

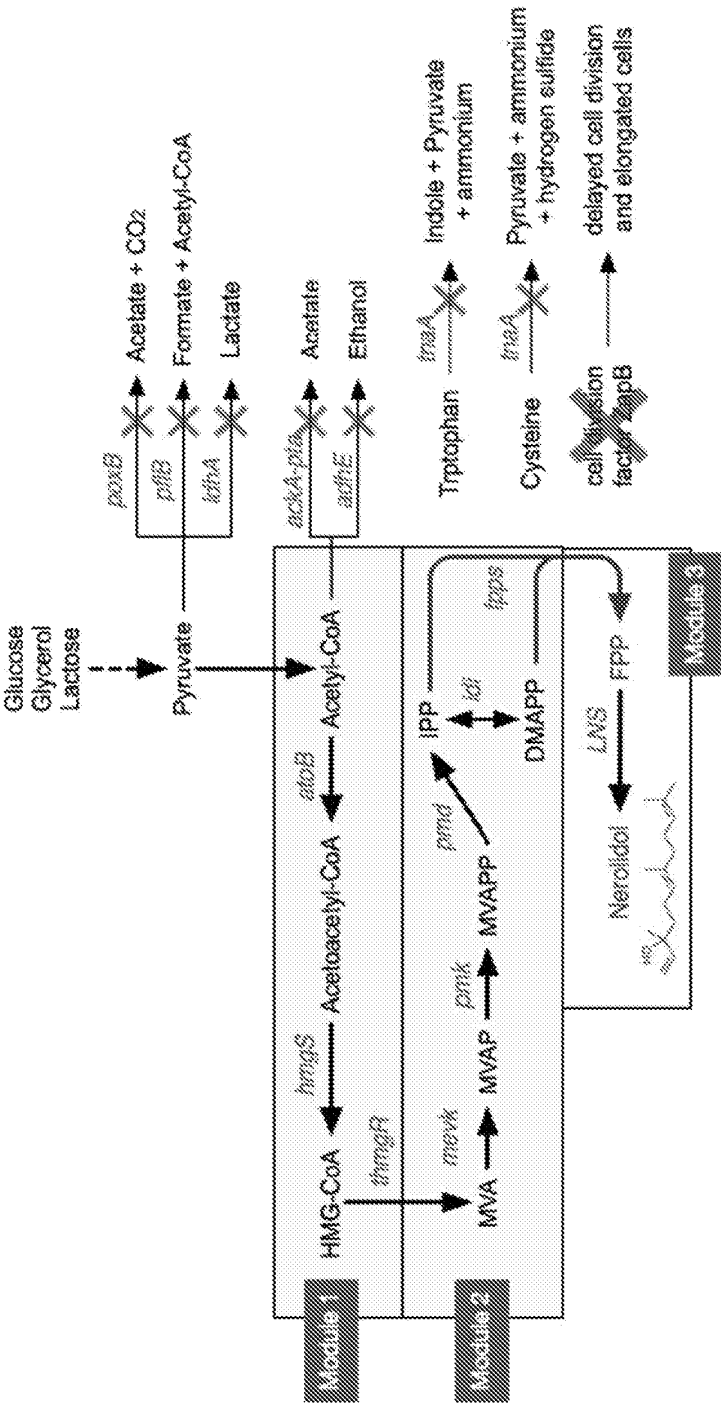


FIG. 1

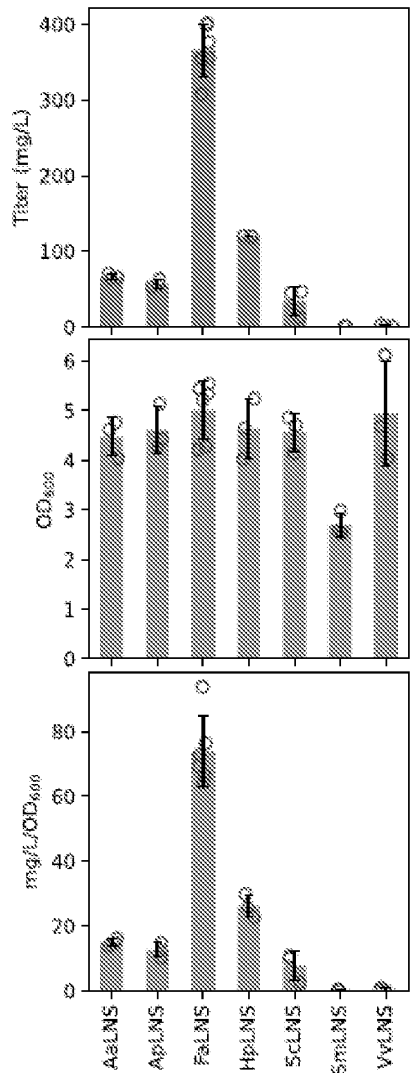


