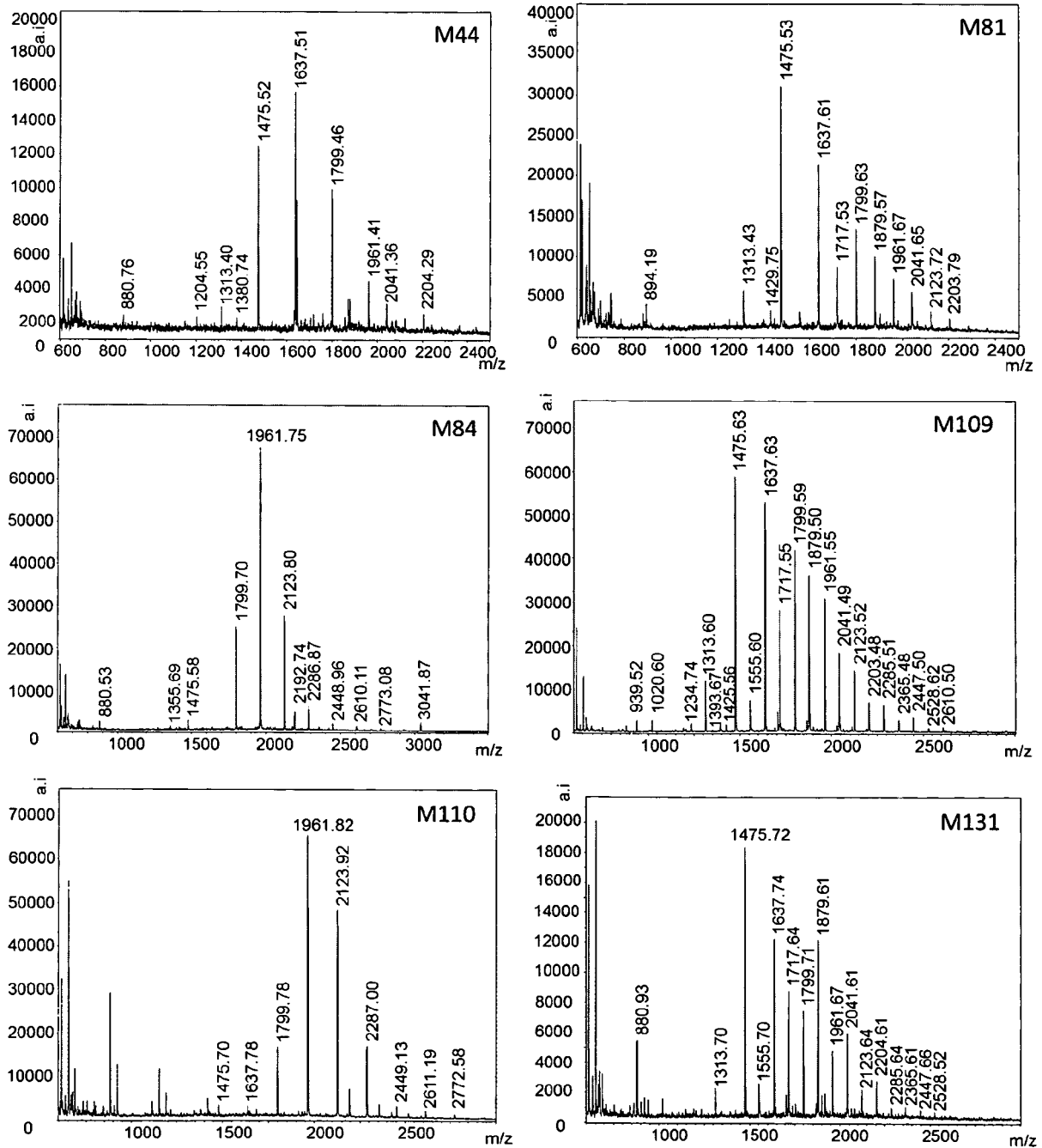


Figure 3, cont.

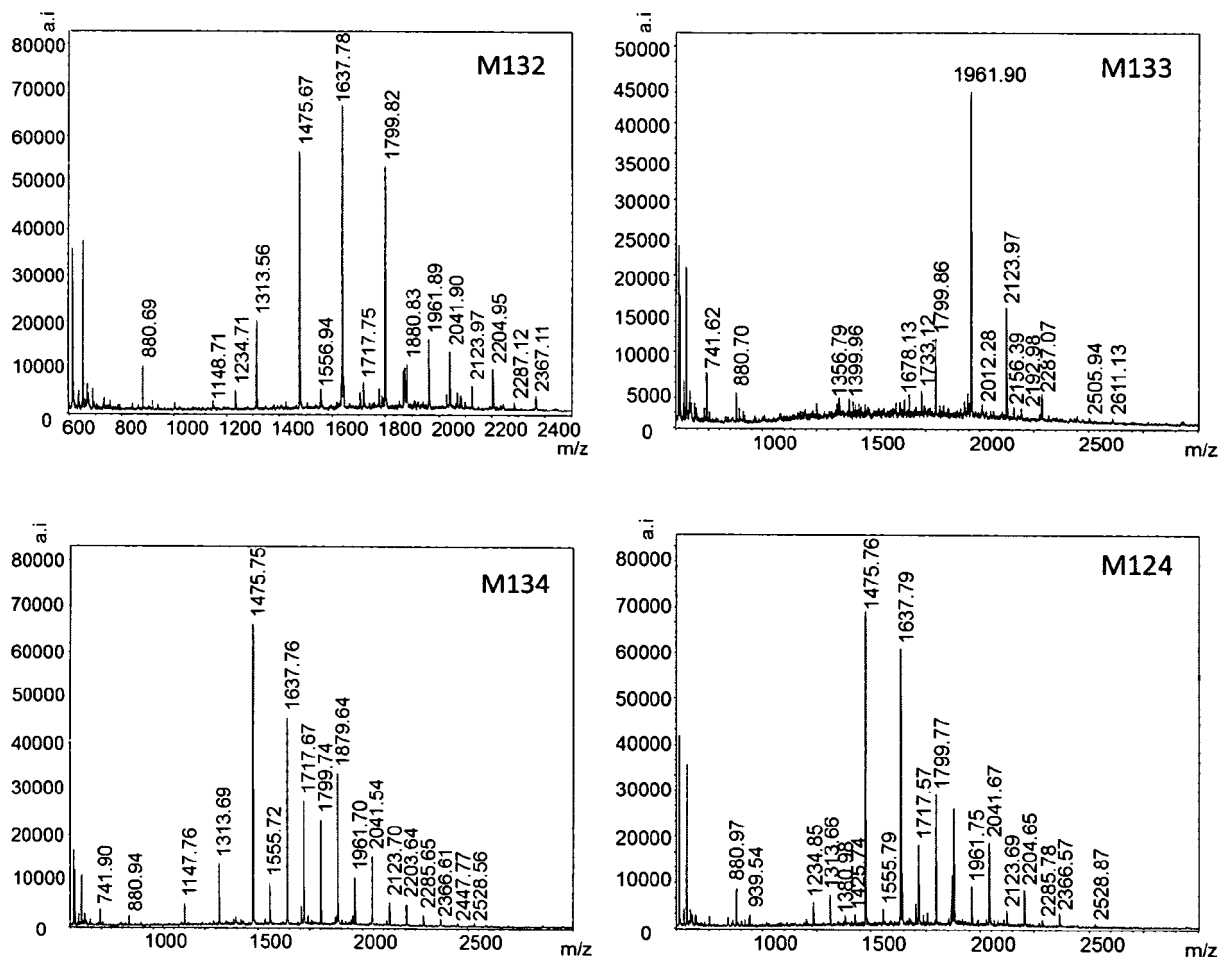


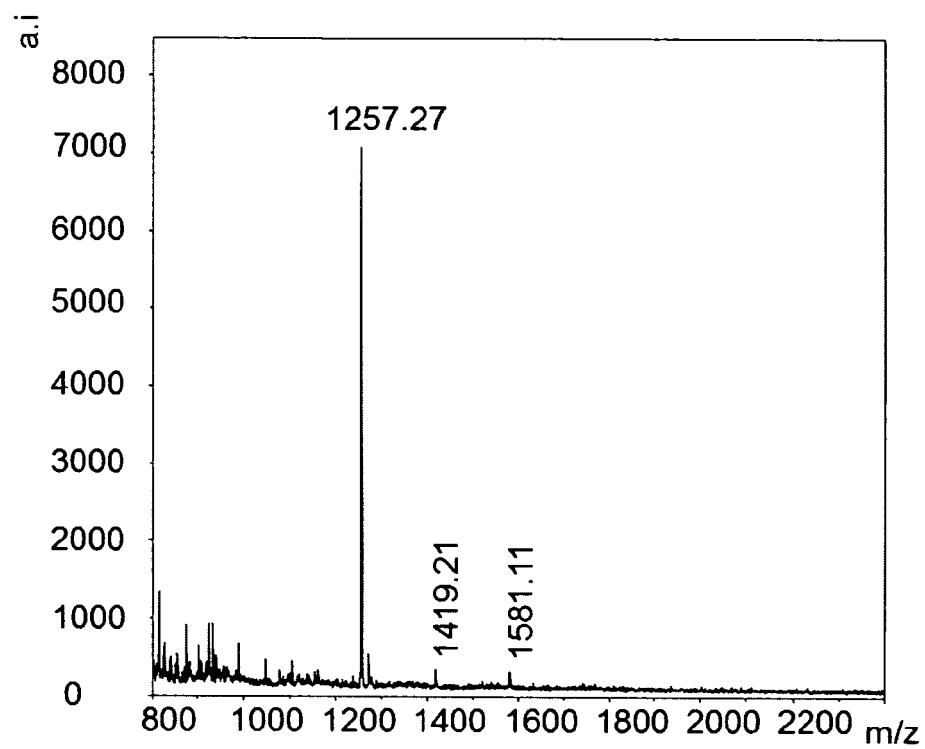
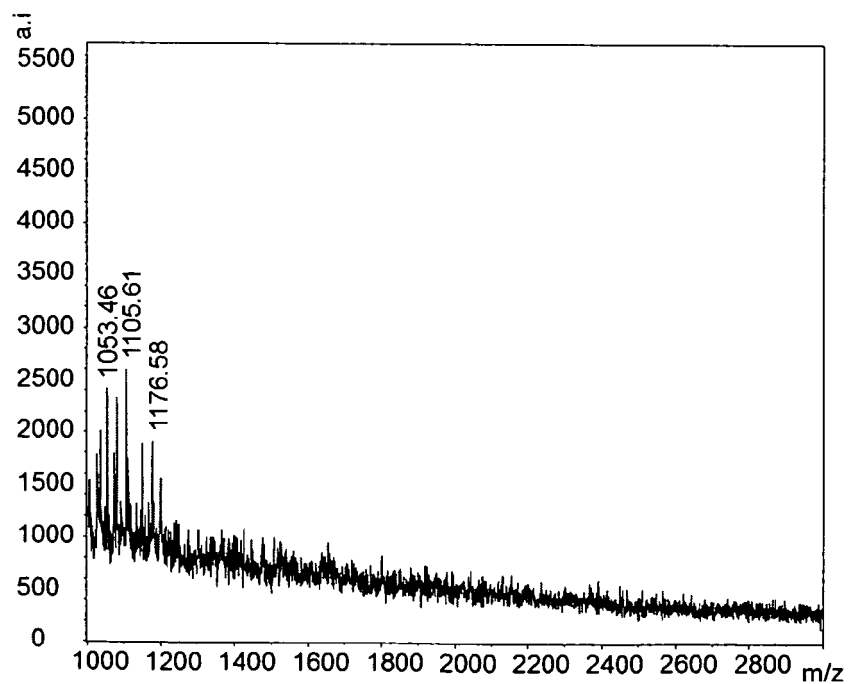
Figure 4**A.****B.**

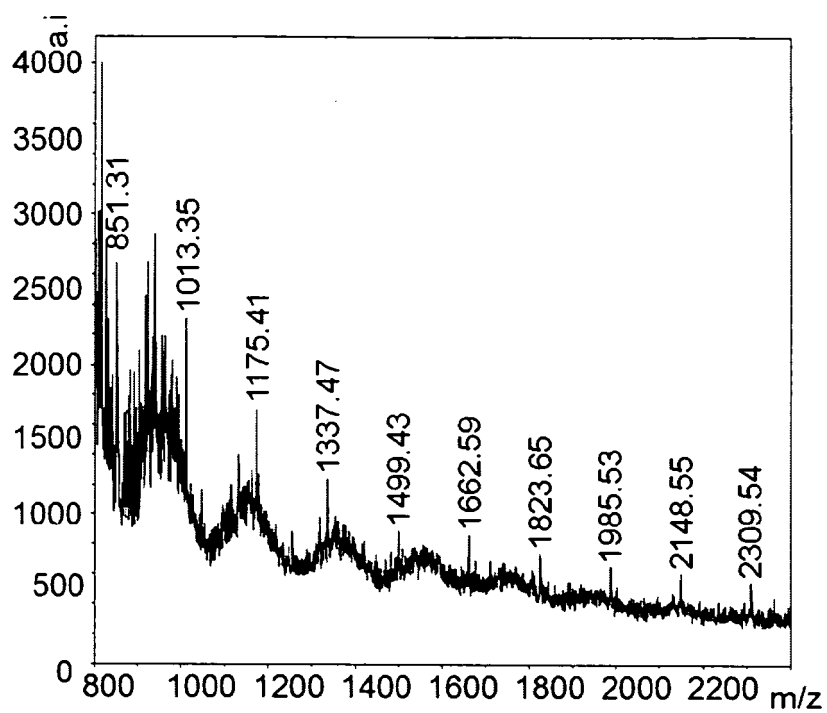
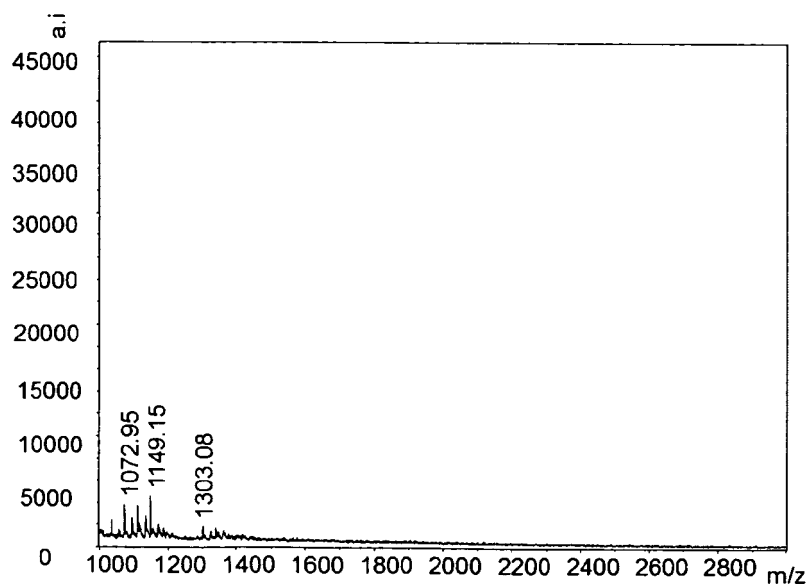
Figure 5**A.****B.**

Figure 6

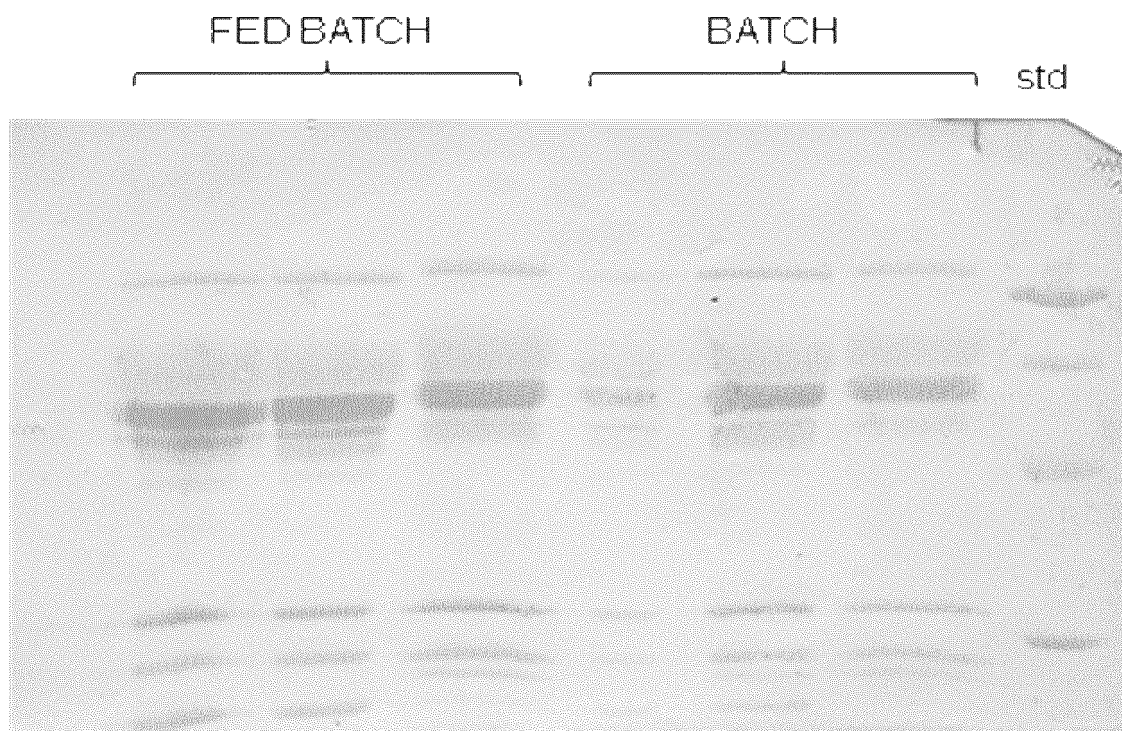


Figure 7

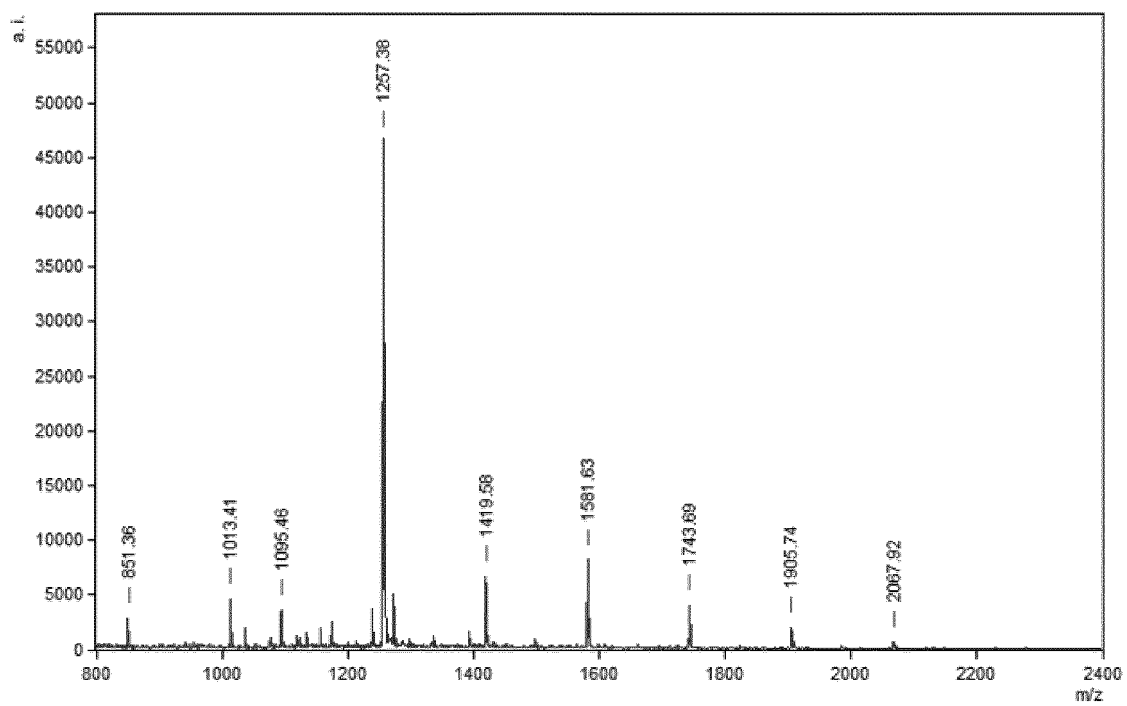


Figure 8

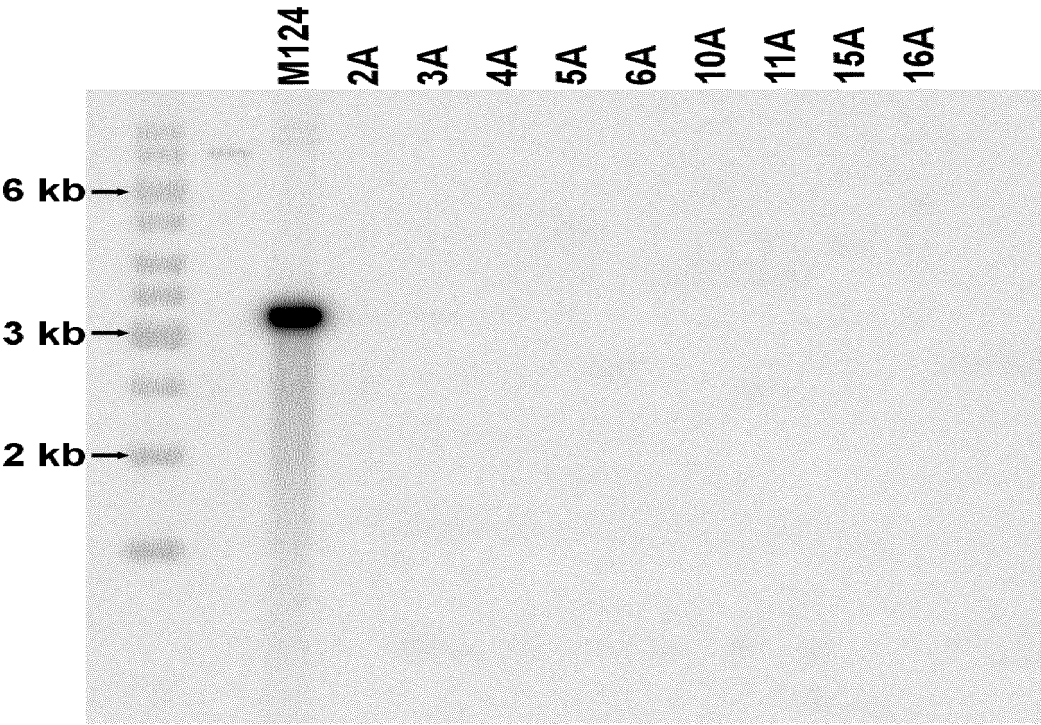
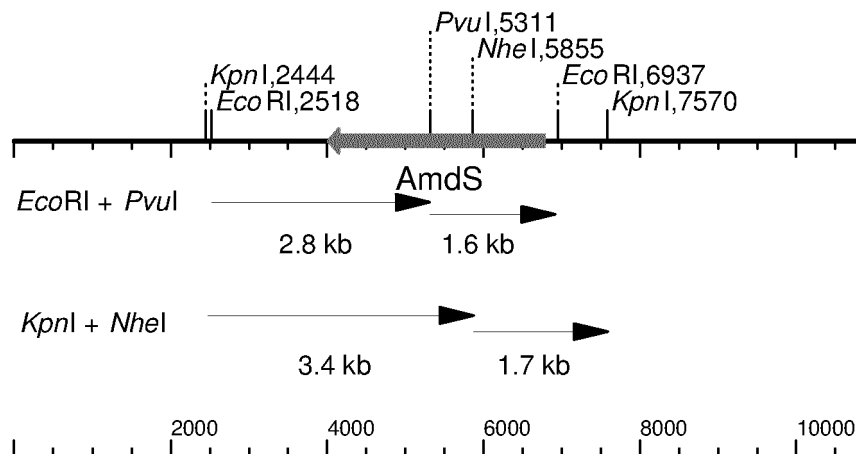


Figure 9

A.