FIG. 2A

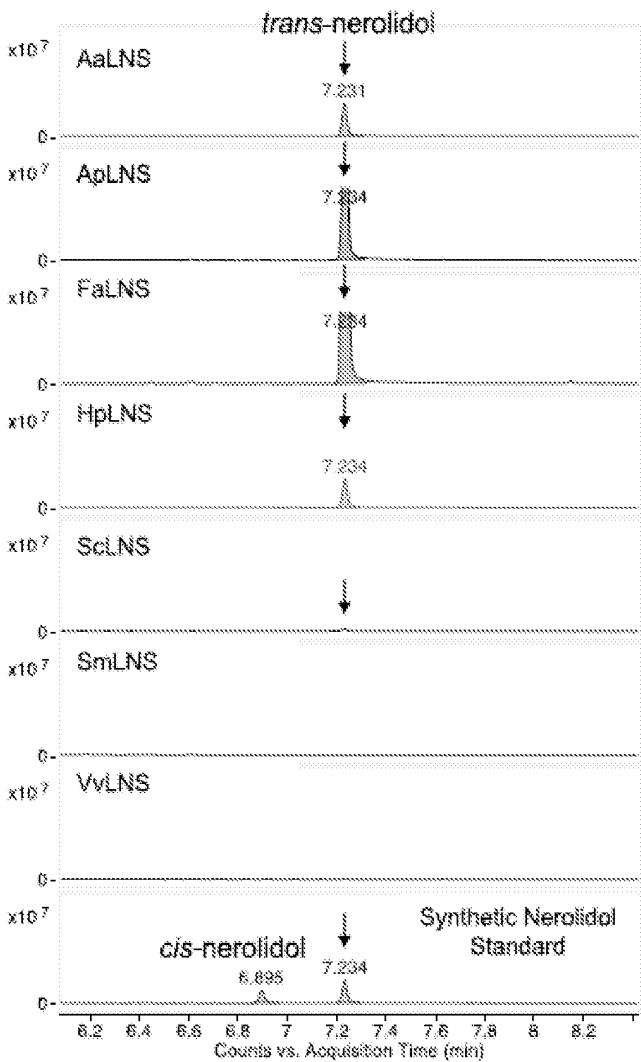


FIG. 2B

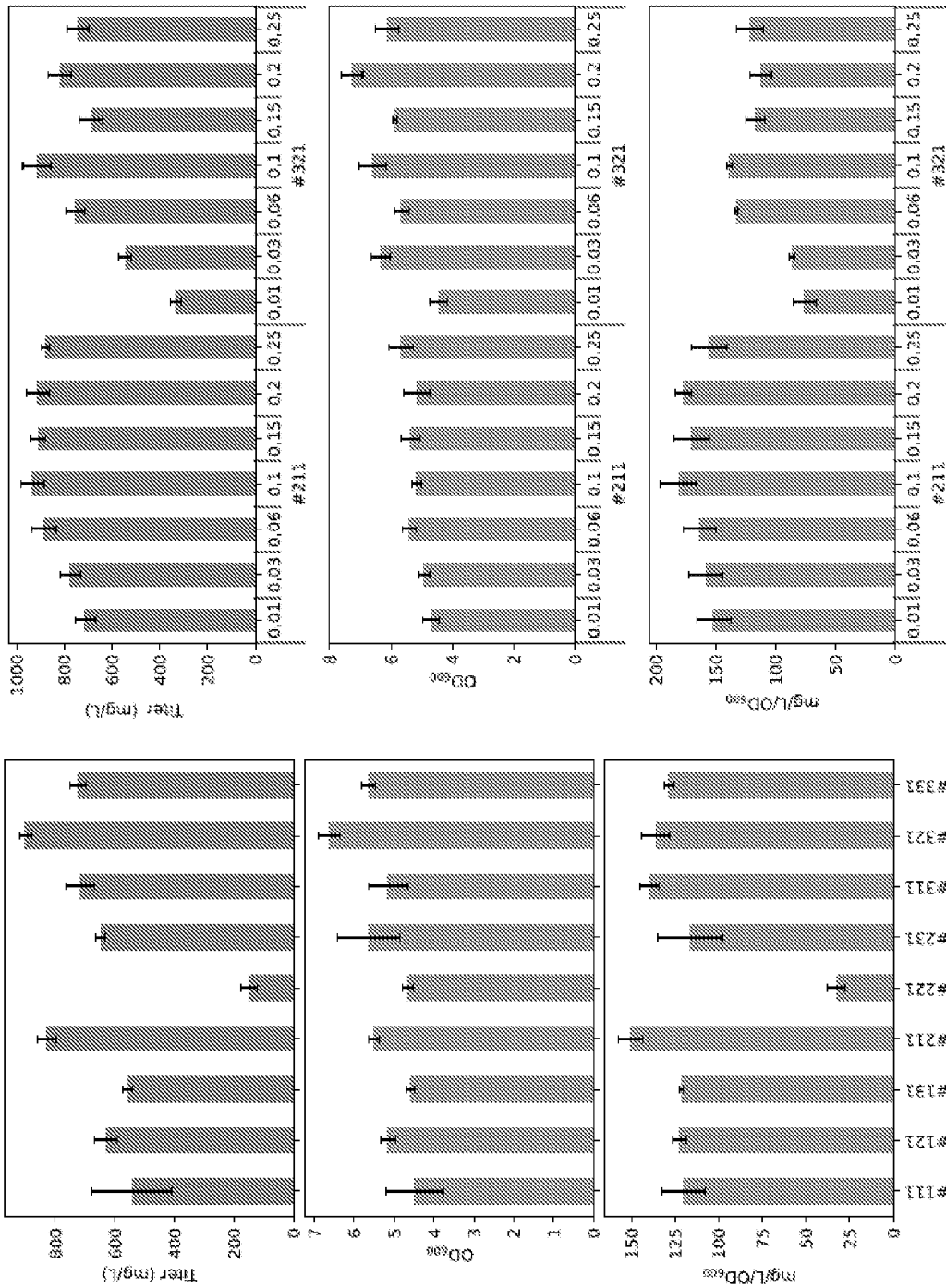
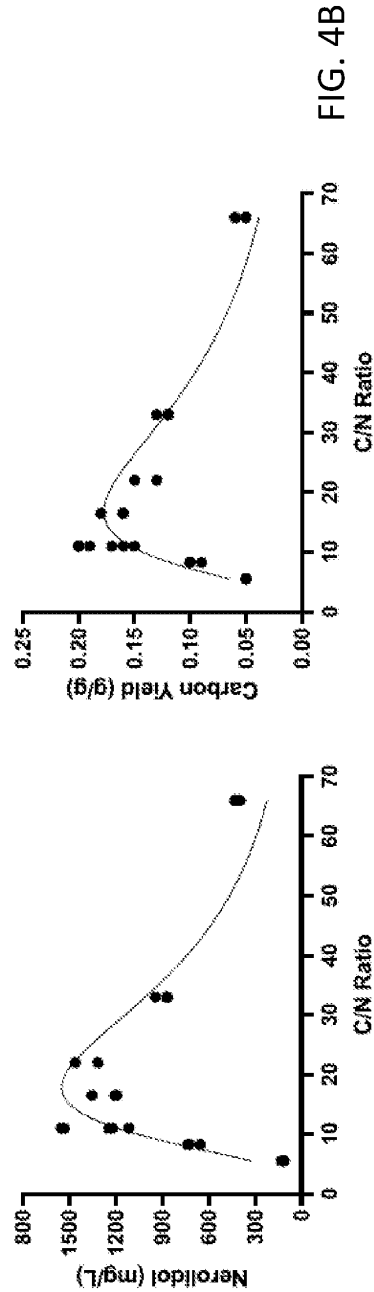
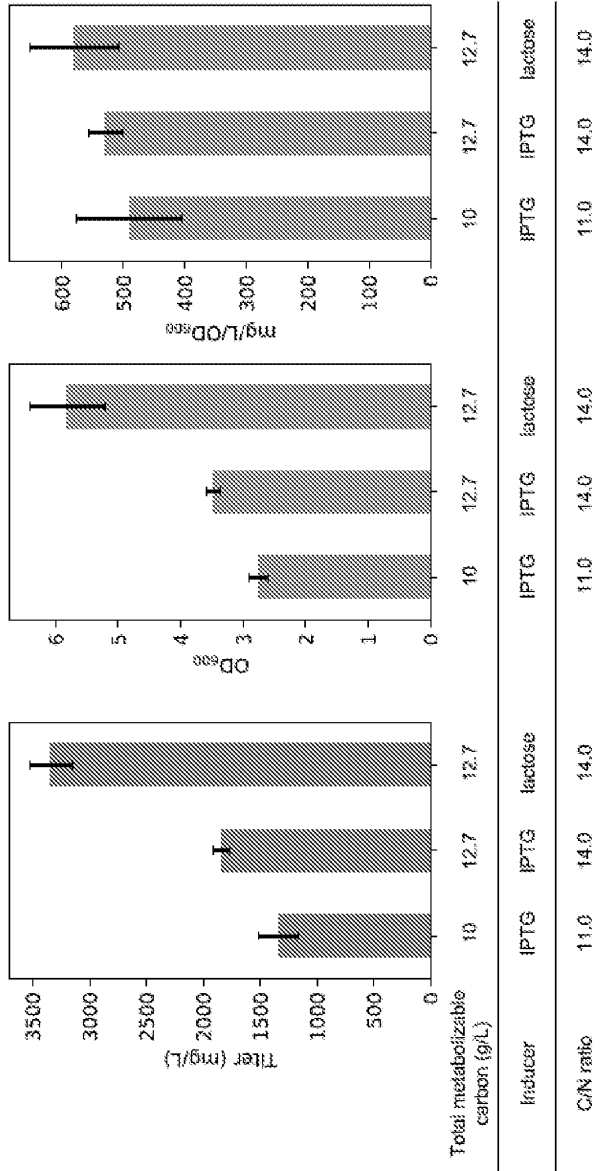