B.

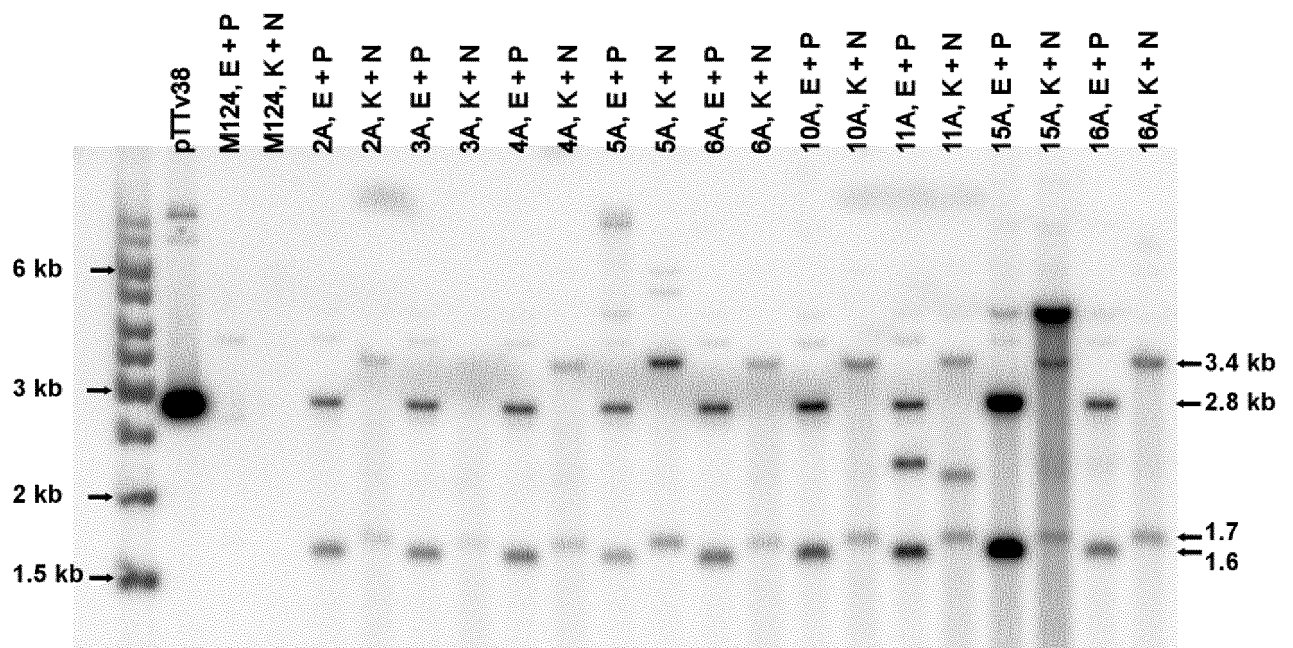


Figure 10

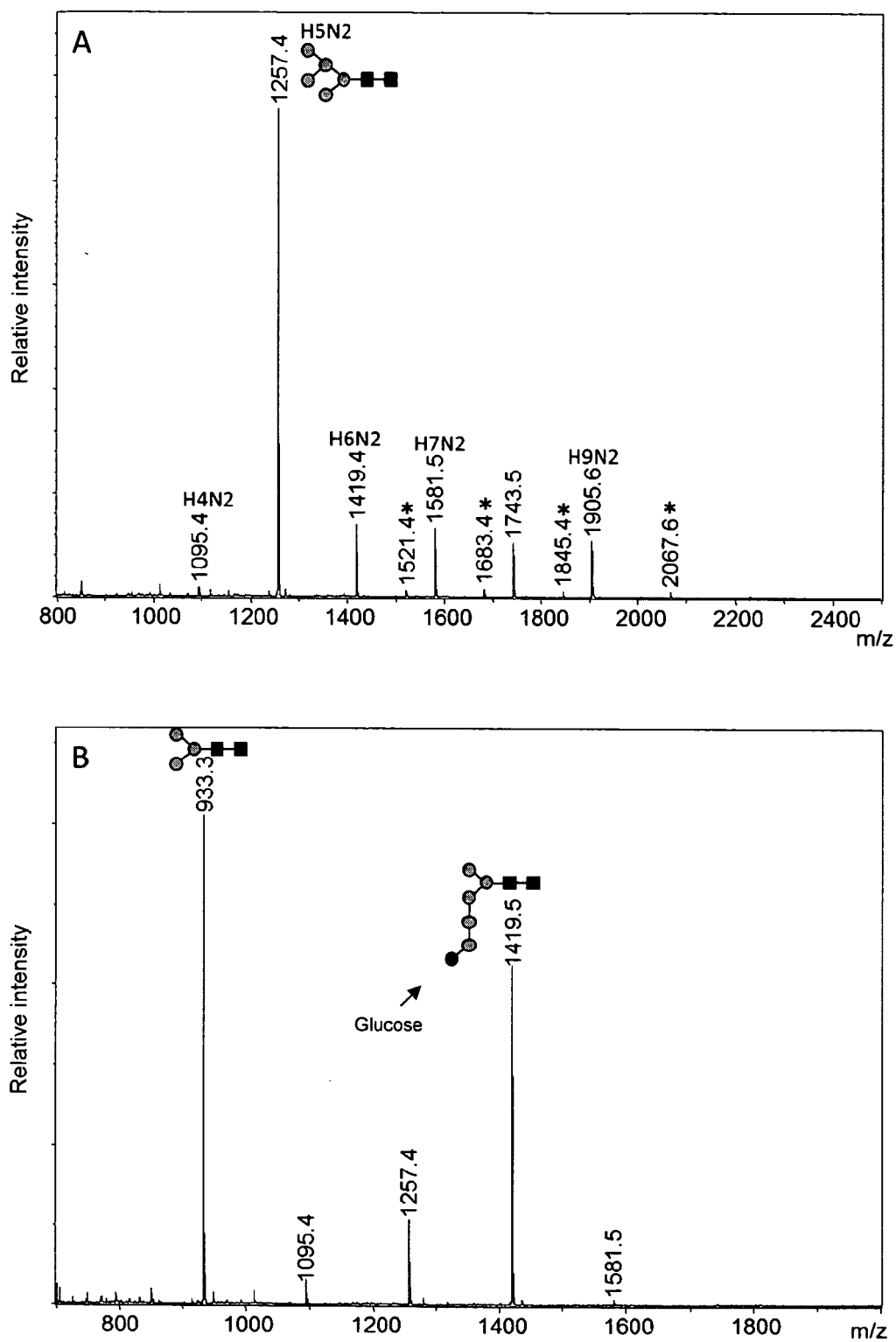


Figure 11

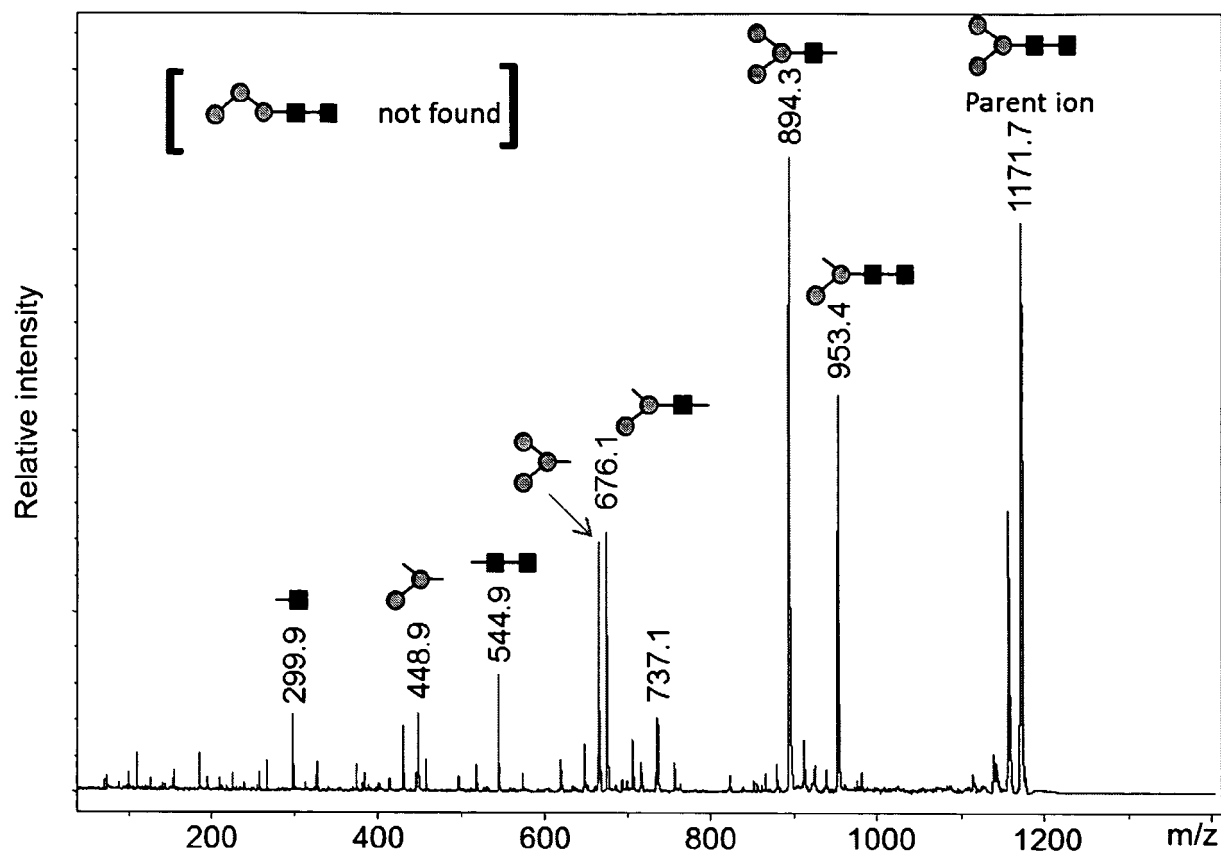


Figure 12

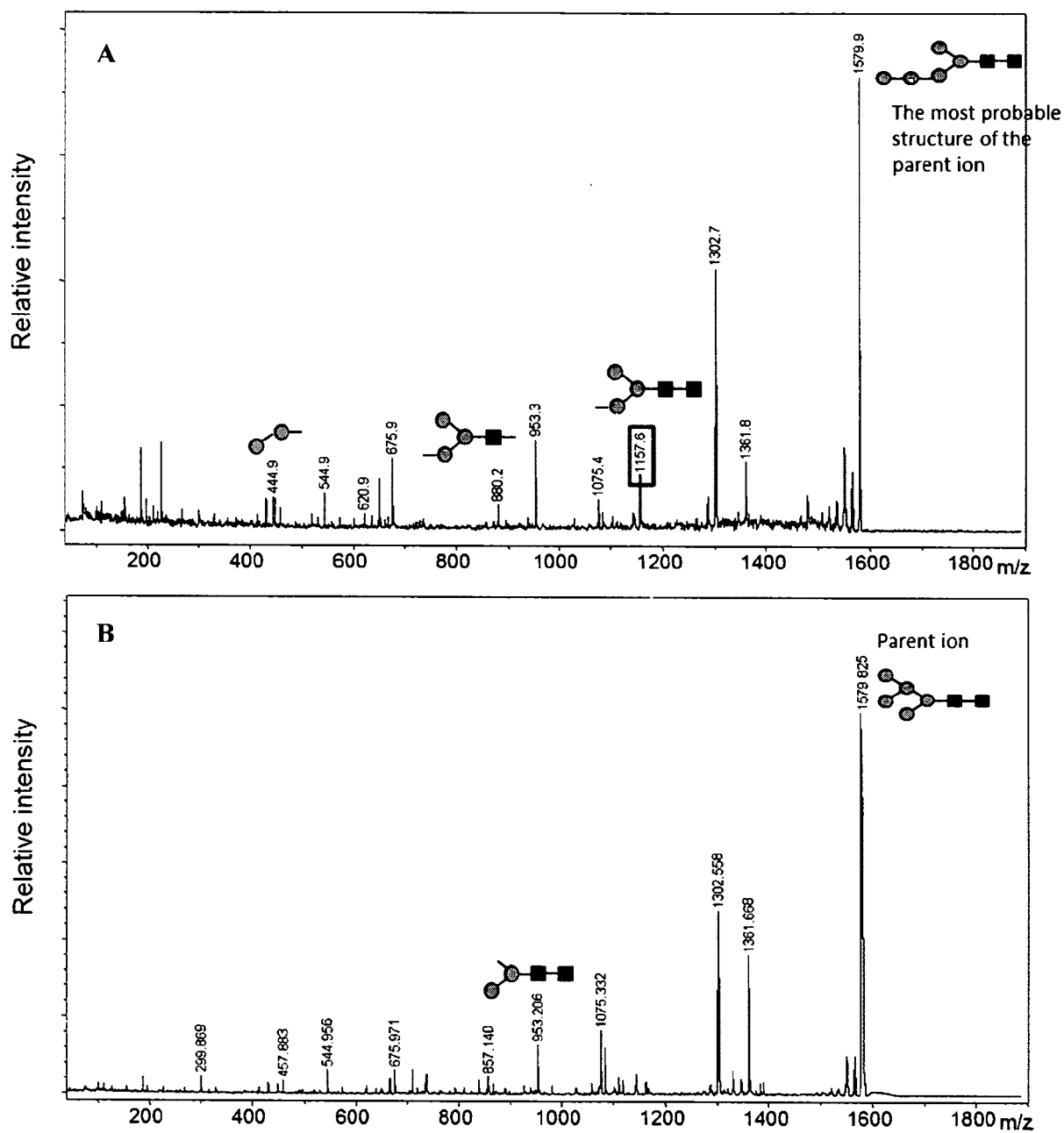


Figure 13

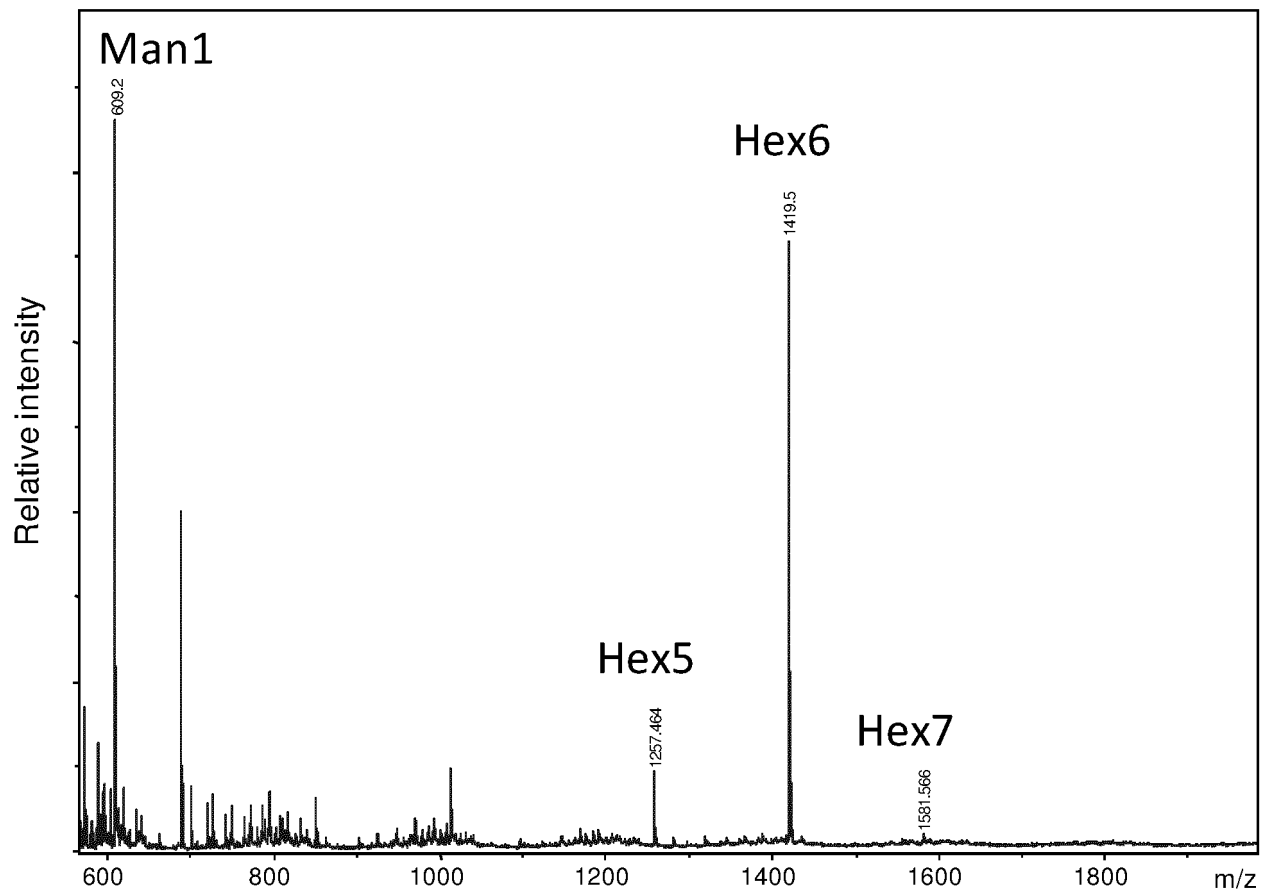


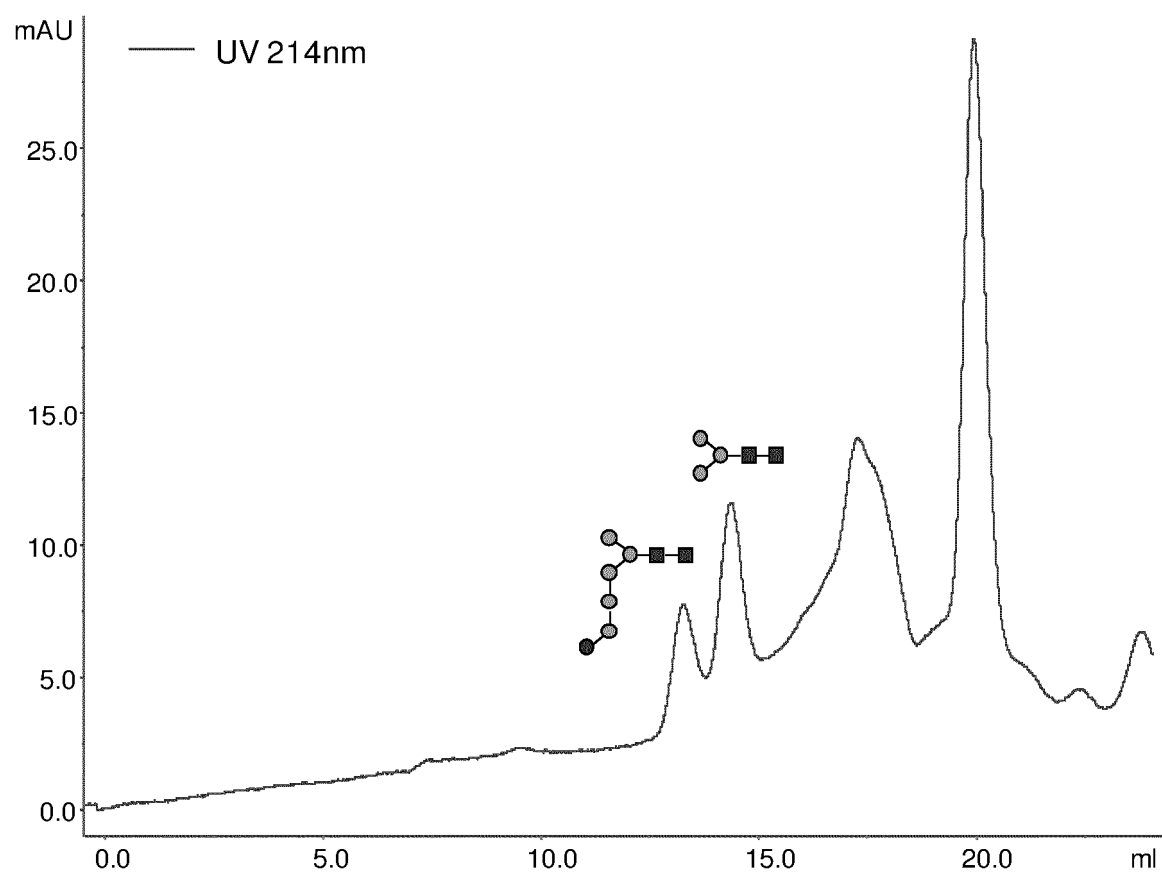
Figure 14

Figure 15