FIG. 3B

FIG. 3A



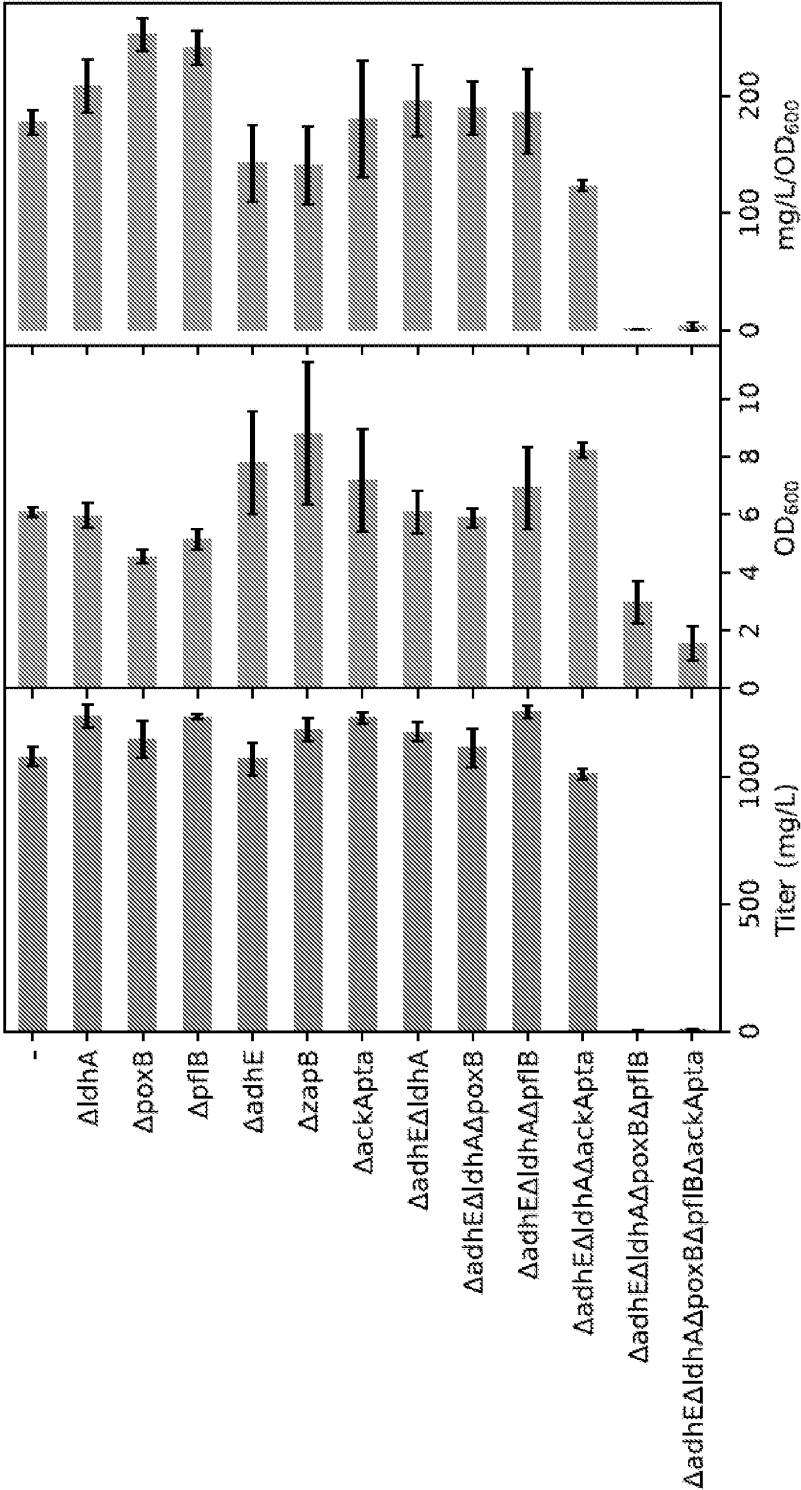


FIG. 5