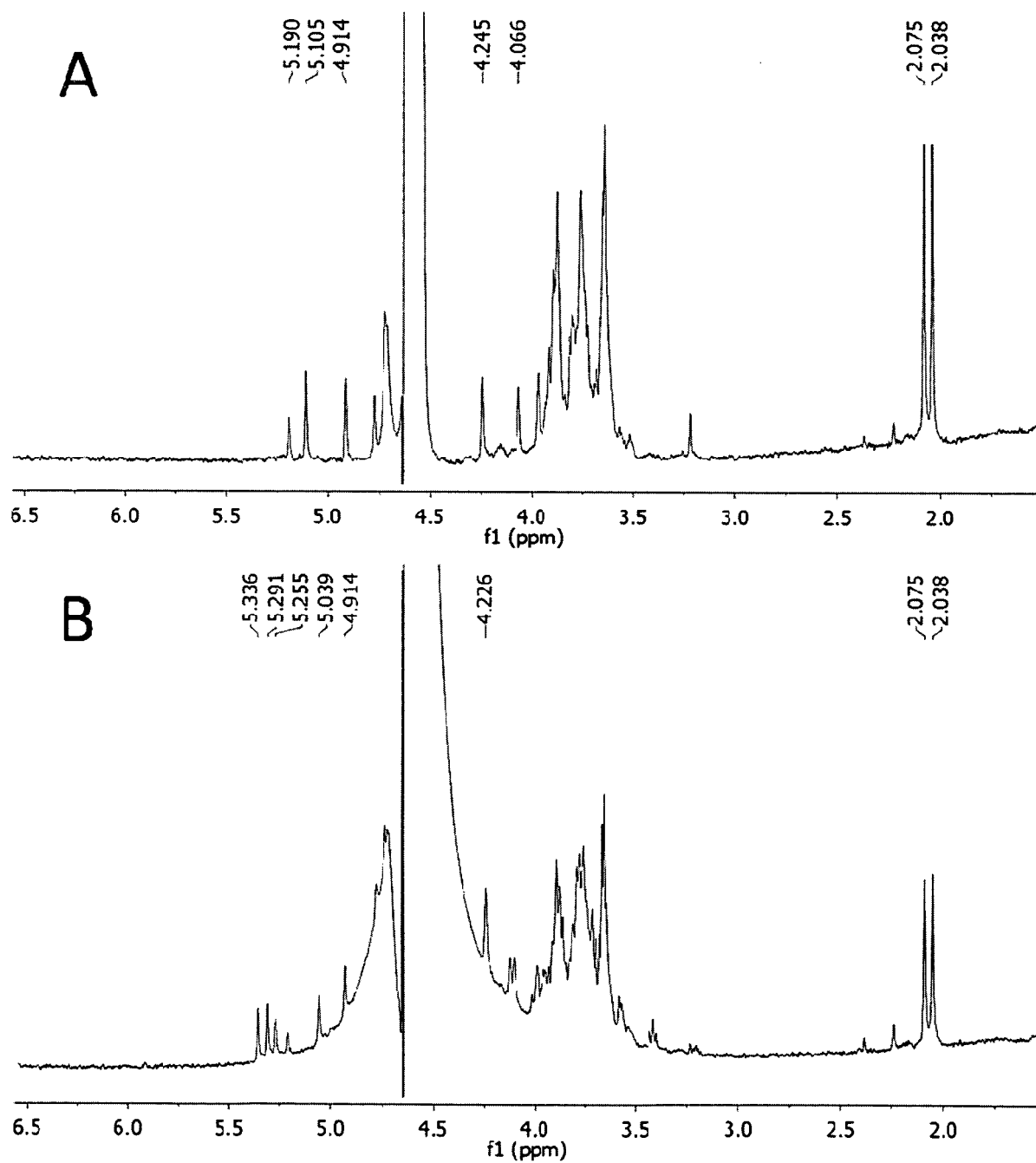


Figure 16

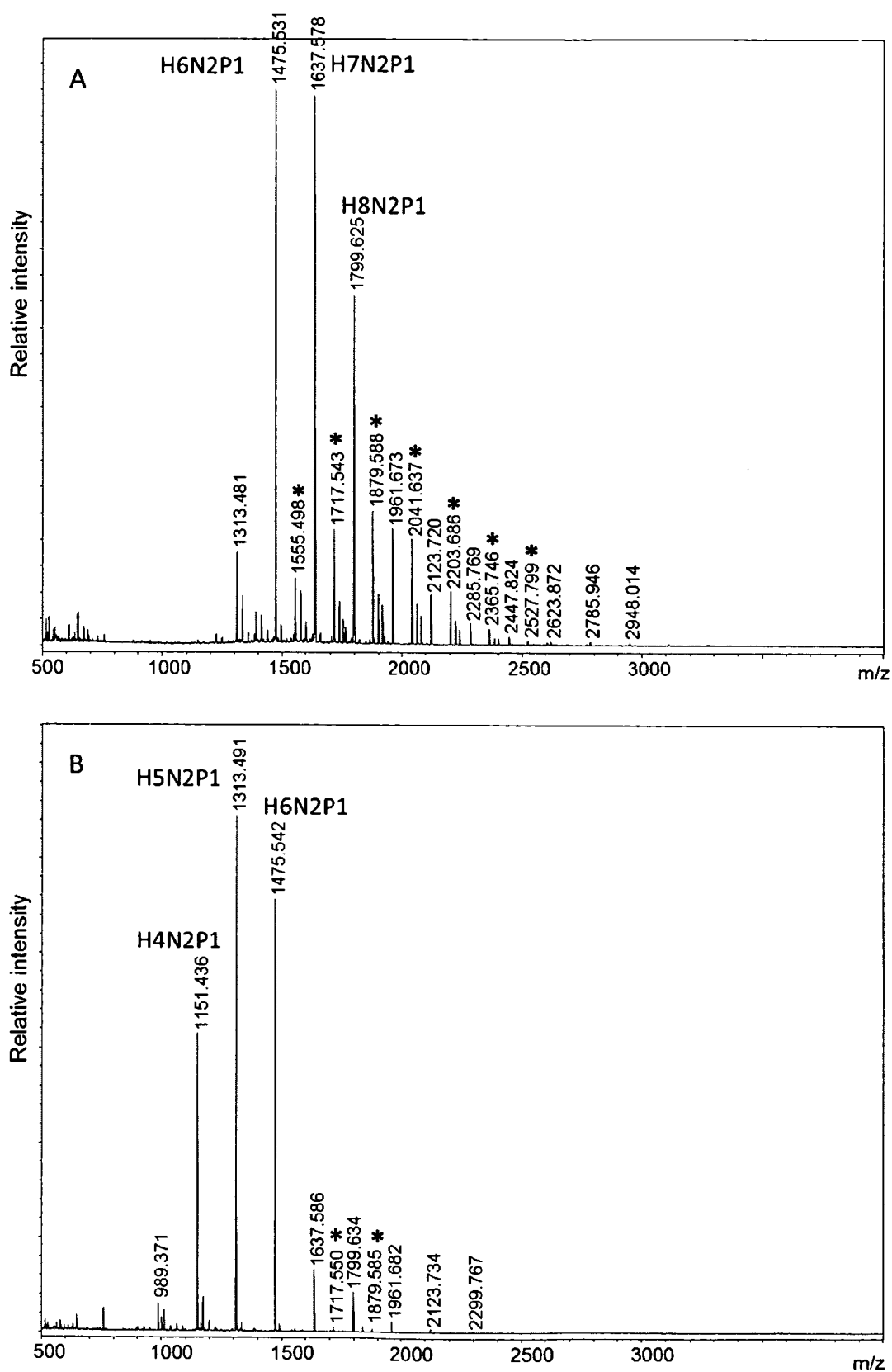


Figure 17

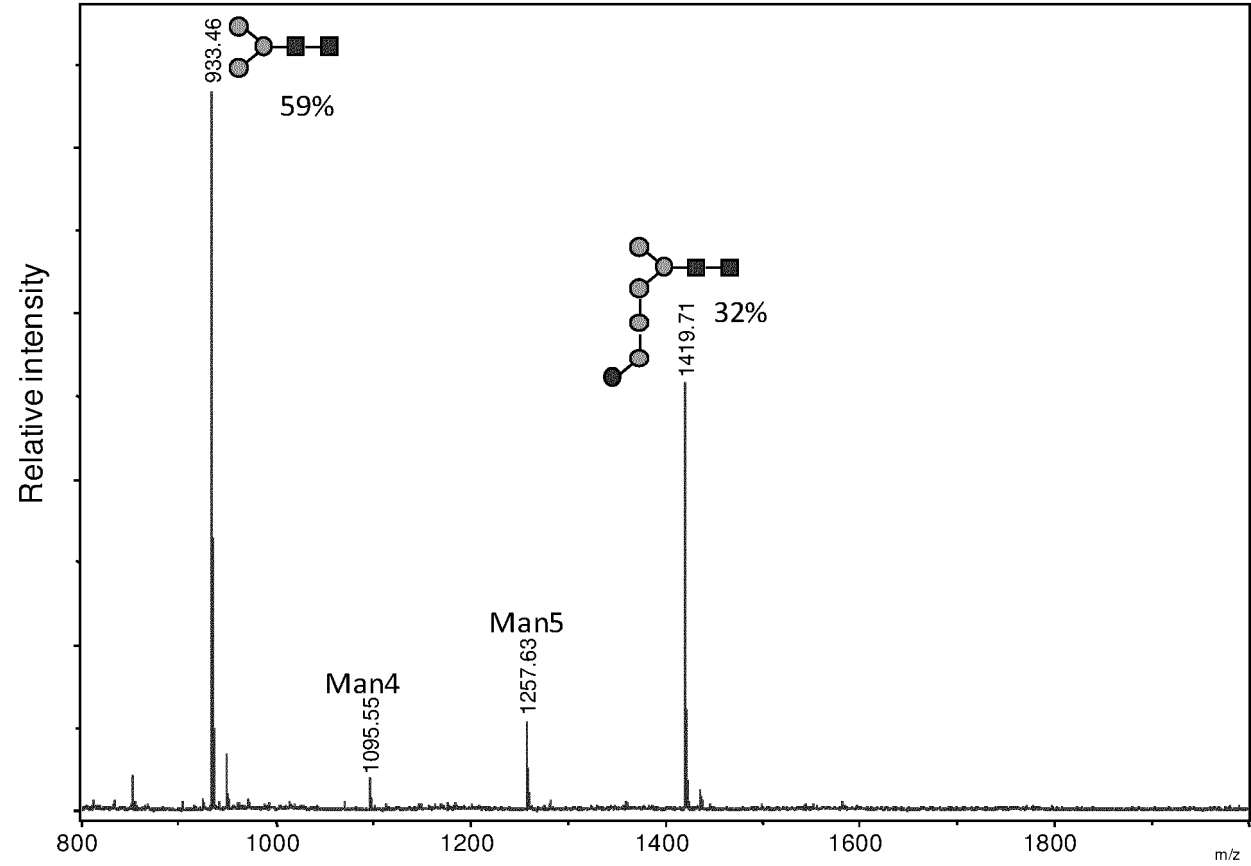


Figure 18

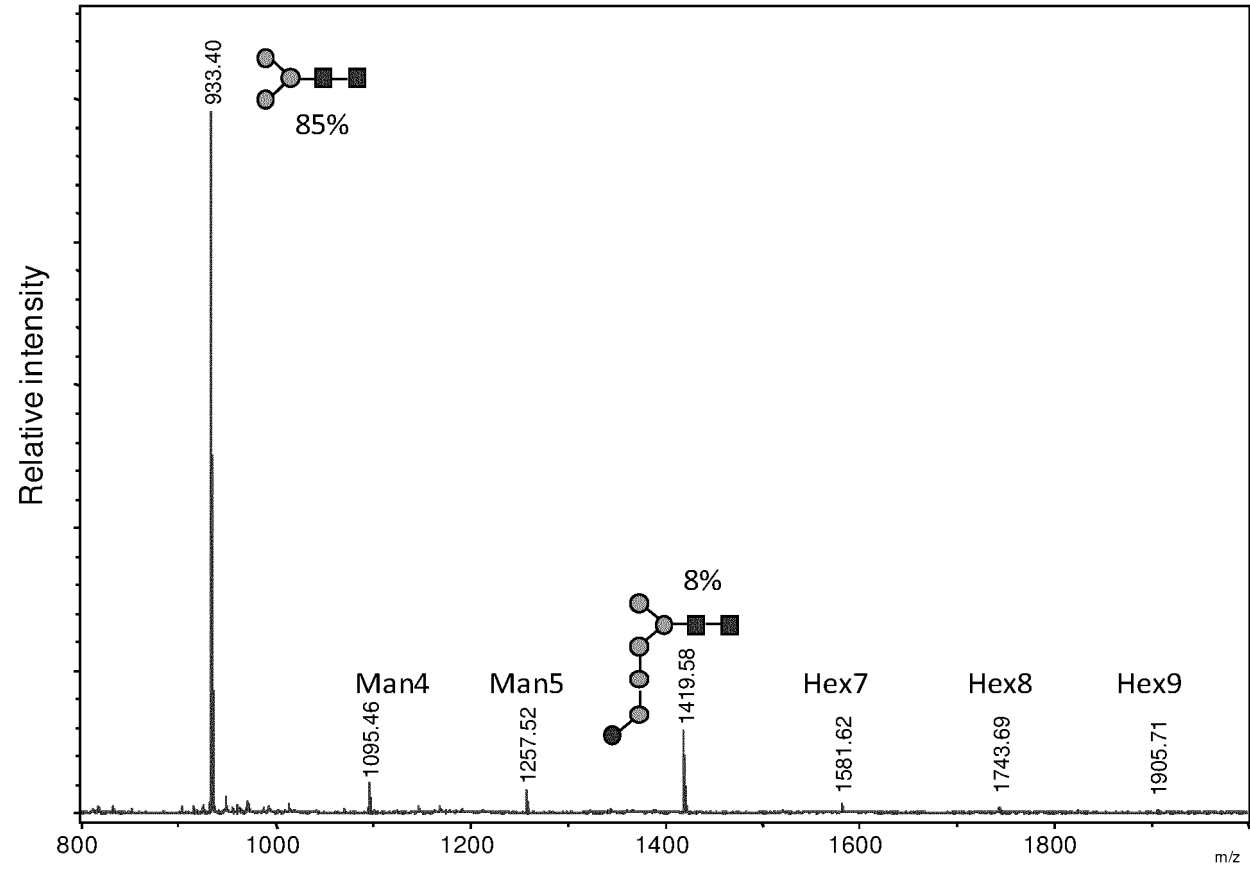


Figure 19

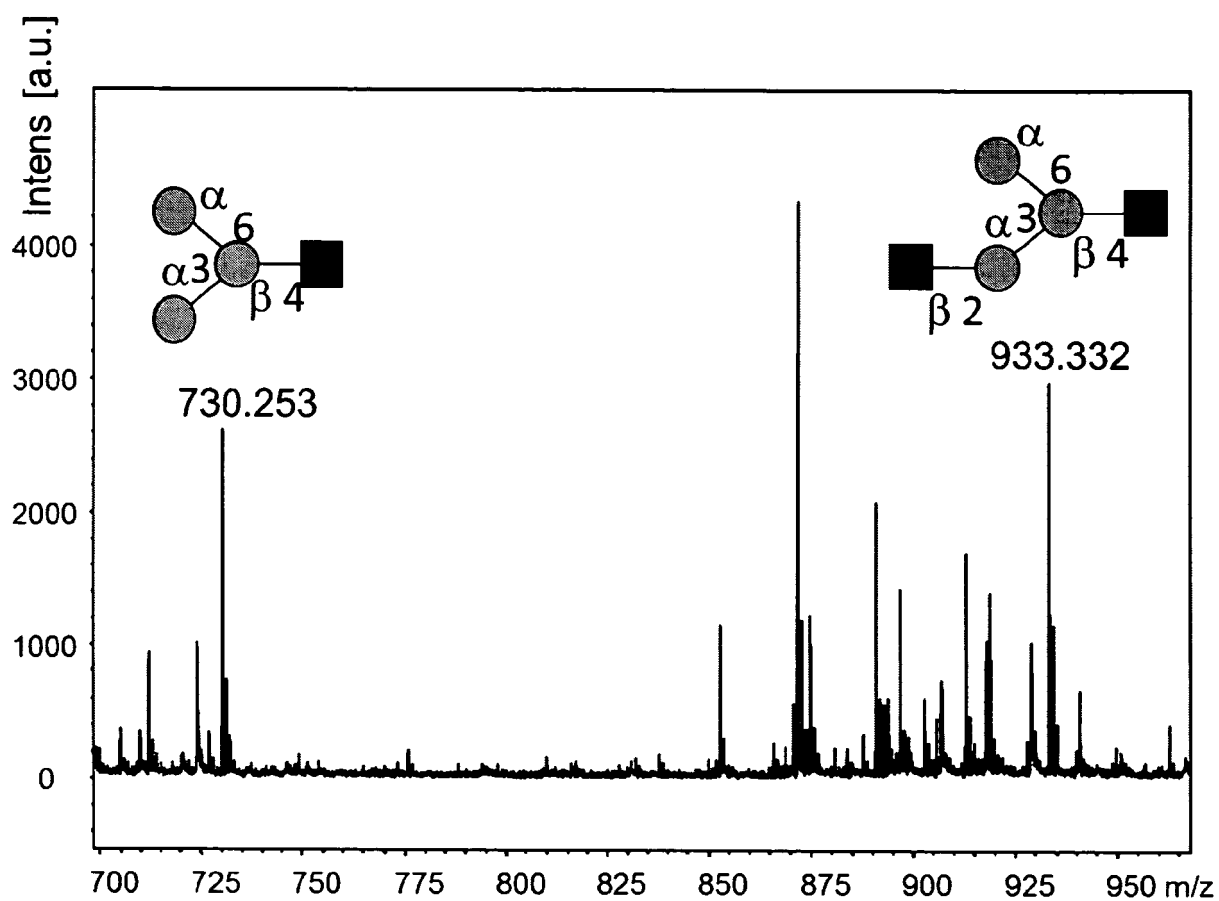


Figure 20

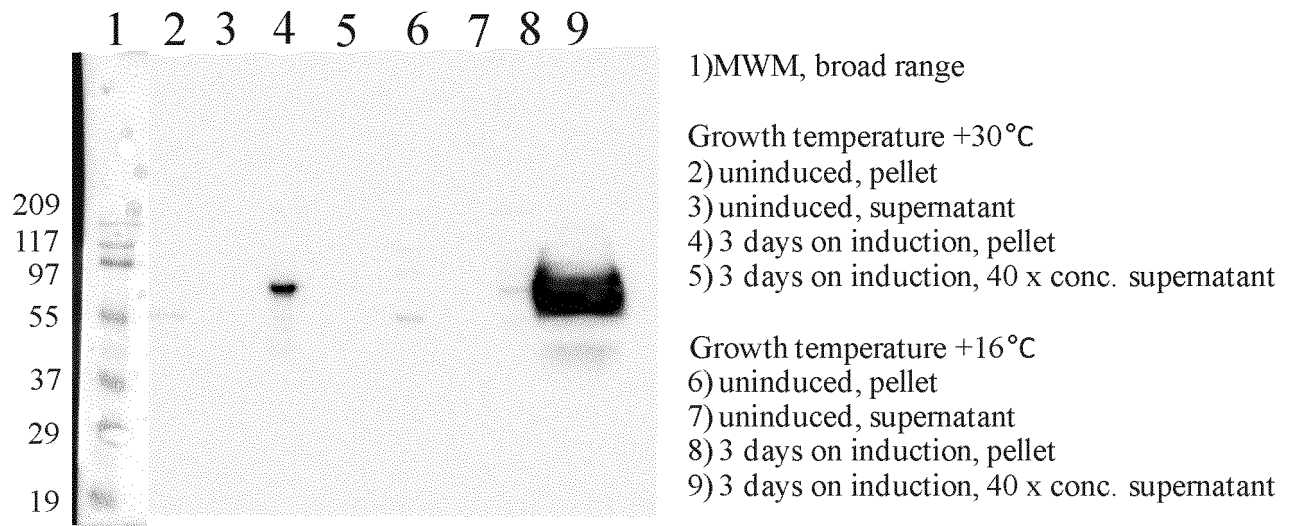


Figure 21

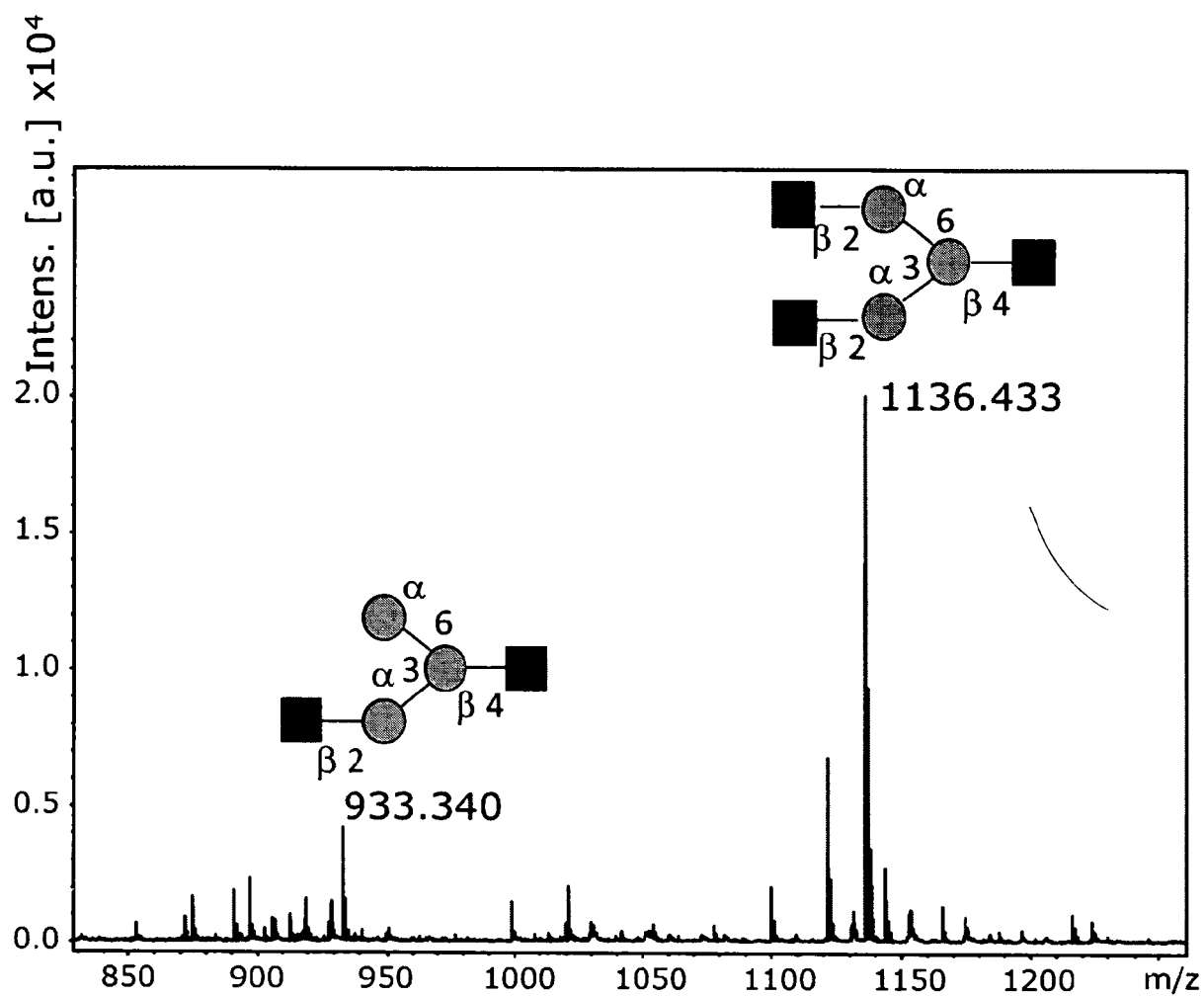


Figure 22

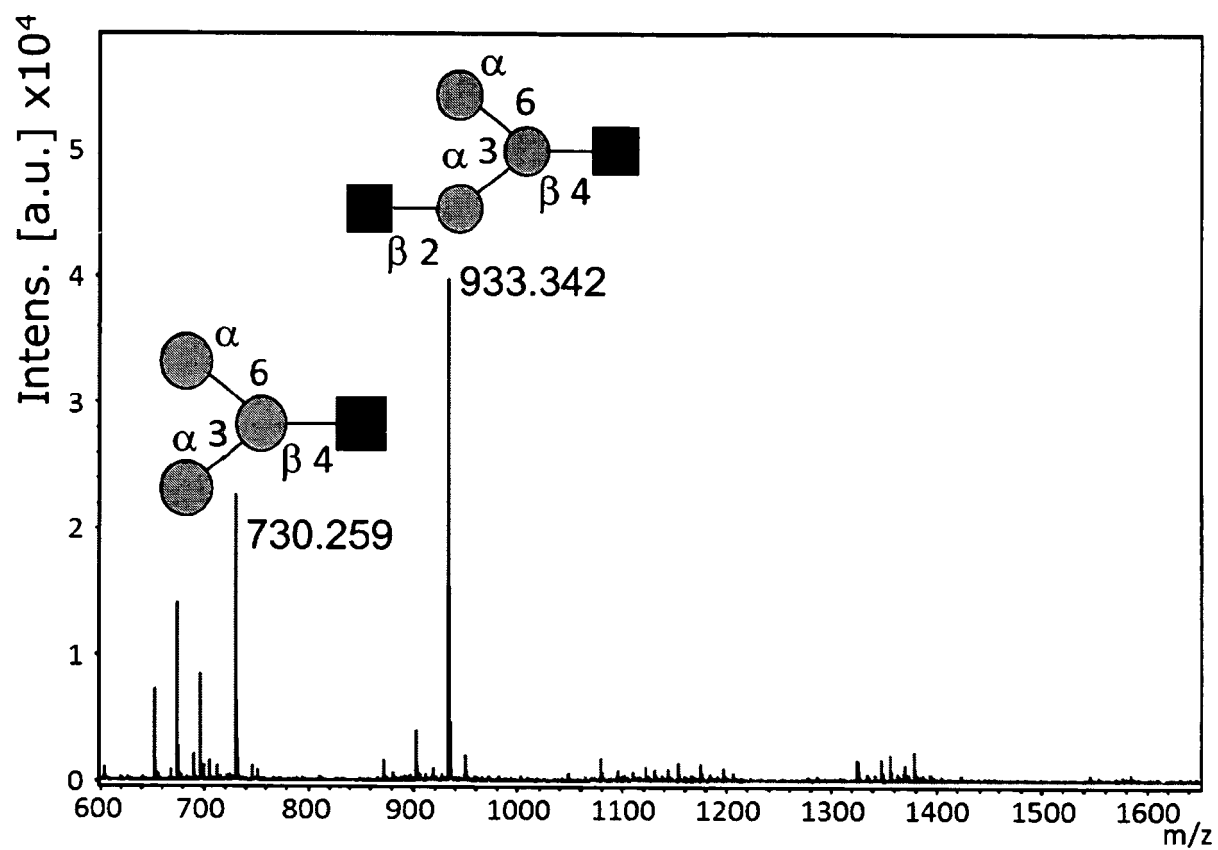


Figure 23

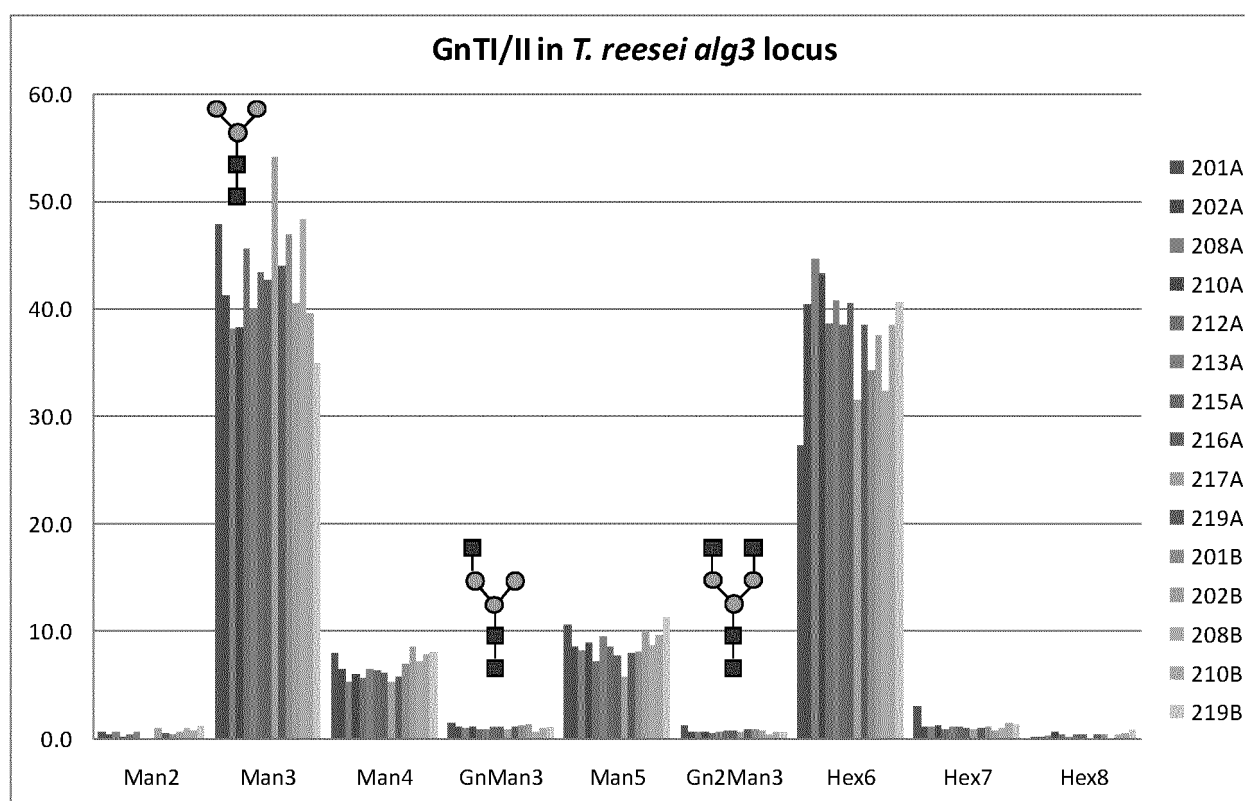


Figure 24

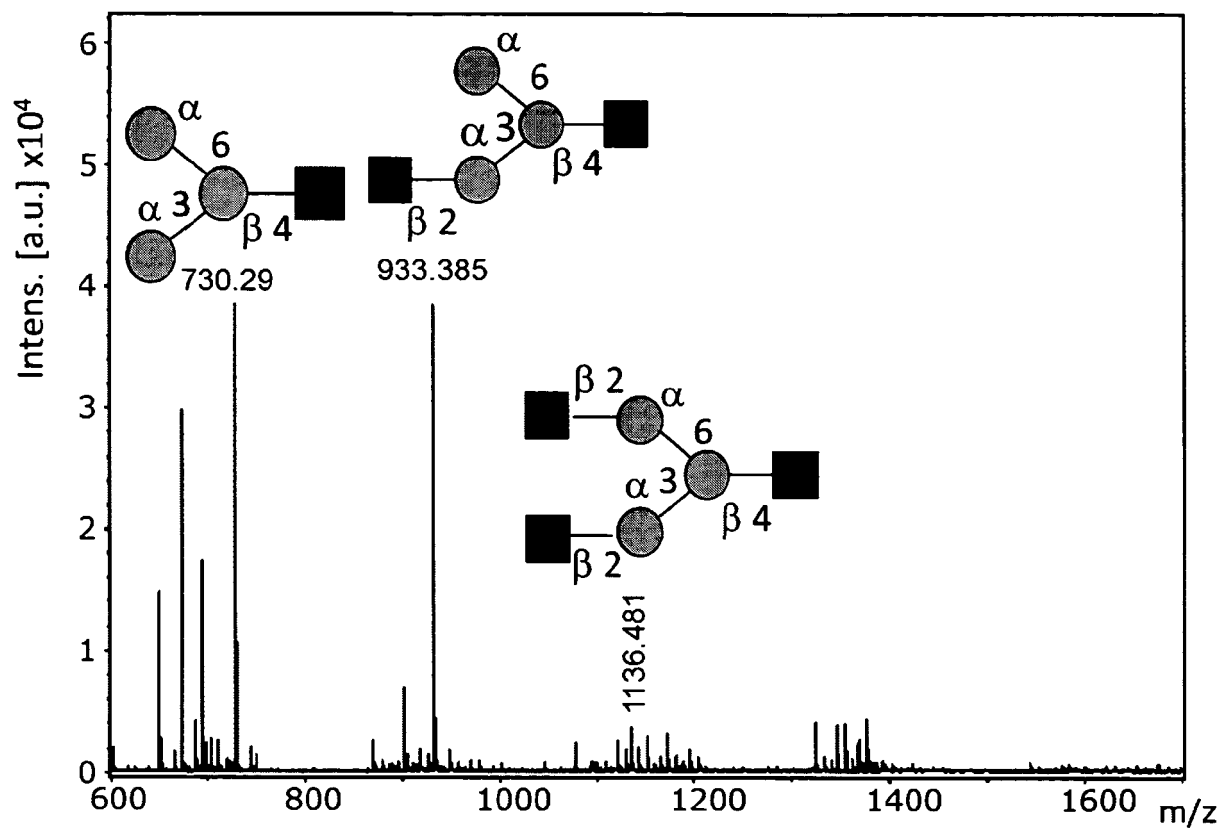


Figure 25

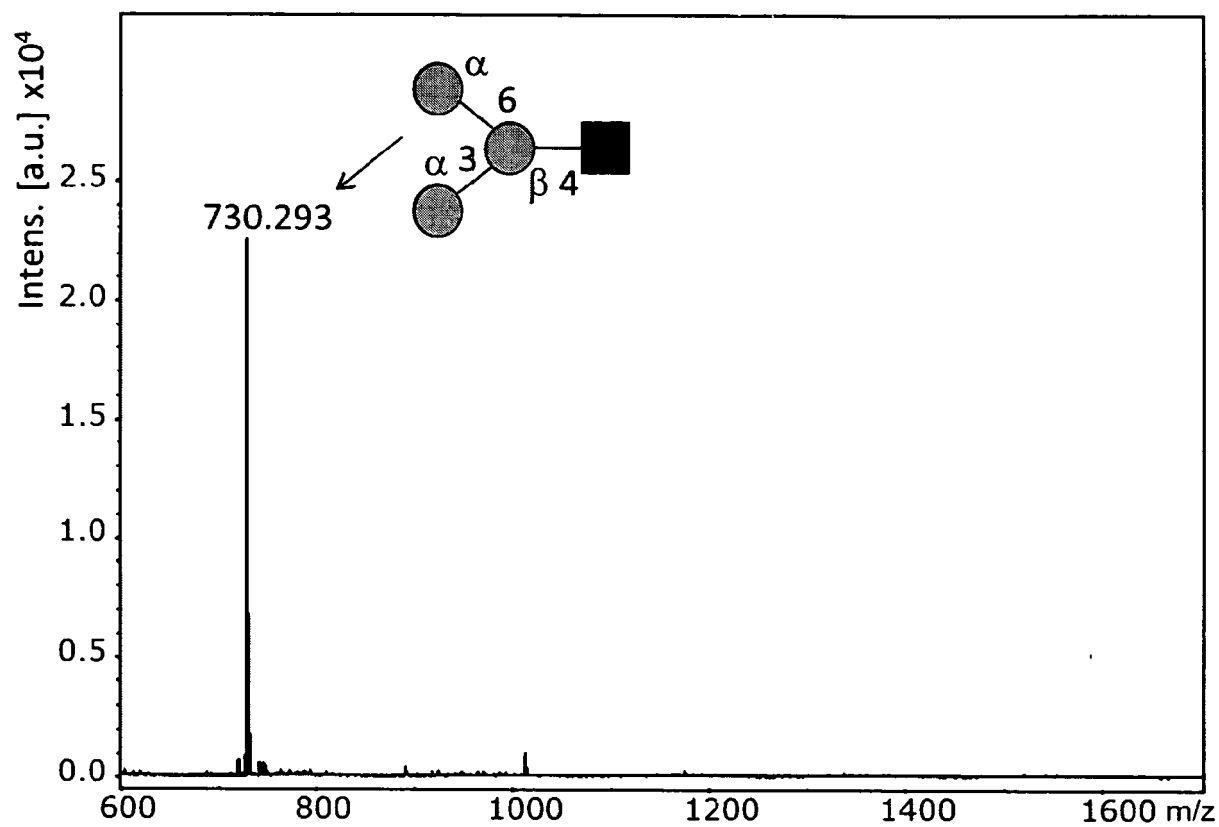


Figure 26

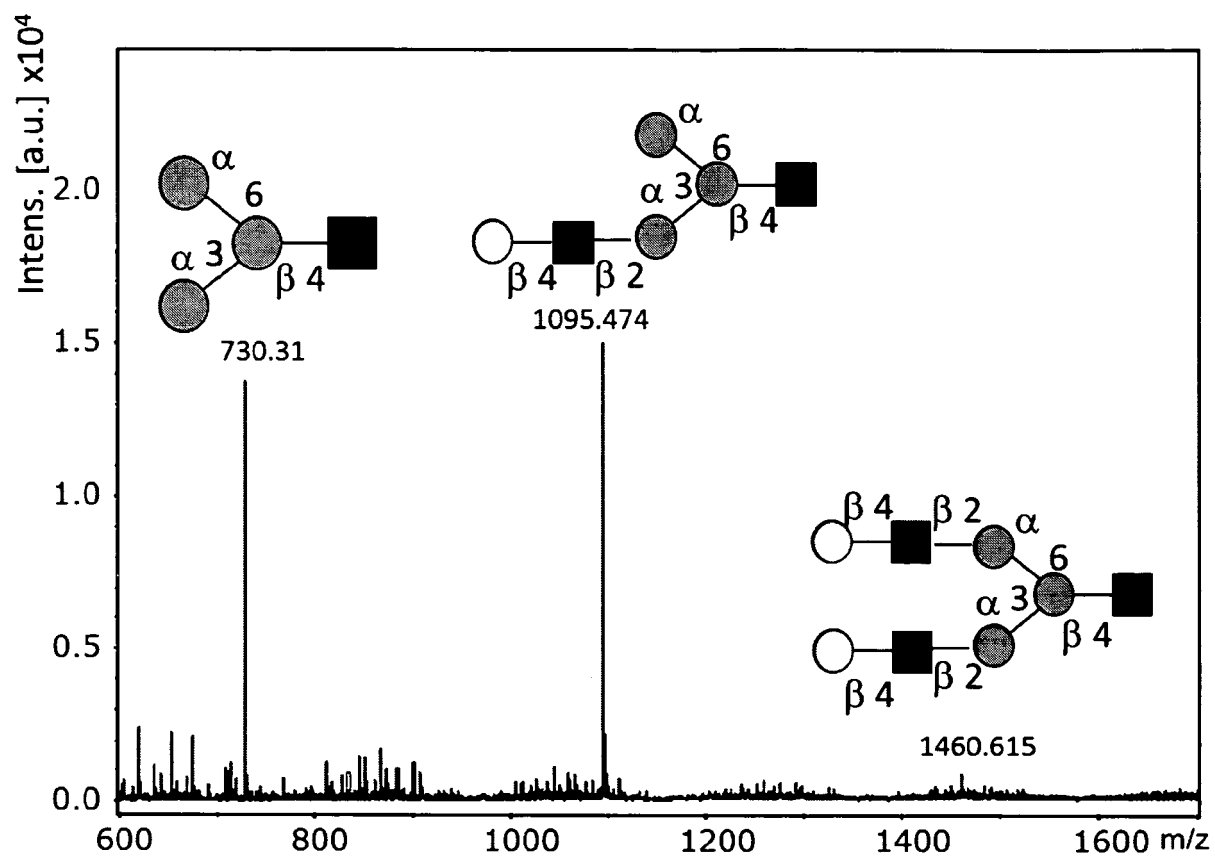
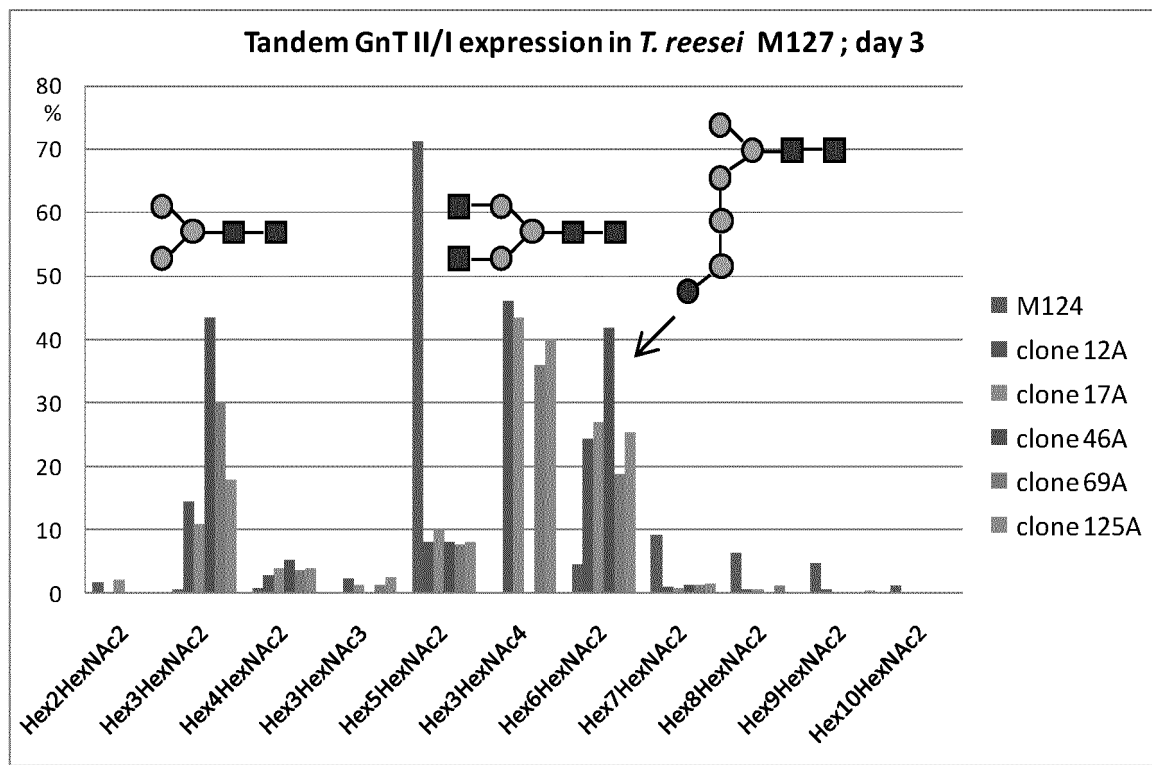


Figure 27

A.



B.