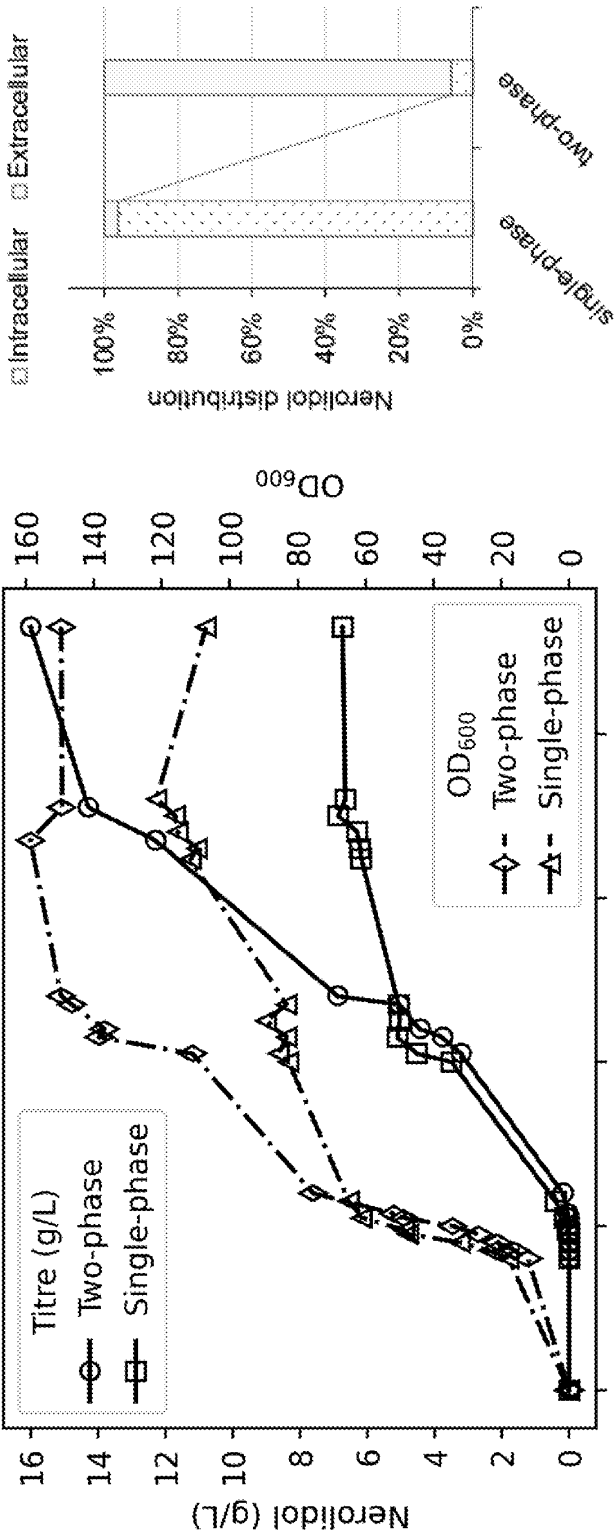
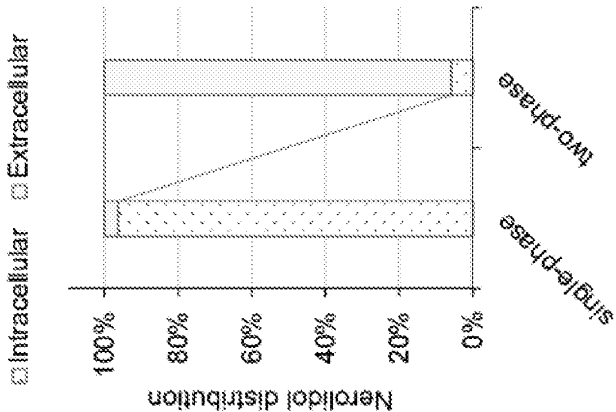