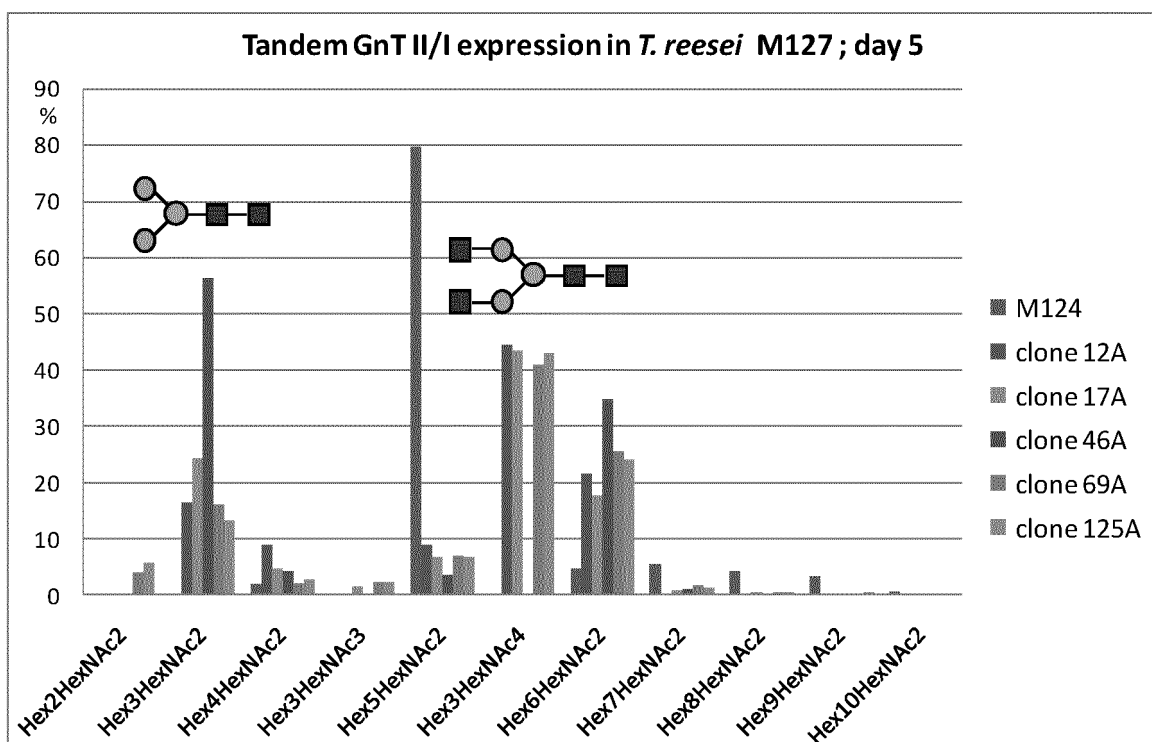
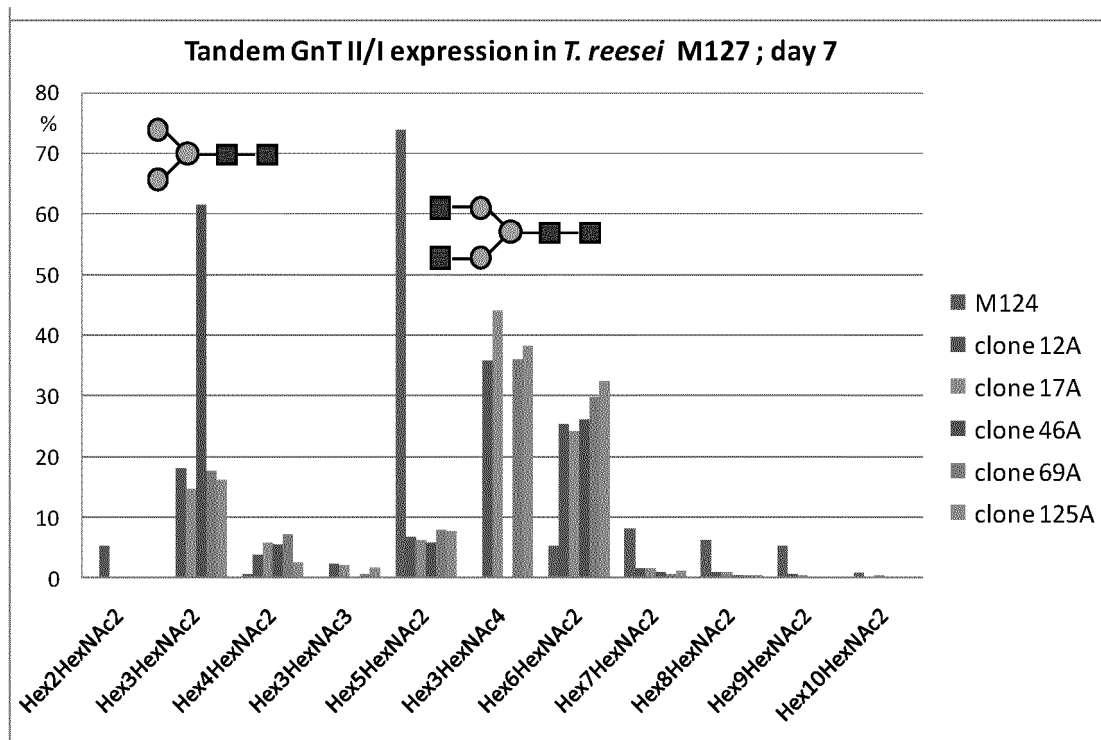


Figure 27 (cont.)

C.



D.

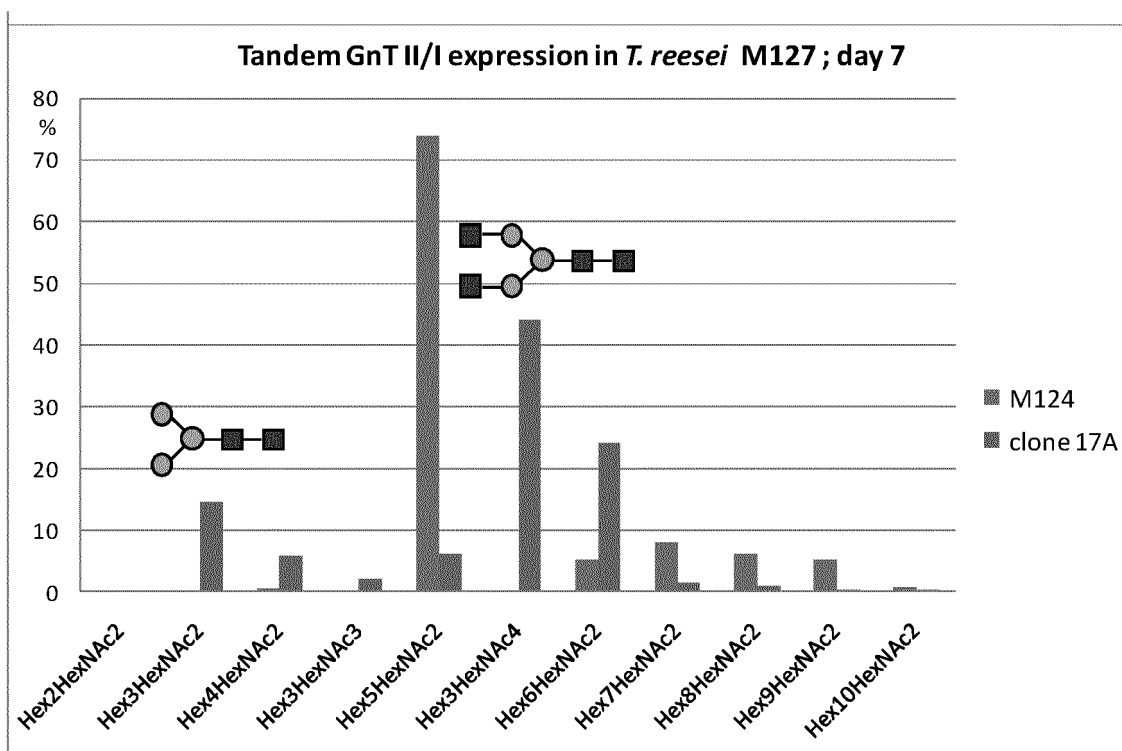


Figure 27 (cont.)

E.

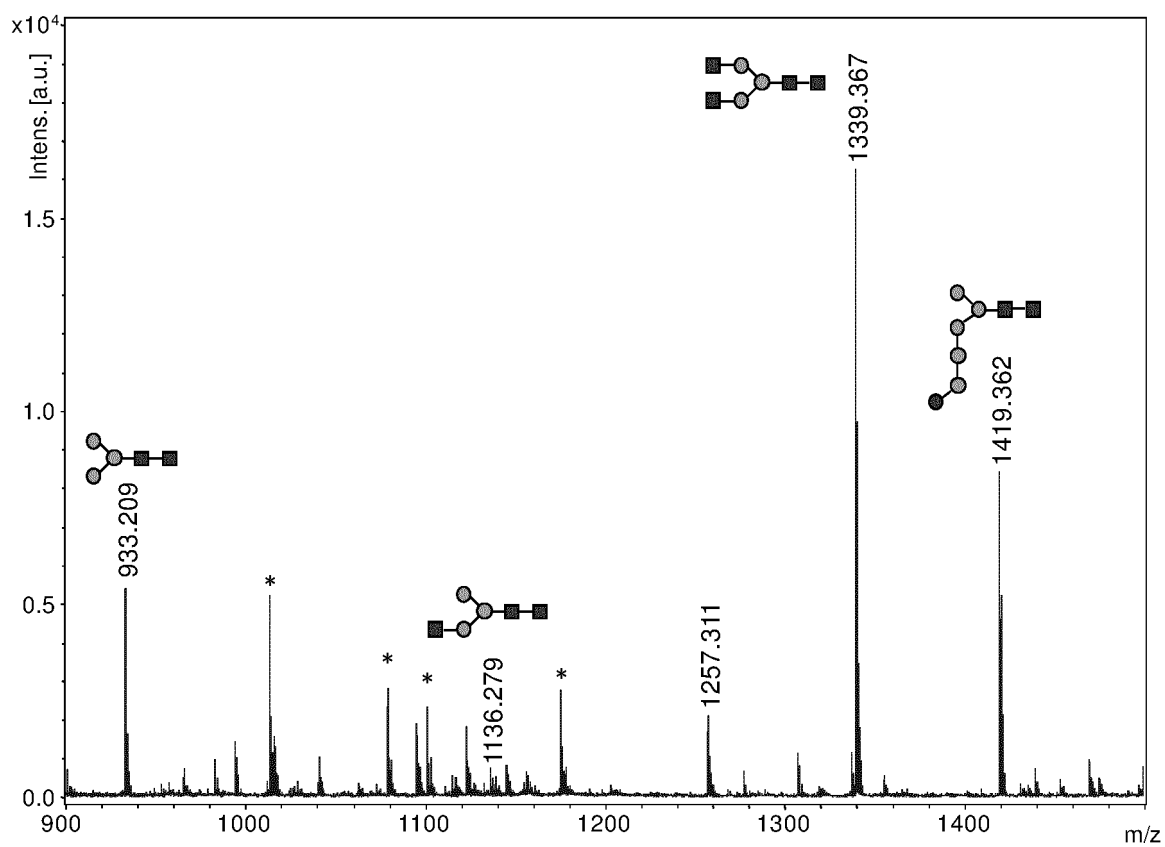
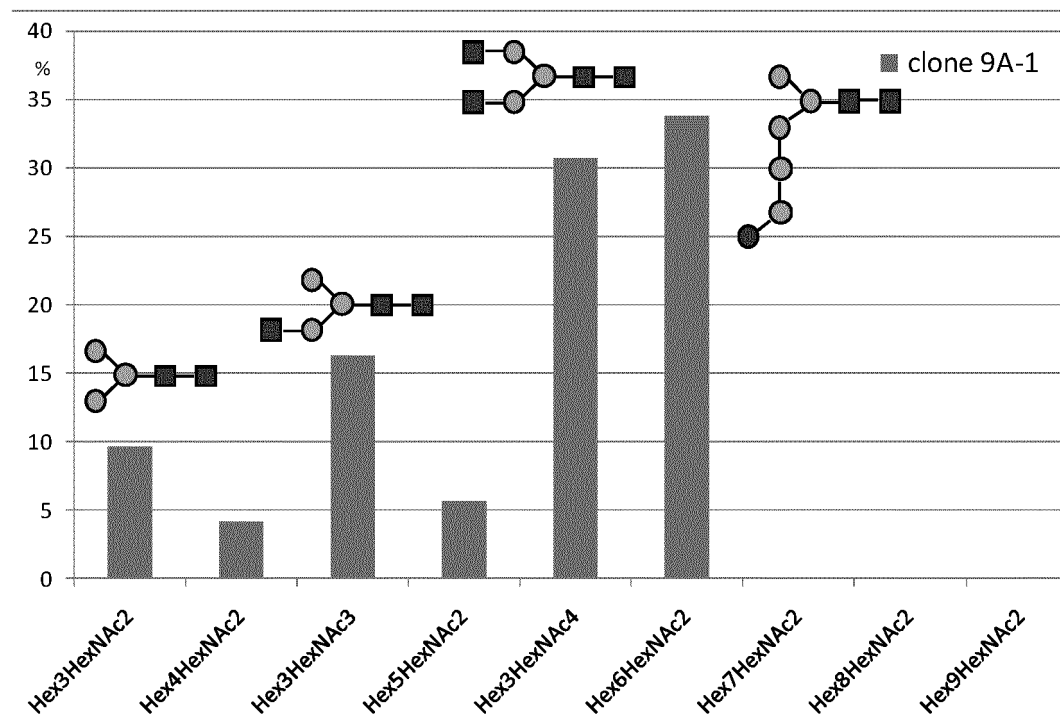


Figure 28

A.



B.

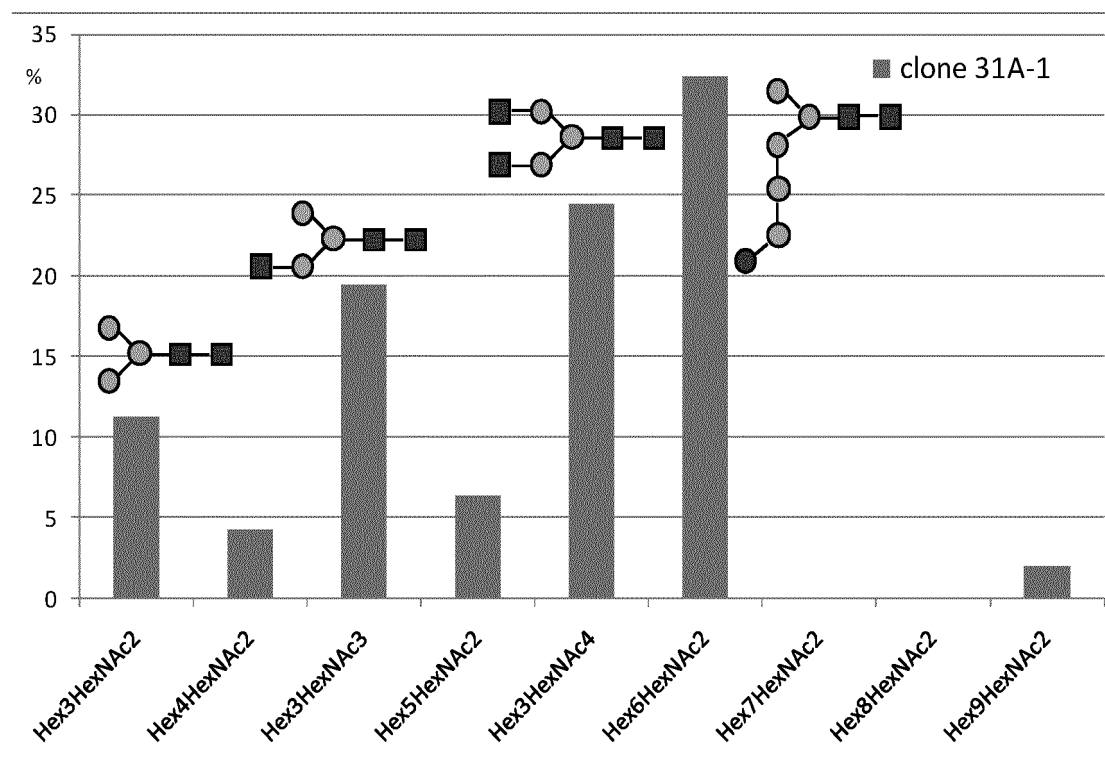


Figure 28 (cont.)

C.

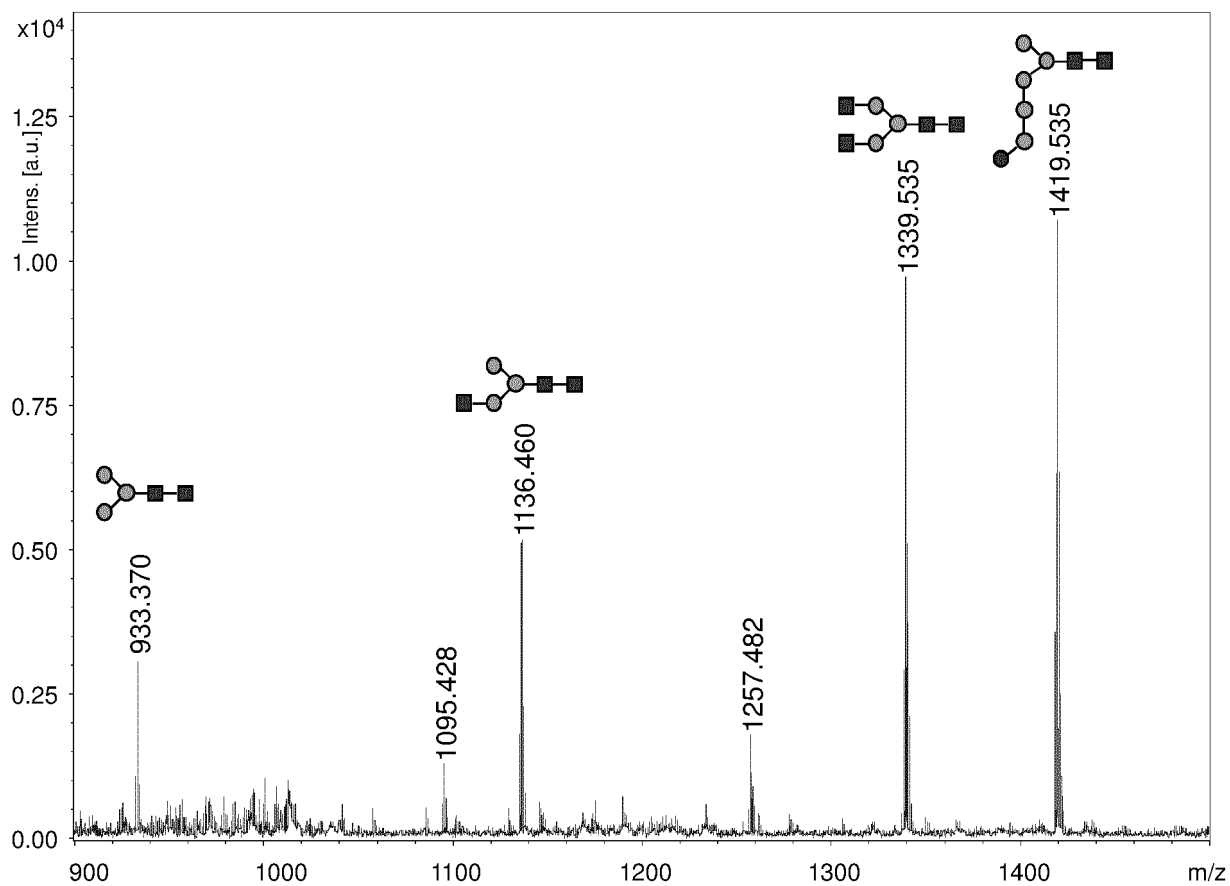


Figure 29

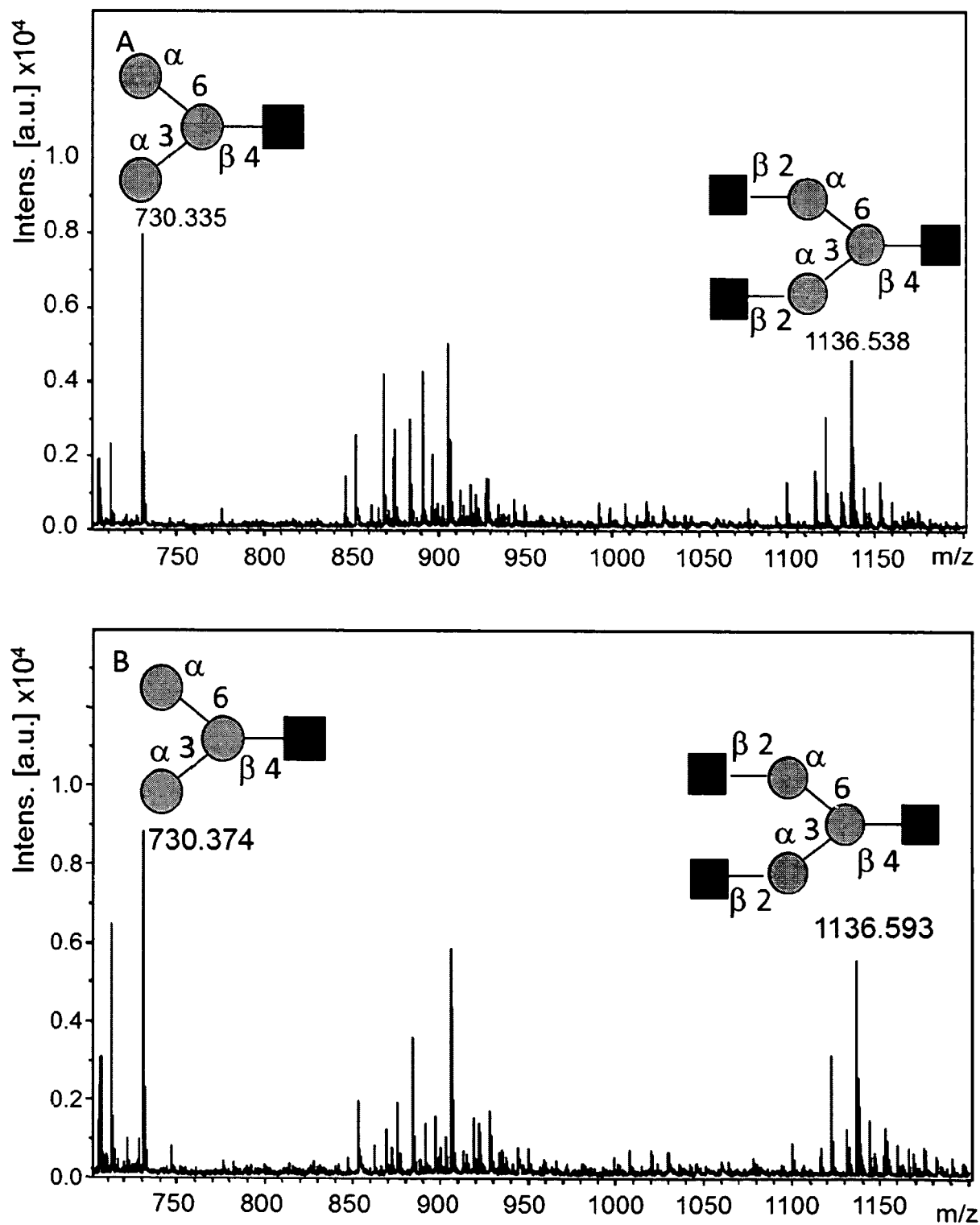


Figure 30

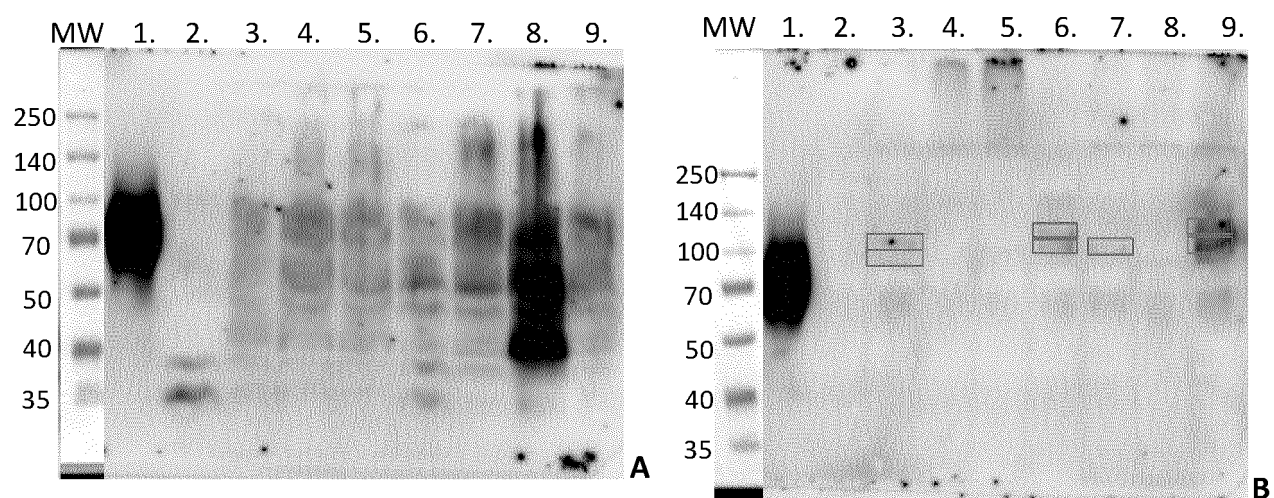
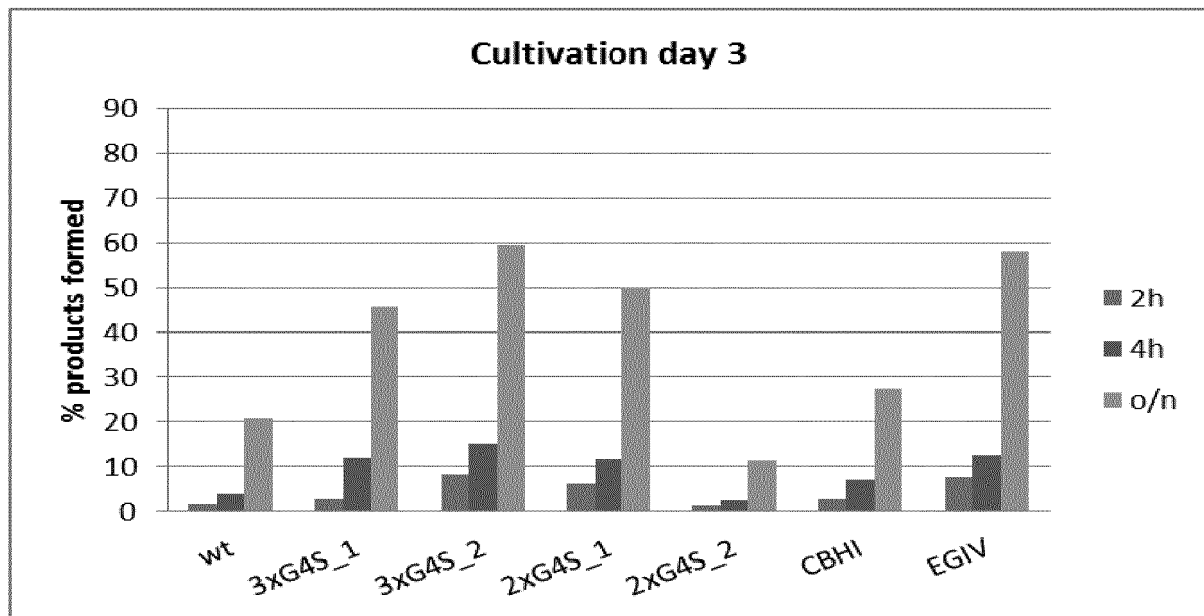


Figure 31

A.



B.