FIG. 6A

FIG. 6B



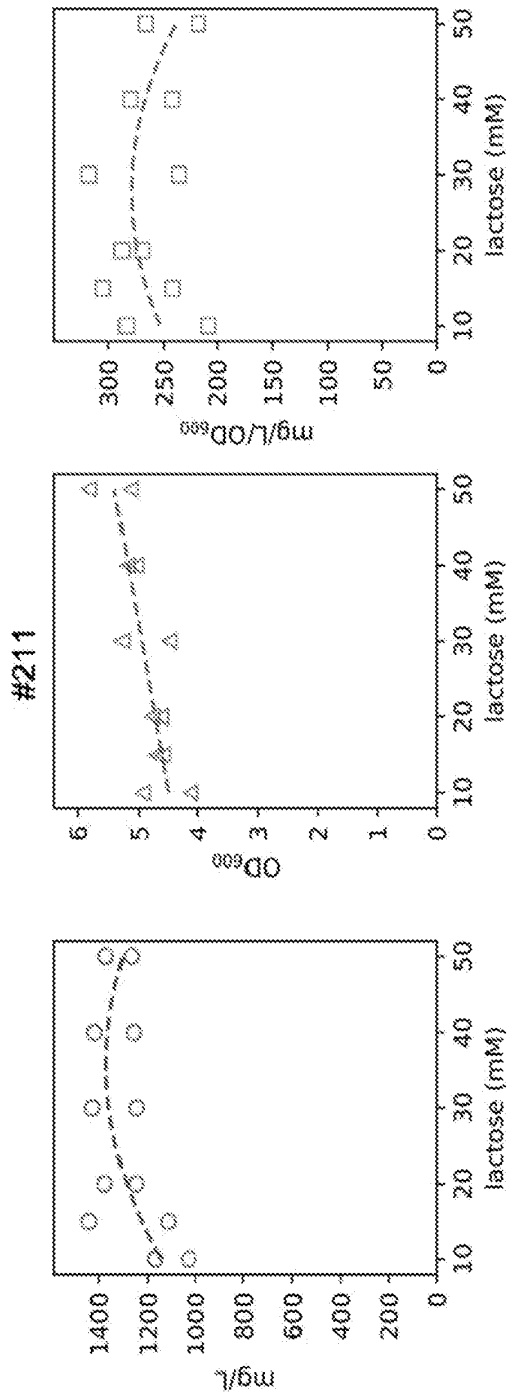


FIG. 7A

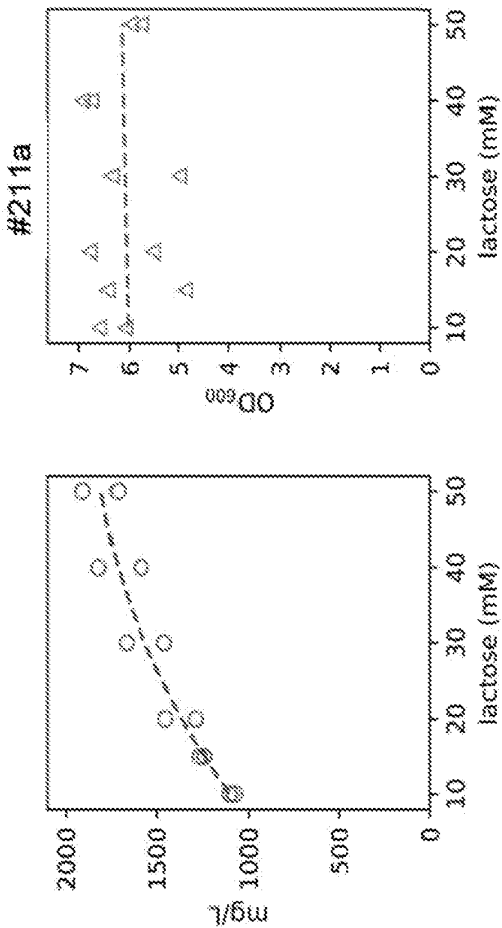


FIG. 7B

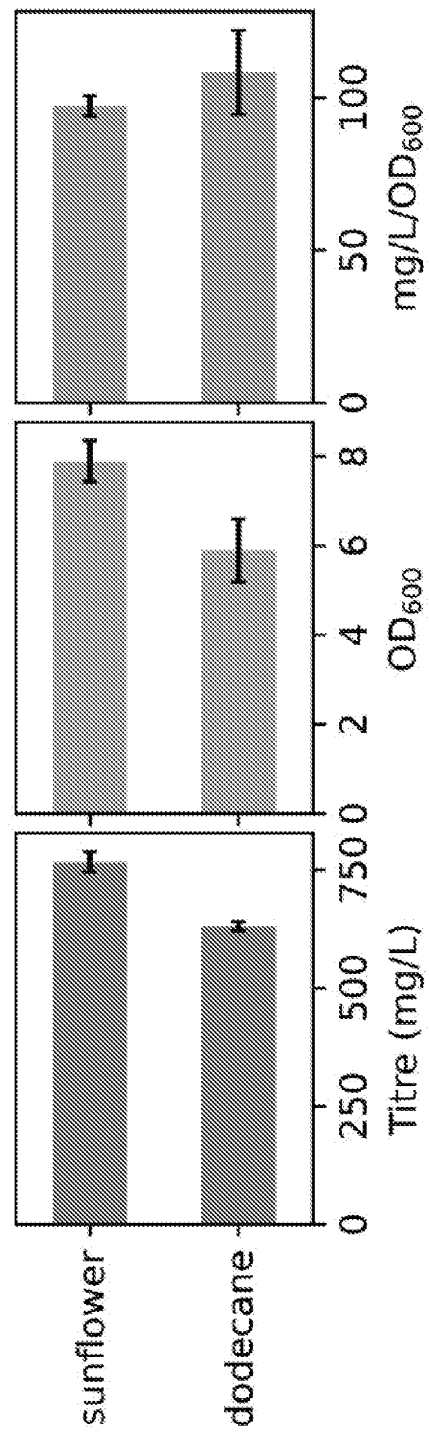


FIG. 8

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AaLNS	-----	1
ApLNS	-----	1
HpLNS	-----	1
ScLNS_{B5H117}	-----	1
SnLNS_{D8RNE9}	-----	1
FaLNS_{P0CV94}	-----MNVT	5
VvLNS_{E6WBC5}	MGFSPAFACSIFFVGPNNKFTELGQSEFNWVVLVPTAQKNSIAHSTLVYPLRHHNSQS	60
AaLNS	-----	1
ApLNS	-----	1
HpLNS	-----	1
ScLNS_{B5H117}	-----	1
SnLNS_{D8RNE9}	-----	1
FaLNS_{P0CV94}	KHTRTMGDI FVQHSQKLELLKTVLRNVVAELBALEGLNMIDAVQRLGIDYNFQBSIDEILE	65
VvLNS_{E6WBC5}	QHLSPTEDEFYINHAQRLGEIRNVFSSVG--EDTLEGLMMIDAQRLGIDYNFKESIEAVLQ	119
AaLNS	-----	1
ApLNS	-----	1
HpLNS	-----	1
ScLNS_{B5H117}	-----	1
SnLNS_{D8RNE9}	-----	1
FaLNS_{P0CV94}	KQMSIVG---ARDDLHEVALRFRLLRQHGYPVEDVFNHFKDSKGTFFKQVLGSDIRGLM	121
VvLNS_{E6WBC5}	RQYMKASTHGESIQDLYEVALRFRLLRQEGYHVPAGVFNHFNNKSKFKQHLKSDIRGLL	179
AaLNS	-----MSSSTQLPTHS	11
ApLNS	-----	1
HpLNS	-----	1
ScLNS_{B5H117}	-----MGSL	4
SnLNS_{D8RNE9}	-----MNDLFRIS	8
FaLNS_{P0CV94}	SLYEASQLGTGEGEDILVEAENFSGHLLKTELKHLDRHRVIVANTLRNPHNSLAPF---	178
VvLNS_{E6WBC5}	ALYEASQLSIEGEDILEEAQRFSSTLLNAGLEHLNHEATVVGHTLENPHNSLAPF---	236
AaLNS	PTNMQIILPOLLCSWGYKGF-----NPHYEGAKABSENTWIRPLVVELPDERG-	59
ApLNS	-MSQGIYIPDLITWPNQXVR-----NPLLQEVQDEANENWVKSFW--LFEPDQ-	45
HpLNS	-MSAQYITIPOLLANNWPNQVVT-----NEMLEDEVDEANENWVMSLG--LFEPDQ-	45
ScLNS_{B5H117}	-M-QEFEFVAV-----PAPSRV-----SPDLARARARHLNWWHAMDL-VRGEEL-	44