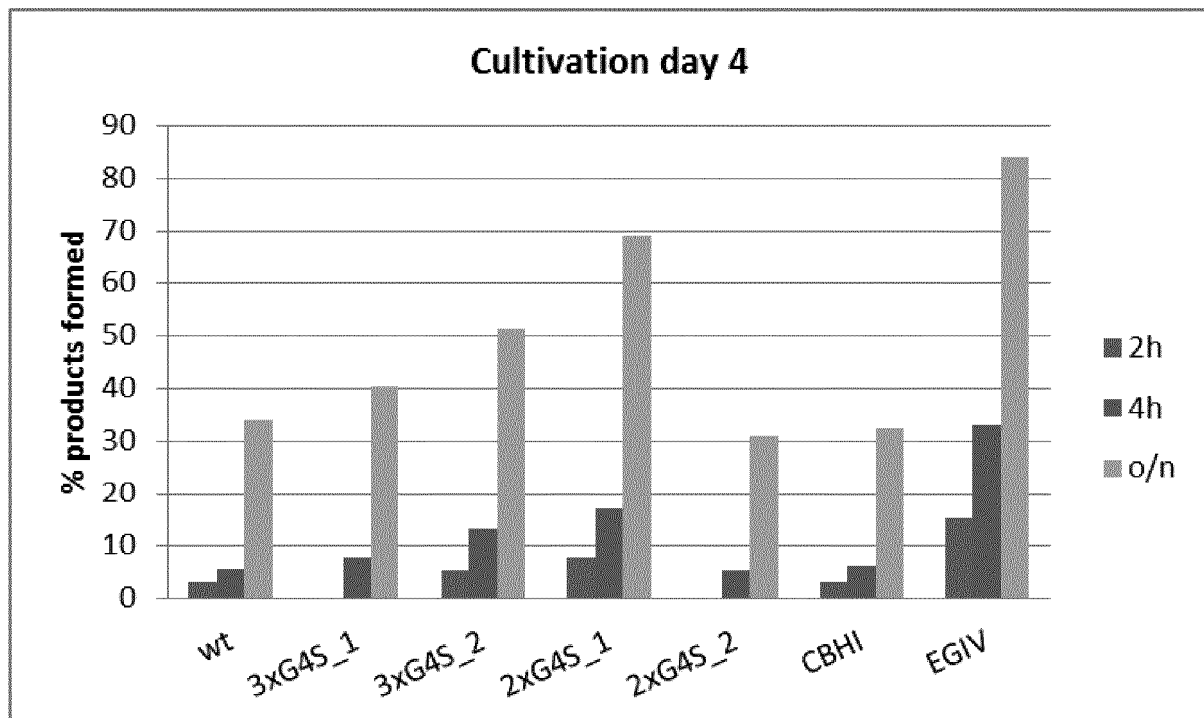


Figure 32

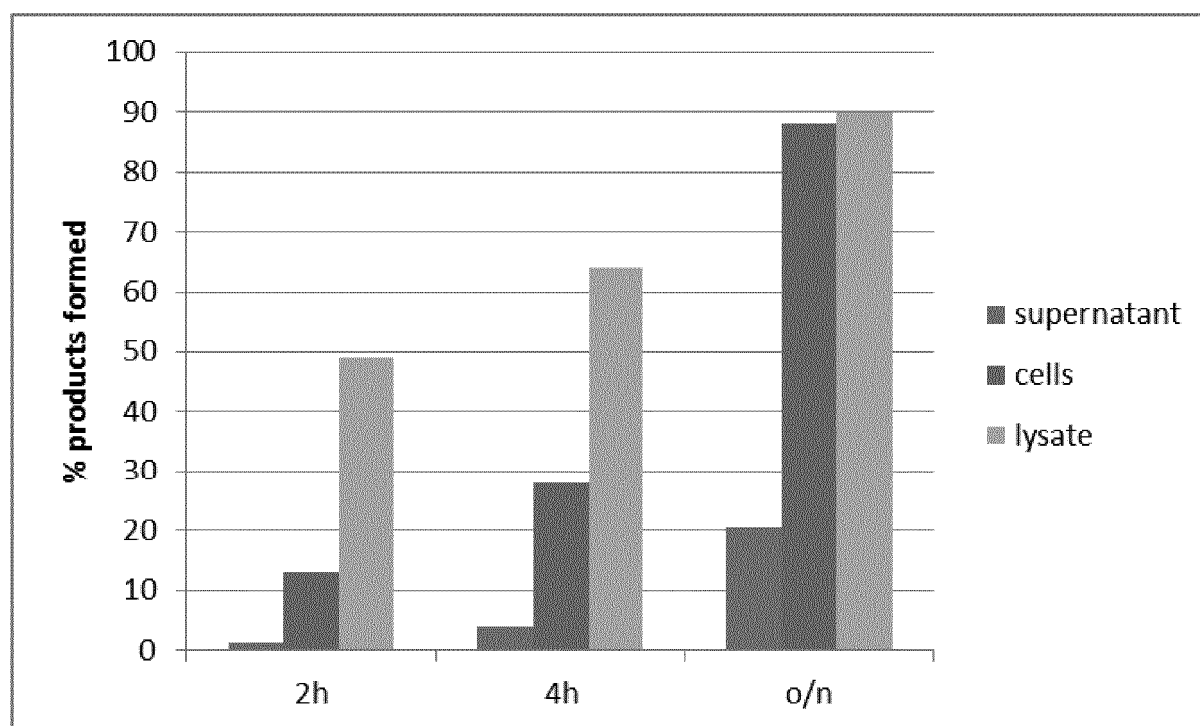


Figure 33

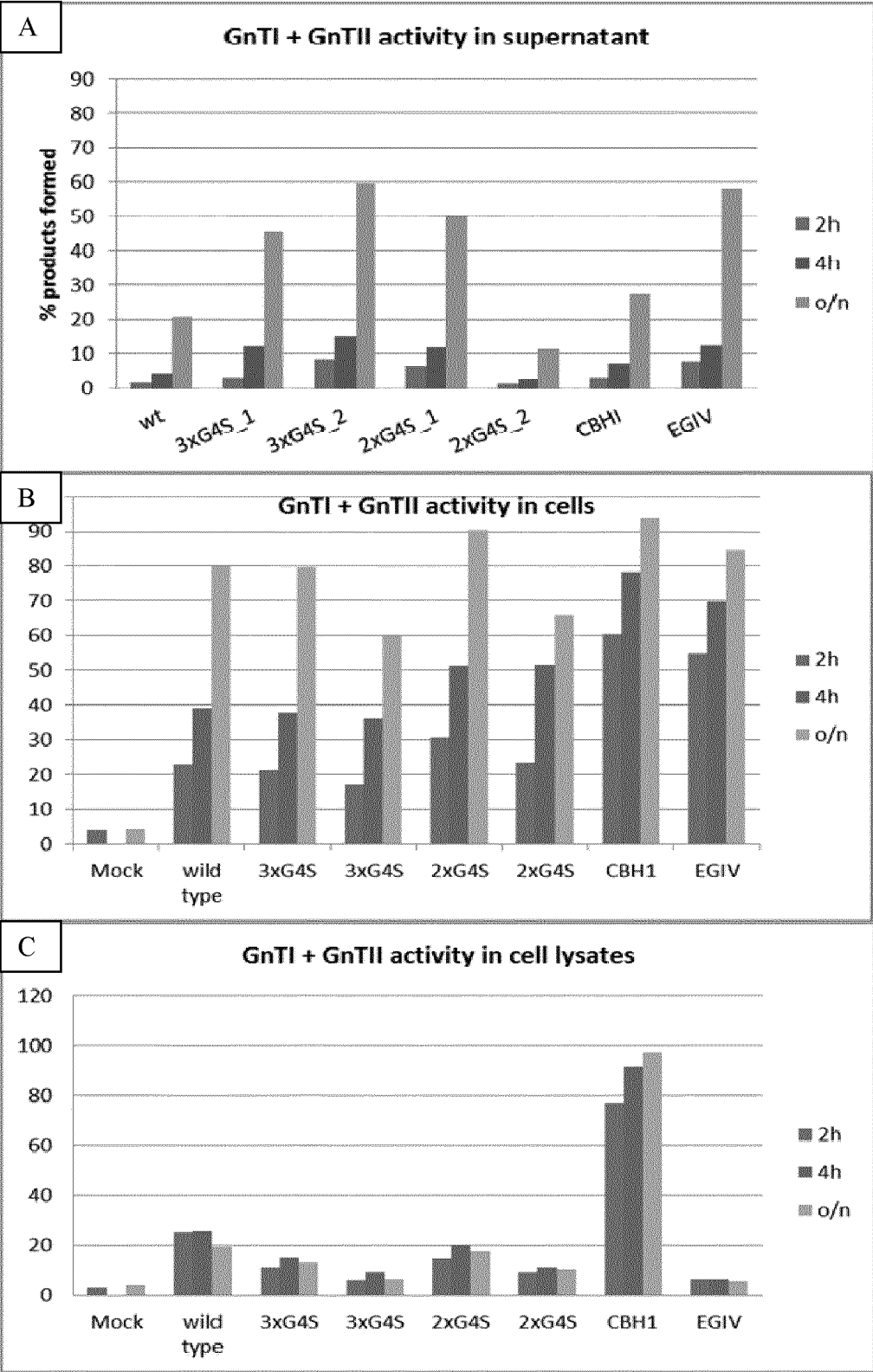


Figure 34

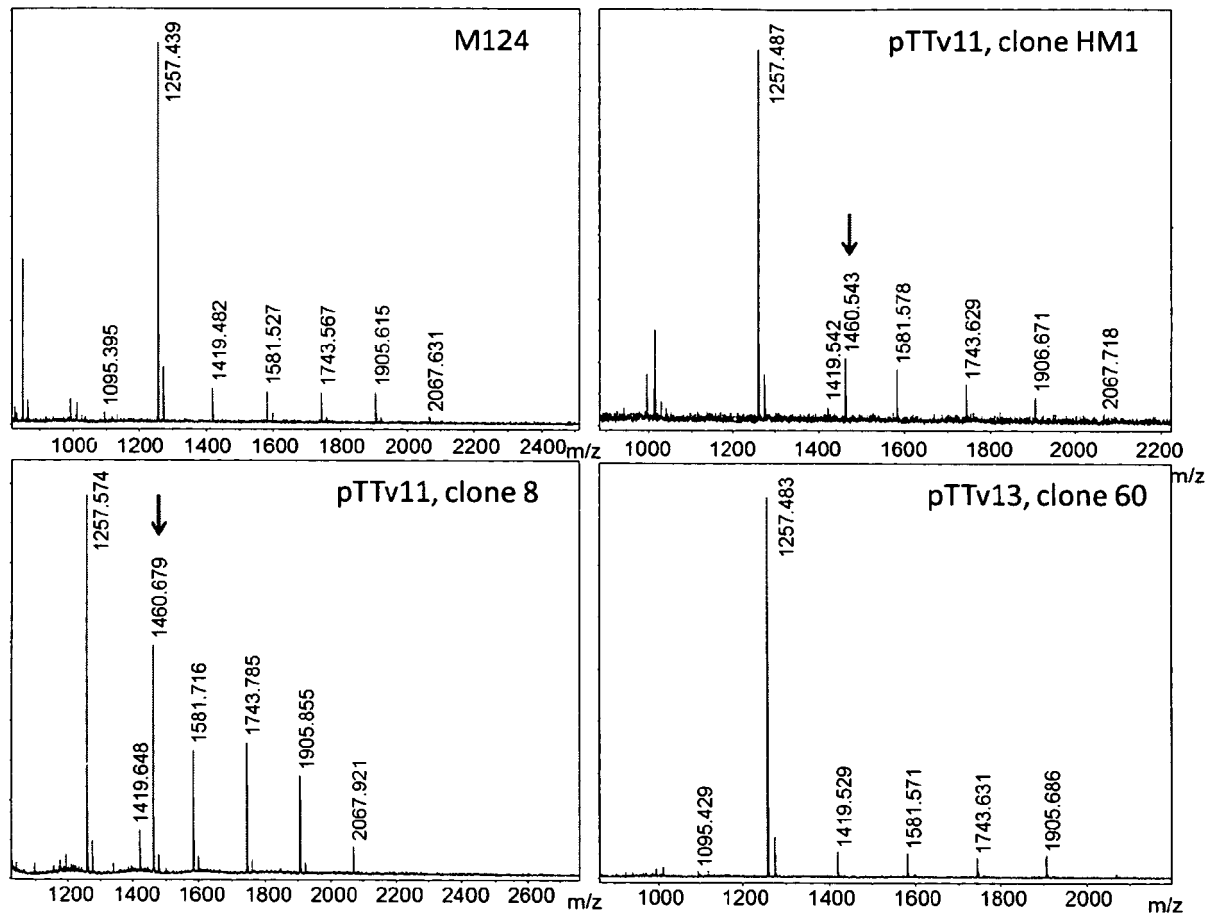


Figure 35

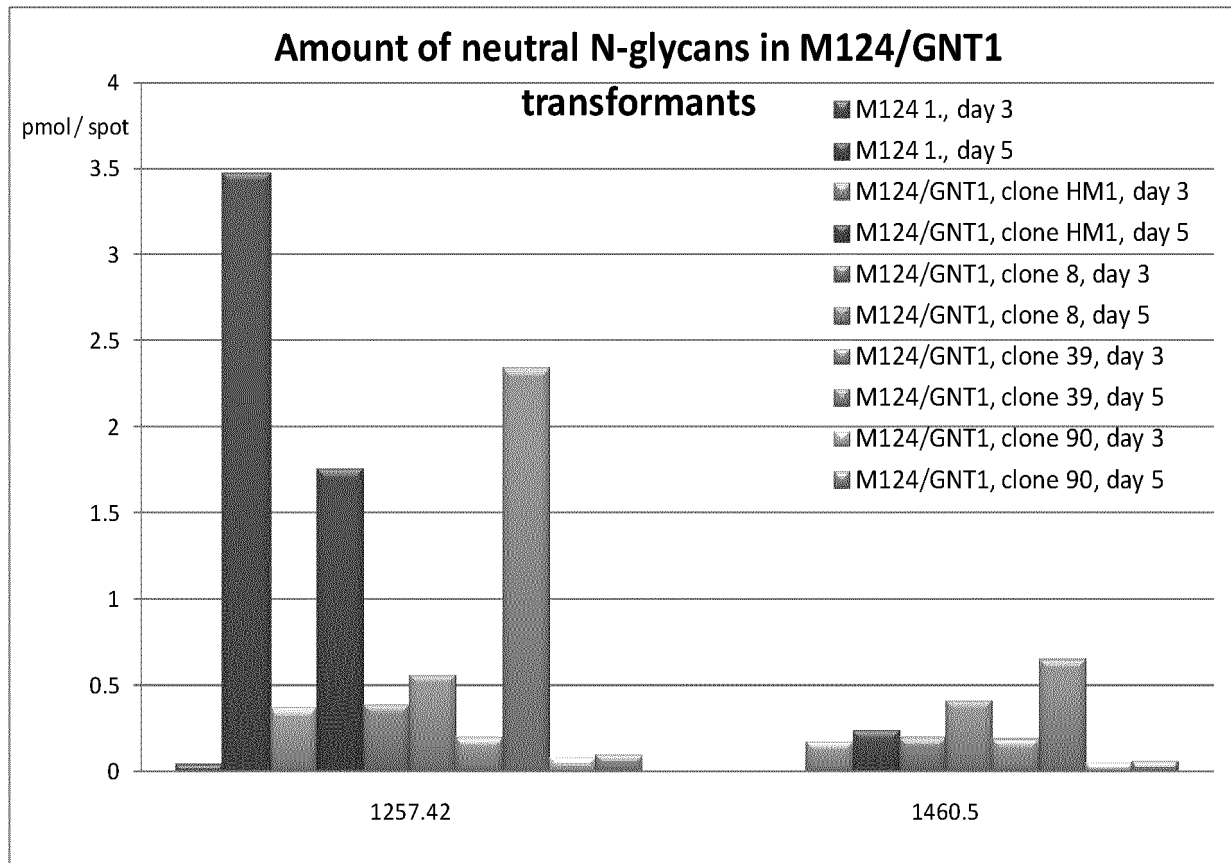


Figure 36

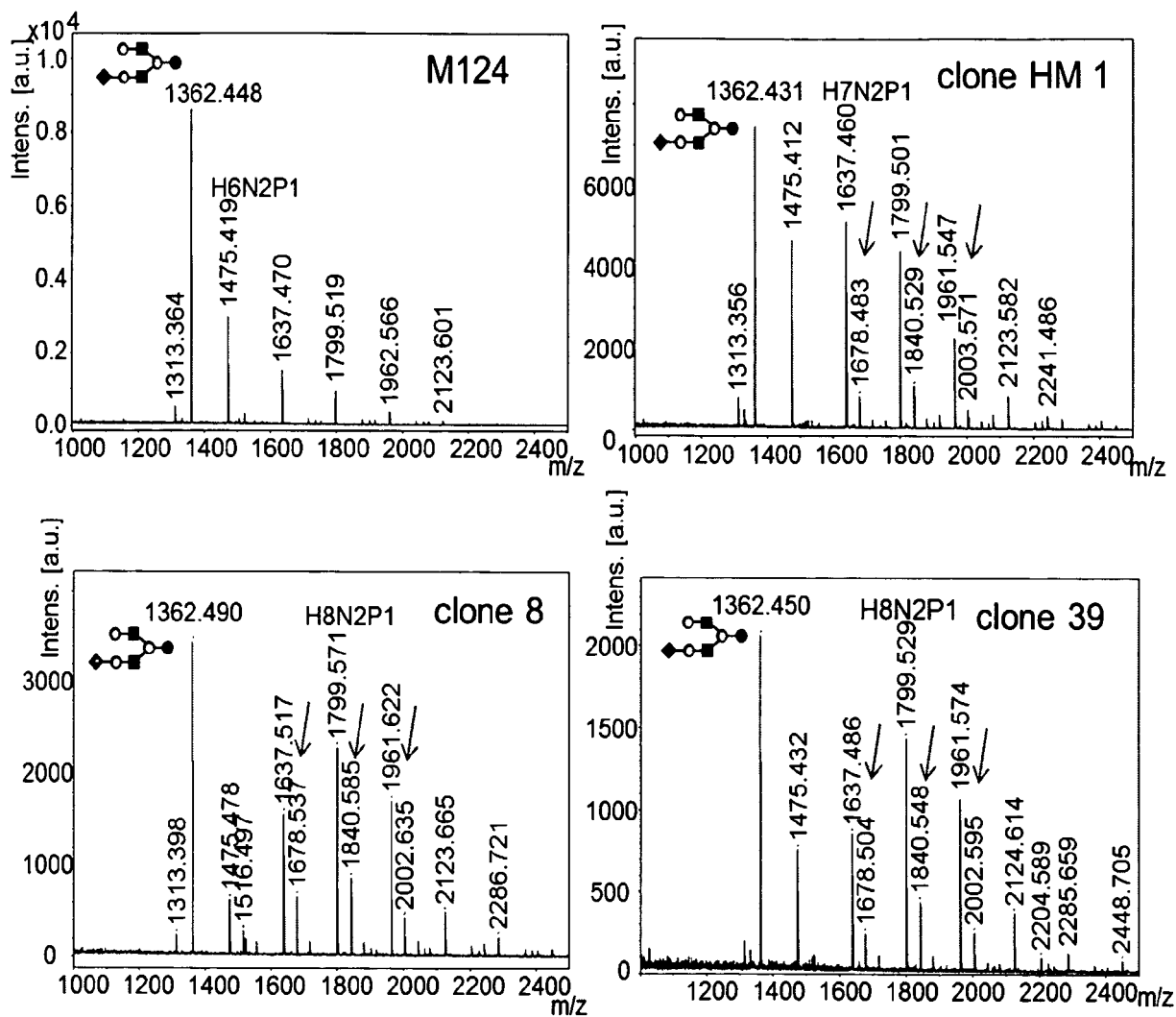
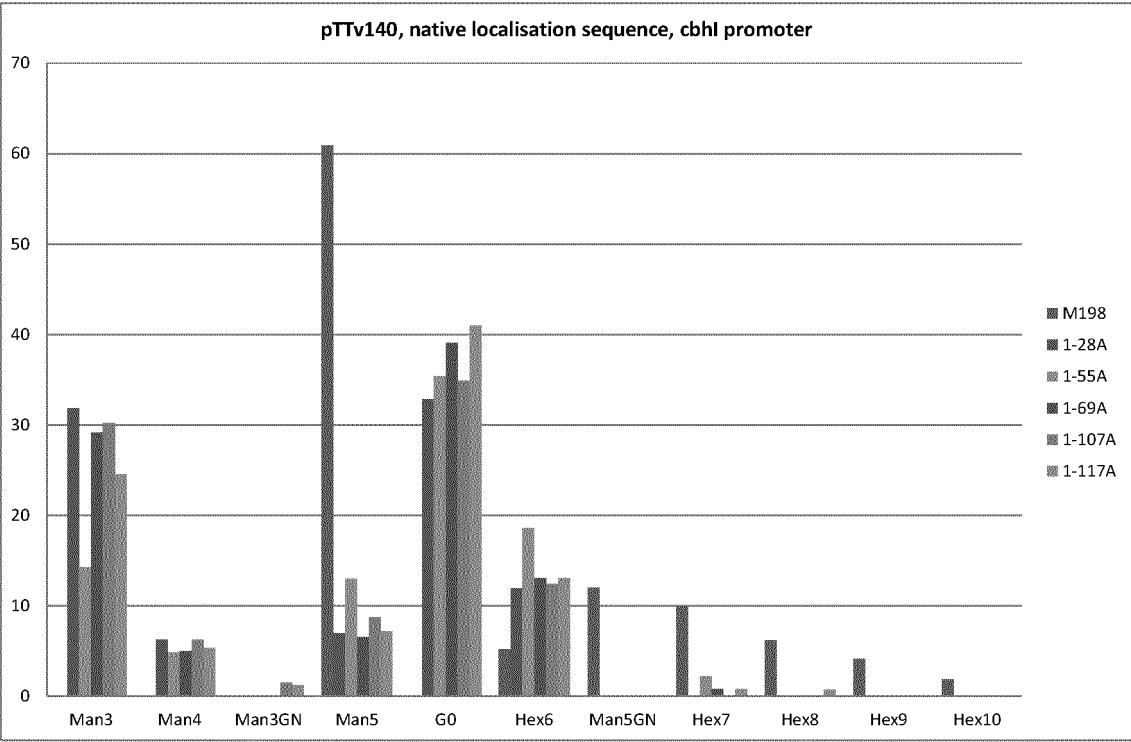


Figure 37

A.



B.

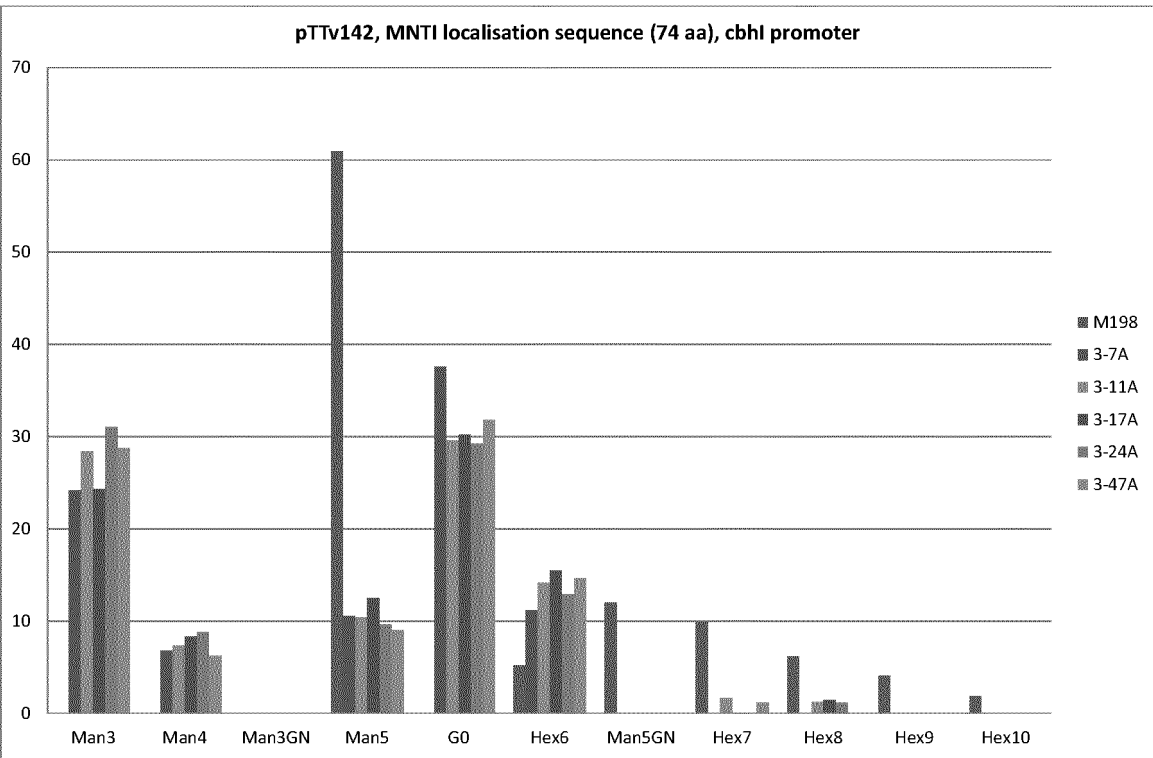
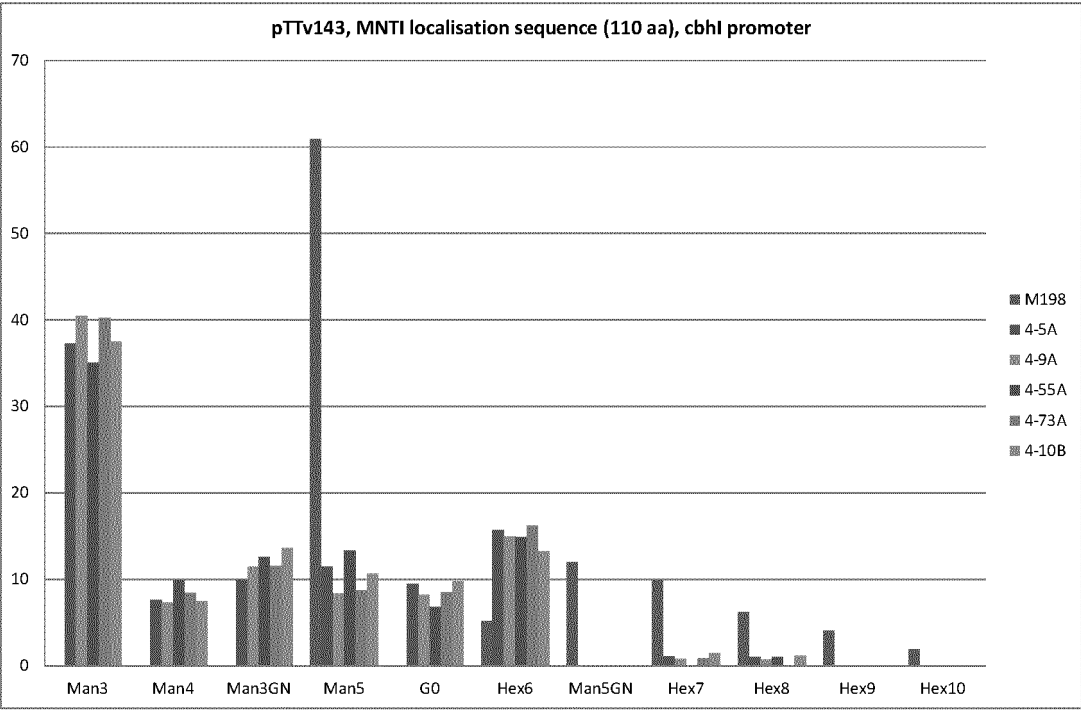


Figure 37 (cont.)

C.



D.

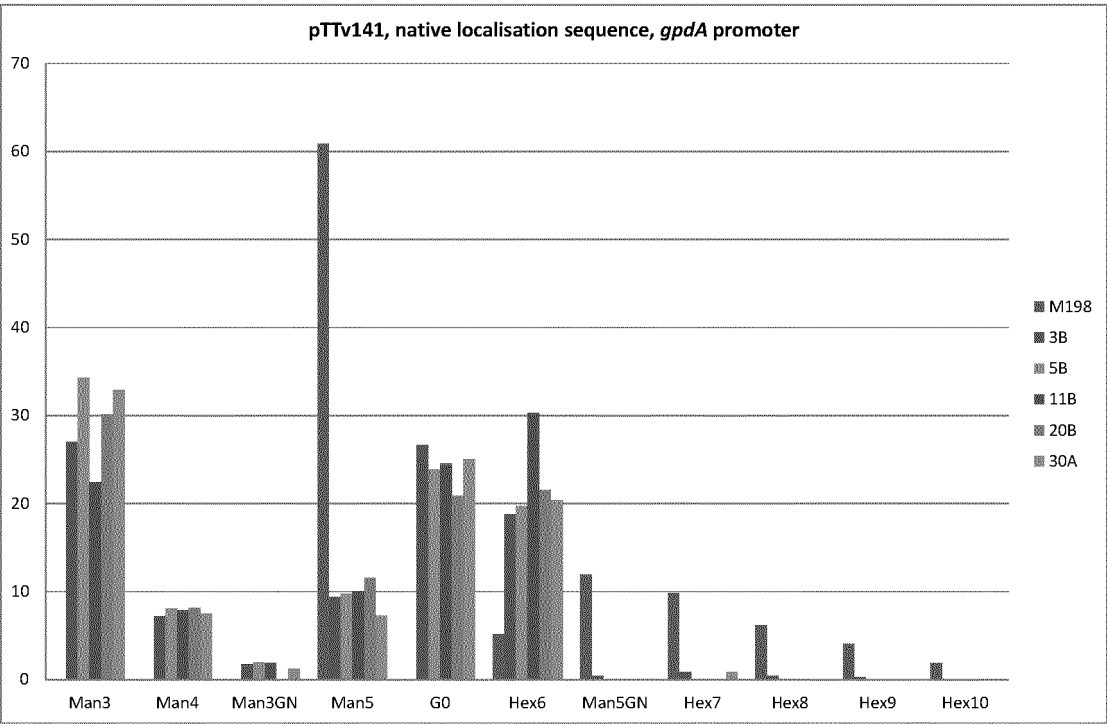


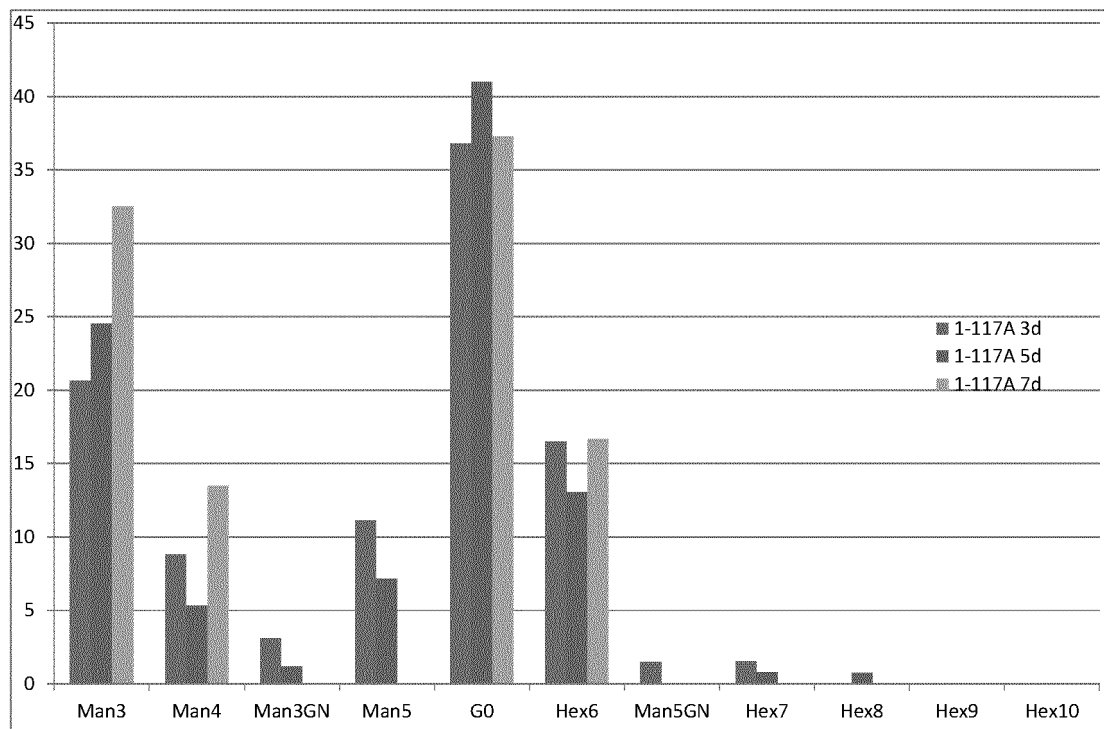
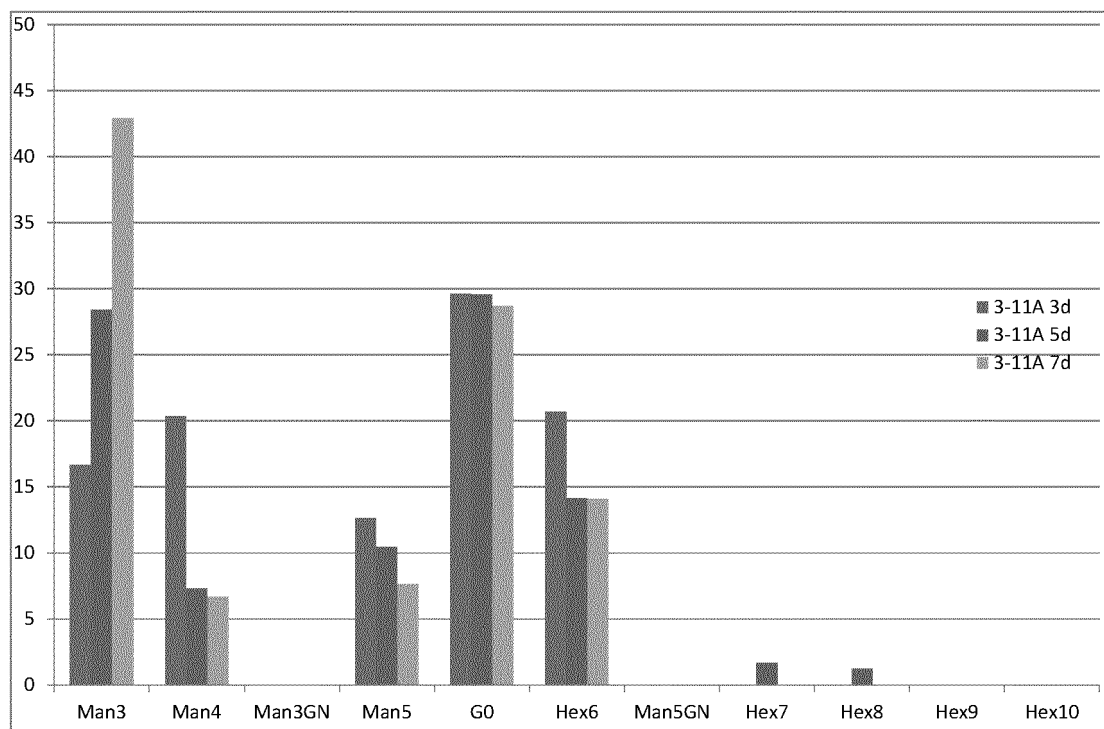
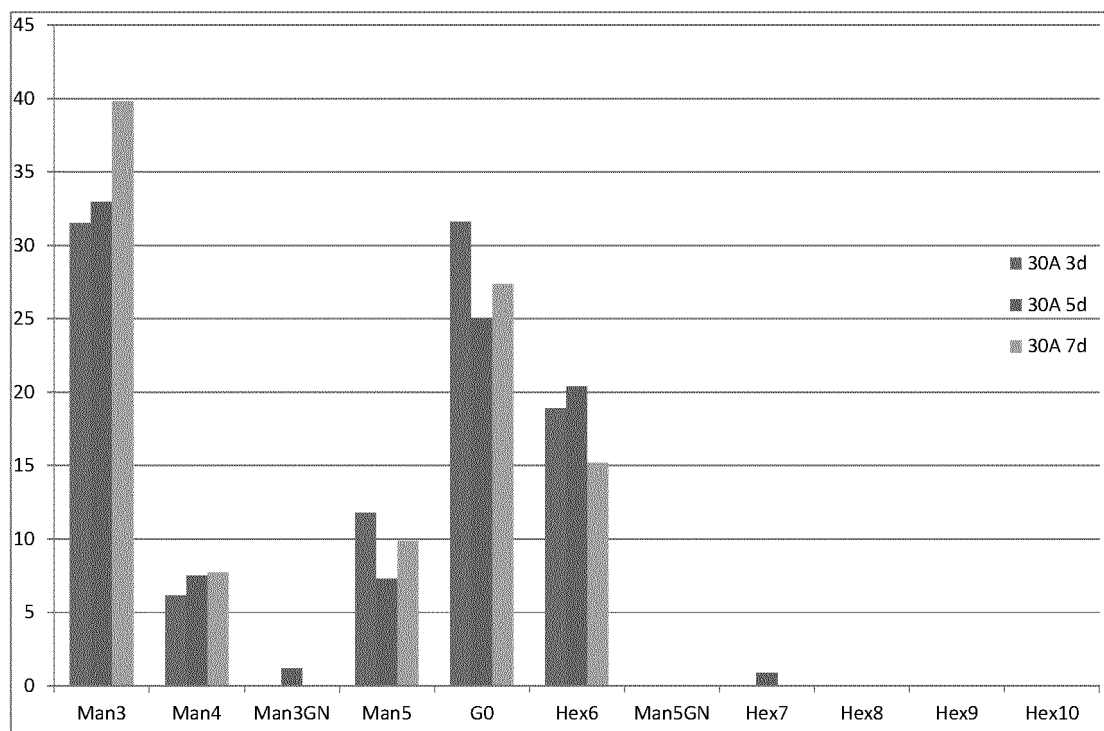
Figure 38**A.****B.**

Figure 38 (cont.)

C.



D.