SnLNS_{D8RNE9}	GV-TFPELELLP--NNIPFAC-----HPEPQSIOLKIDWFLGKMR-IADETS-	52
FaLNS_{P0CV94}	-M-ARNFPVTSQATNSWLNLLKEVAKTDFNMVRSLEHQSIVQMSKWWELGL--AKLELF	234
VvLNS_{E6WBC5}	-M-ANSFLNSFQGPNGWLTVLQELAKADFNWVQCSIRQHELLQISKWVQGRGL--AEELNF	292
AaLNS	-QMAFAKDYTGILLASMTYPRHNKEFLCVACDMMNLPFVYDEVYDITFPETAQRLAKI---	115
ApLNS	-FENFKACDFHLLGALVGPLGTKEELRISCDLNNFYFAPDEVYDITLASADEAFVIARD---	101
HpLNS	-FKKFKACDFHLLASFIGPLECKEHLKLVACDLNFPYFAPDEVYDITVANREEAKKISQG---	101
ScLNS_{B5H117}	-RRRYEFGCVADIGAYGYPHATGADLDLCVDVLGWTFLPDQDFAGDGRERDALAVCAEL	103
SnLNS_{D8RNE9}	-KKNVLESRIGLVACMMSPHAKREKLVLAGKHLWAVFLDCLLDGSKHNPQLNLT---	108
FaLNS_{P0CV94}	ARDQPLKWKYIWSMACLTSPKLGESRVEL--TKPISFVYLLDIPFVYGTLSGLILFTE---	390
VvLNS_{E6WBC5}	ARDQPLKWHNWPMAVLPDPSLSQRVEL--TKPISMIYITDDIFVYVGTLSGLILFTE---	348
AaLNS	VVNAMRNPDIAALGEDSIGTNTKQFWRRAXTL--PPN---GDN---SESCIQHFIDY	166
ApLNS	VMEGFRH-TD--KPGHNKITEMARQFFERTINTV---GND-----PTGIEQFIAD	145
HpLNS	VMHAFKTRSA--EPSSSKITEMARQFFERTVDVY---GED-----SPAINQFITD	146
ScLNS_{B5H117}	TDLLWKGTG--ATAADPPIVVAFSDCWERMRAEM--SDA-----R--RRRTVHENVDY	150
SnLNS_{D8RNE9}	ISNLANGNC--DEDTNPLLALYREVMEETRAAM---EPF-----L--LDRTV---QC	151
FaLNS_{P0CV94}	AVNRWEITA-----IDNLPDYMKICFKALYDMTNEFSCKVYLRHGNWFLQSLKISWASL	344
VvLNS_{E6WBC5}	AVNRWDIAA-----PETLPWYMKICFKTLDEITNEISNEVYKESGWNWVDSLRRTVVEL	492
AaLNS	TEEYLTAVTREACD-----RG-SGSVHAVKDYLAMRATSG---AGLMVGLLEFGL	213
ApLNS	FDATYTSIIQEADD-----RA-SGHIRSVEDYFILRADTCG---GKPSGFFFLGL	192

FIG. 9 (continued)