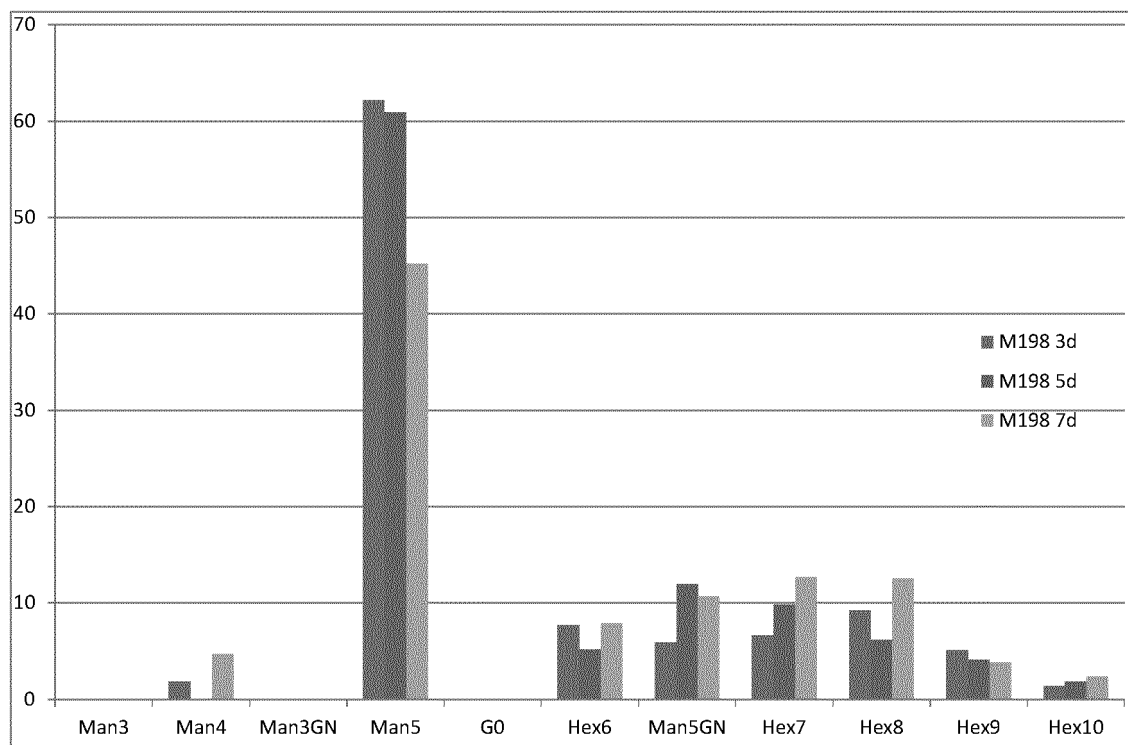


Figure 39

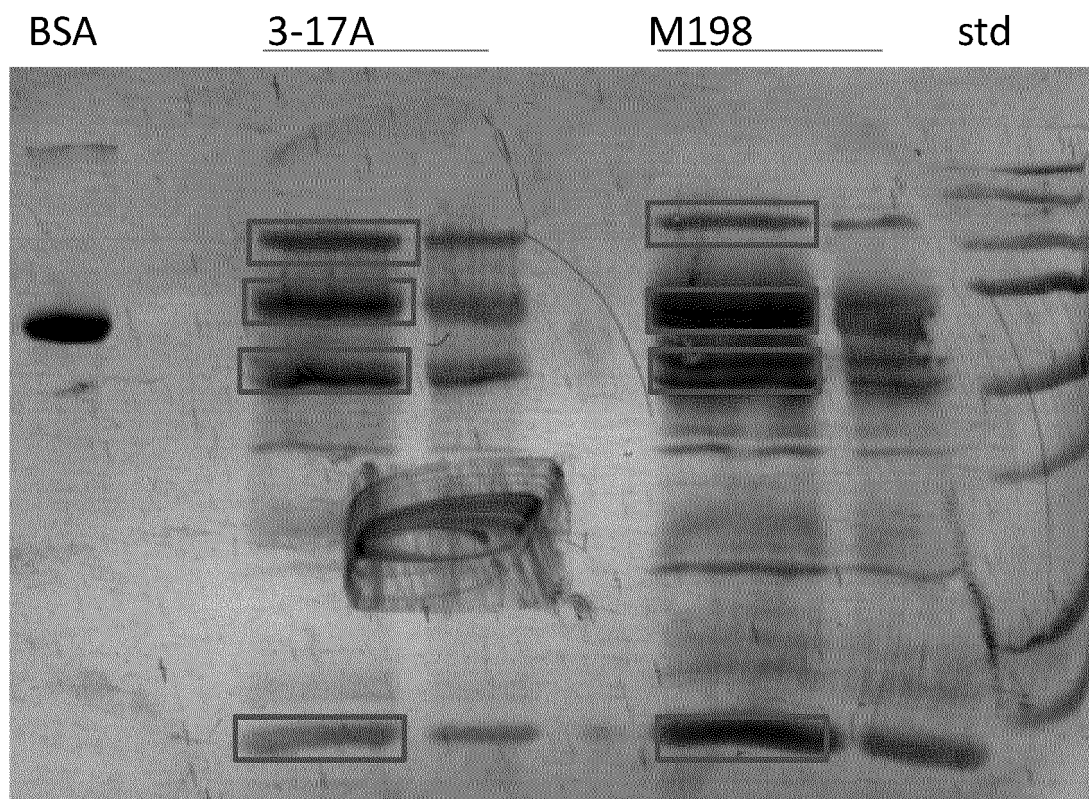


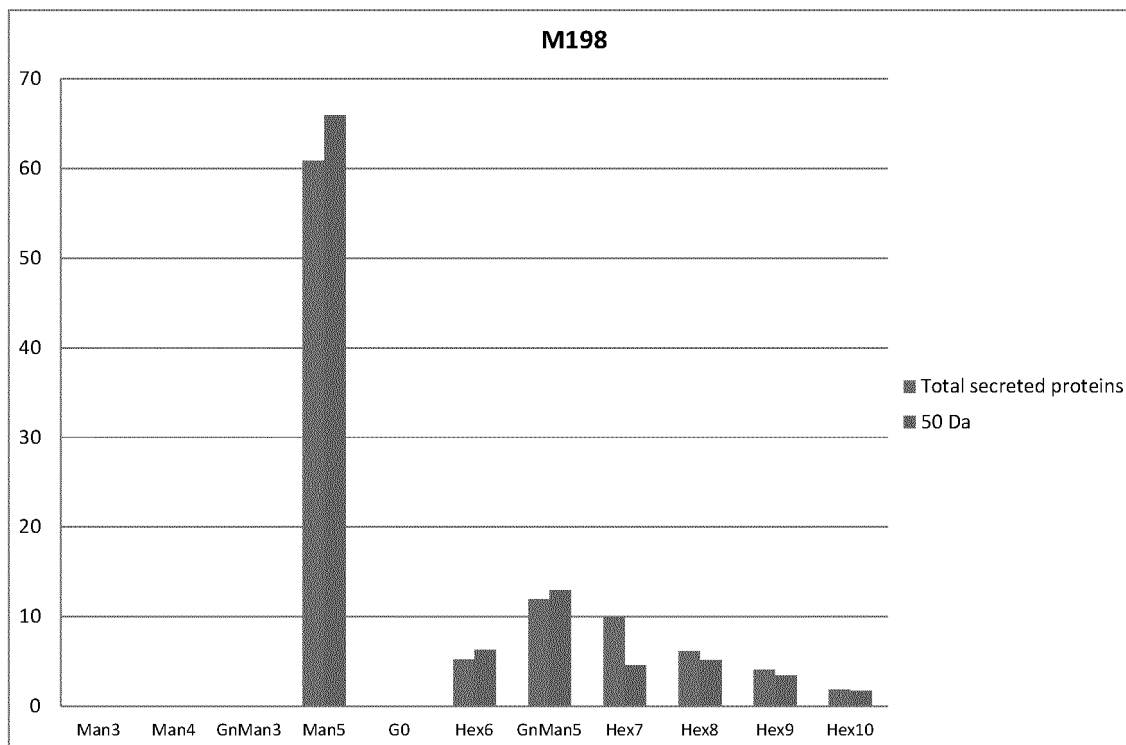
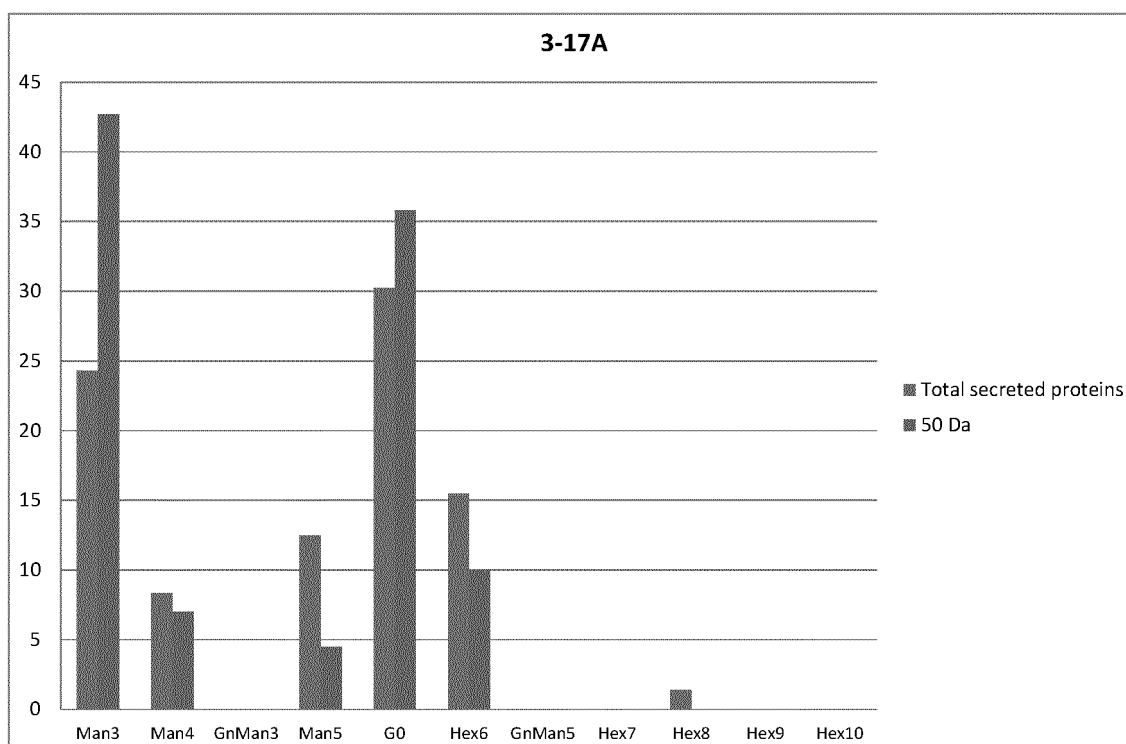
Figure 40**A.****B.**

Figure 41

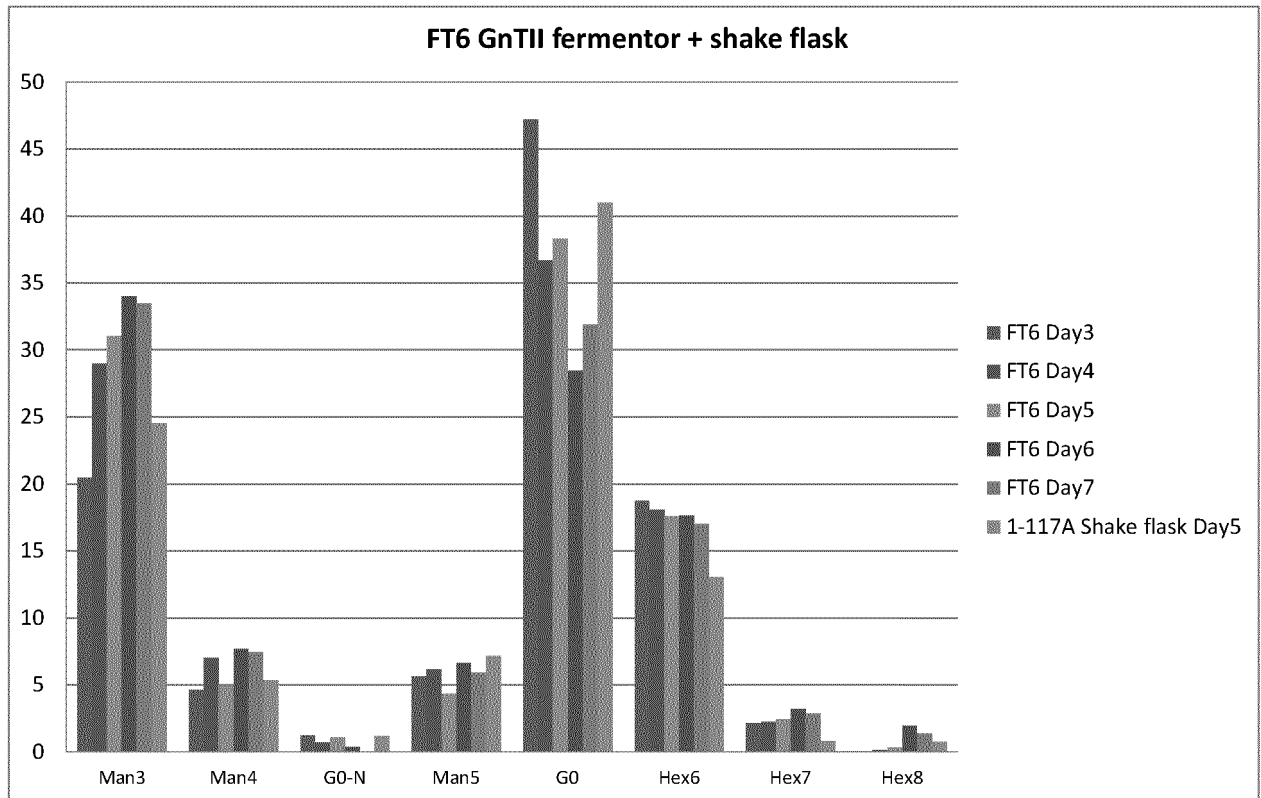


Figure 42

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Tatroviride_jgi|Triat2|270085|
Foxysporum_gi|342880904|gb|EGU
Gzea_gi|46136275|ref|XP_389829
Mthermophila_gi|347013322|gb|A
Ncrassa_gi|85106839|ref|XP_962
Moryzae_gi|145611997|ref|XP_36
Spombe_gi|19114765|ref|NP_5938

Aoryzae_gi|169779159|ref|XP_00
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Nfischeri_gi|119478936|ref|XP_
Treesei_jgi|Trire2|104121|fgen
Tvirens_jgi|TriviGv29_8_2|1944
Tatroviride_jgi|Triat2|270085|
Foxysporum_gi|342880904|gb|EGU
Gzea_gi|46136275|ref|XP_389829
Mthermophila_gi|347013322|gb|A
Ncrassa_gi|85106839|ref|XP_962
Moryzae_gi|145611997|ref|XP_36
Spombe_gi|19114765|ref|NP_5938

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Tvirens_jgi|TriviGv29_8_2|1944
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Gzea_gi|46136275|ref|XP_389829
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Tatroviride_jgi|Triat2|270085|
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Mthermophila_gi|347013322|gb|A
Ncrassa_gi|85106839|ref|XP_962
Moryzae_gi|145611997|ref|XP_36
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Aoryzae_gi|169779159|ref|XP_00
Aniger_gi|317037568|ref|XP_001
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Tatroviride_jgi Triat2 270085	GLGVKMSLLLVLPAV	VI	VL	FLGRG	-FKGALRLWL	MMVQVQLLAIPFITT	227																																											
Foxysporum_gi 342880904 gb EGU	GLGIKMSLLLVLPA	IGVIL	FLGRG	-LWPS	RLRLAWLMAQ	IQFAIGLFPFITK	237																																											
Gzea_gi 46136275 ref XP_389829	GLGIKMSLLLVLPA	IGVIL	LLGRG	-FWGL	RLRLWLMMAQ	QVQFAIGFIMK	235																																											
Mthermophila_gi 347013322 gb A	GLGVKMSLLLVLPA	VG	VLL	LLGAG	-FATSLRLAA	IVGLVQVLI	AVPFLSN	249																																										
Ncrassa_gi 85106839 ref XP_962	GLGVKMTLLLLSL	PAVG	IV	VL	FLGSGSFV	TTLQLVATMGL	VLIQVGLVPFLAH	249																																										
Moryzae_gi 145611997 ref XP_36	GLGIKMTVLLSL	PAVG	VILL	LLGRG	-FGGAL	NVASIMGQ	LQVAILGFPFLSK	160																																										
Spombe_gi 19114765 ref NP_5938	ACSVKMSLL	LYVP	AVL	LLQL	LQILG	-PKKTW	MMHIFVILIVQILFSLPFLAY	231																																										
	.	.	***:	**	**	::	.	.	.*	::	***:																																							
Aoryzae_gi 169779159 ref XP_00	NP	IGYVARAFEL	TRQFM	FKWT	VNWR	FVGEDL	FLSKQFSL	ALLGLHIFLLG	275																																									
Aniger_gi 317037568 ref XP_001	NP	AGYLSRAFEL	TRQFM	FKWT	VNWR	FVGEEV	FLSKSFS	LALLAVHIVLLG	275																																									
Nfischeri_gi 119478936 ref XP_	NP	AGYVSRAFEL	TRQFM	FKWT	VNWR	FVGEE	LFLSRKFS	LALLALHILLG	275																																									
Treesei_jgi Trire2 104121 fgen	NW	RGYLGRAFEL	SRQFK	FEW	T	VNWR	MLEDL	FLSRGFSITLLAFHAFILL	277																																									
Tvirens_jgi TriviGv29_8_2 1944	NW	KGYLGRAFEL	SRQFK	FEW	T	VNWR	MLEDL	FLSRGFSITLLAFHAFILL	277																																									
Tatroviride_jgi Triat2 270085	NW	AGYLGRAFEL	SRQFK	FEW	T	VNWR	MMEET	FLSRGFSITLLFHVVTLL	277																																									
Foxysporum_gi 342880904 gb EGU	NPR	G	YAA	RAFEL	SRQFQ	F	KWT	VNWR	MLEDL	GEEV	FLSKYFAL	SLLACHILVLL	285																																					
Gzea_gi 46136275 ref XP_389829	NSR	G	YAA	RAFEL	SRE	F	KWT	VNWR	MLEDL	GEEV	FLSKSFAIF	LLACHVTALL	285																																					
Mthermophila_gi 347013322 gb A	NPW	G	Y	L	GRAFEL	SRQFF	K	F	K	W	T	VNWR	FVGEEV	FLSKFES	LALLGLHIVAVLA	299																																		
Ncrassa_gi 85106839 ref XP_962	YPT	EYLSRAFEL	SRQFF	K	F	K	W	T	VNWR	FVGEE	I	FLSKG	FATLLALHVLVLG	292																																				
Moryzae_gi 145611997 ref XP_36	NAW	G	Y	L	GRAFEL	SRQFM	F	K	W	T	VNWR	FVGEE	T	FLSKP	FATLLALHASVLL	210																																		
Spombe_gi 19114765 ref NP_5938	FWS	-YWTQAFDF	GRAFDY	KWT	VNWR	FIP	RS	I	F	E	S	T	S	F	S	T	S	I	L	F	L	H	V	A	L	L	V	280																						
	*	*	:	***:	**	*	:	*****:	..	*	*	:	*	*	:	*	*	*																																
Aoryzae_gi 169779159 ref XP_00	LFV	TTGWLR	PSGS	NVP	DF	LRSL	LQ	-----	RQ	RTV	V	L	S	K	S	F	I	M	T	V	315																													
Aniger_gi 317037568 ref XP_001	AF	A	V	T	T	G	W	L	R	P	S	G	S	L	P	A	F	I	R	N	L	L	A	G	-----	RH	R	T	V	L	S	K	P	I	M	S	V	315												
Nfischeri_gi 119478936 ref XP_	LF	V	A	T	V	T	G	W	L	R	P	S	G	S	D	L	P	S	F	L	Q	R	L	I	Q	-----	RY	R	T	A	S	L	K	S	F	I	M	T	A	315										
Treesei_jgi Trire2 104121 fgen	A	F	I	L	G	R	W	L	K	I	R	E	R	T	V	L	G	M	I	P	Y	V	I	R	F	S	P	F	T	E	Q	E	E	R	A	I	S	N	R	V	V	T	P	G	Y	M	S	T	327	
Tvirens_jgi TriviGv29_8_2 1944	I	F	I	L	G	R	W	L	K	I	R	E	R	T	V	L	G	M	I	P	Y	V	I	R	F	S	P	F	T	E	Q	E	E	R	A	I	S	N	R	V	V	T	P	E	Y	I	M	S	A	327
Tatroviride_jgi Triat2 270085	V	F																																																

Figure 42 (cont.)

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Aoryzae_gi|169779159|ref|XP_00      AWNVYPSTNASSSVVFSLAVQVFG-----V 391
Aniger_gi|317037568|ref|XP_001     AWNTFPSTNLSSIIIVVLSLATQSFG-----V 391
Nfischeri_gi|119478936|ref|XP_     AWNTYPSTNASSLVVILSLAAQVFG-----V 391
Treesei_jgi|Trire2|104121|fgen     AWNVFPSTPLSSSVVSVLAVTVA-----MA 403
Tvirens_jgi|TriviGv29_8_2|1944     AWNVFPSTPLSSNVVSVLAVTVA-----MA 403
Tatroviride_jgi|Triat2|270085|     AWNVFPSTPLSSSVVISLVPVCLLSPQLLVSHDIYNFANCSAILRPRGIA 427
Foxyosporum_gi|342880904|gb|EGU     AWNVYPSTDLSSSTIAVNTMLATVV-----LV 410
Gzea_gi|46136275|ref|XP_389829     AWNVFPSTDLSSRVTVGAMLATVV-----LA 410
Mthermophila_gi|347013322|gb|A     AWNVYPSTPISSGVVGVGLALTAA-----LV 424
Ncrassa_gi|85106839|ref|XP_962     AWNVFPSTPASSAVVGVGLGVTVA-----GV 418
Moryzae_gi|145611997|ref|XP_36     AWNVYPSTPVSSGVVGVMAITVG-----AV 335
Spombe_gi|19114765|ref|NP_5938     AWNVFPSTKLSSLIACVPLITILK-----L 398
***.:*** ** :.:

Aoryzae_gi|169779159      LLNSRNALSDAPPRRKGEHIQ----- 413 (SEQ ID NO: 133)
Aniger_gi|317037568|     LANSASAFYTMRSNPSGKEHNQ----- 413 (SEQ ID NO: 135)
Nfischeri_gi|1194789     LGNSFSRKHLDDQS--SQKEHLQ----- 411 (SEQ ID NO: 134)
Treesei_jgi|Trire2|1     F---AGSNPQPRETSSKPKQH----- 420 (SEQ ID NO: 126)
Tvirens_jgi|TriviGv2     F---VGSNPQ-RGAPKPKQL----- 419 (SEQ ID NO: 128)
Tatroviride_jgi|Tria     FGQDISATLNPDGVAKPLGELENDGLRVWHLASVQVVSFGLHHAHNELGG 477 (SEQ ID NO: 127)
Foxyosporum_gi|342880     YLGTARRAVPAPAAQVGNVDDKNK----- 434 (SEQ ID NO: 129)
Gzea_gi|46136275|ref     YRG TARLAVPP--SQARKIEAKNK----- 432 (SEQ ID NO: 130)
Mthermophila_gi|3470     WLGAREDWEP--RRVL LKGEAAKR----- 446 (SEQ ID NO: 131)
Ncrassa_gi|85106839|     WFGAREEWEPGMKSSSKKEEAAMR----- 442 (SEQ ID NO: 132)
Moryzae_gi|145611997     MVGAKAEFRP--QVPVAKKVEAKR----- 357 (SEQ ID NO: 136)
Spombe_gi|19114765|r     YTS DY RKP----- 406 (SEQ ID NO: 137)

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