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HpLNS	FDYTTAVIQEADD-----RT-EGTIRNVEDYFTLRBDTCG---ARPSFCFFALGL	193
ScLNS_{B5H117}	LAGWPTFLADRRAGAVLSPAAHLRARERTICCRPLPALAE-----RVGGY-----	195
SmLNS_{D8RNE9}	VGASLEAVNDQVHR-----RA-ESIFSVVEEYKLARRATGFMEAVGGIMTEFCIGI	201
FaLNS_{P0CV94}	CNAFLVE----AK-----WFA-SGNLPKSEEXLNGIVSSGVN-VVLVNMFFLLGQ	389
VvLNS_{H6WBC5}	CNAFLVE----AK-----WFA-SGHVPEAHVYLNQGVISSGVR-VVLVHLFFLLGH	447
***** 2. 27 210 200 200 200 200 200 200		
AaLNS	DLPEEVMKH-EVIQELSTGAIDMYCLNCHMGVASELSSGQASHNVITVVMHE--RNLSL	270
ApLNS	NIPFVVFAR-PMFISXTEGATDLIAITGMH-YNLSQSRGLDGHNVITAINHE--YKINL	249
HpLNS	NMPTEVFER-PLIMSLVERATDLIAIVGMH-YGLRARGLDGHNVITSIMYE--HQLDL	250
ScLNS_{B5H117}	EVPRRAWHS-SRLDGMRFPTSDAVIGMELHCFEKRAQGH--ANLVLSLVHR--GGLTG	250
SmLNS_{D8RNE9}	RLSQAQIQS-PIFRELLNGVSDHVLVGLL-FKKFYGGDYHNNWISVLLNHSFRGTST	260
FaLNS_{P0CV94}	NITRQVELLNHTPAIISGAAILRLWDLG-ANDENQDGDGGSYVRCYLEH--EGCSI	447
VvLNS_{H6WBC5}	GITRGHVLVDFFPSIIGSTAAILRLWDLG-ANDENQDGDGGSYIICYIKH--QGSEM	505
***** 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200		
AaLNS	QEAFDWLASVAGGVVGFPTNLNRVPSFGELEDHSLSGEGMLRDRIQRYIDGLQAVRAE	330
ApLNS	QGALYNLGGYATKTIKFIISDRNLPSWNGPVVDR-----AVEQYFPAVGRGVRY	339
HpLNS	QGALHNLGVAEDTIANFLCEERLPSWNGPANDV-----SVQEFVDRLGRCVRY	300
ScLNS_{B5H117}	PEAVTRVCDLVQGGIESFLALRSGLPELGRALGV-----EGAVLDRIADALGAFCRGY	303
SmLNS_{D8RNE9}	QGVVRLCEMISQAELCSILALNKKIADDEG-----SDGELTFAREFFPMVAGGS	309
FaLNS_{P0CV94}	EHAREKTINMISDEWENLNRELLSPNEFFA-----SFTLAS	483
VvLNS_{H6WBC5}	ENARQNVVTMISDLWRRLNKECLSQHEFFST-----SFTMGG	541
... 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200		
AaLNS	DDAFETTRHGGQNGPQIKLTR---MLTIRPOVKDN---YARQAPRVEAPER--PMLE	381
ApLNS	DAISYETTRVYGGNGLEIQNTR---QITLRPLDPAY---VTEQLQVGMHA-----	344
HpLNS	DAISYETTRVYGGHGLQIQNTR---QITLPSNDSGY---ITRQMGVSLA-----	344
ScLNS_{B5H117}	HDSGRGADRTTRDHPGDLGLE---NLVARSSG-----NLVARSSG-----	333
SmLNS_{D8RNE9}	LVSSTVTGRYHGYGNFLTGEIFSGTWLLHFMATVVLPSKFRMDTMRFSLAPKRDGFP-	368
FaLNS_{P0CV94}	LNLARMIPIMYSYDGNQCLPSL-----KEY-----MKLNLVETVSM-----	519
VvLNS_{H6WBC5}	LNLARMVPLMYSYDGNQCLPFL-----EEH-----MKSLLPETAPFL-----	577
***** 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200		
AaLNS	VRS	384
ApLNS	---	345
HpLNS	---	345
ScLNS_{B5H117}	---	334
SmLNS_{D8RNE9}	---	369
FaLNS_{P0CV94}	---	520
VvLNS_{H6WBC5}	---	578

FIG. 9



FIG. 10A

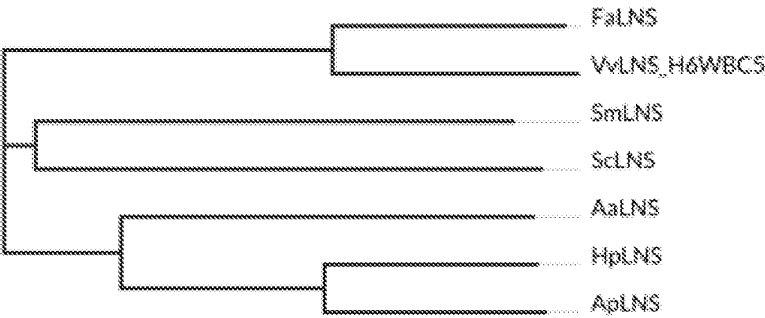


FIG. 10B

Mass spectra of the samples of the present disclosure and standards

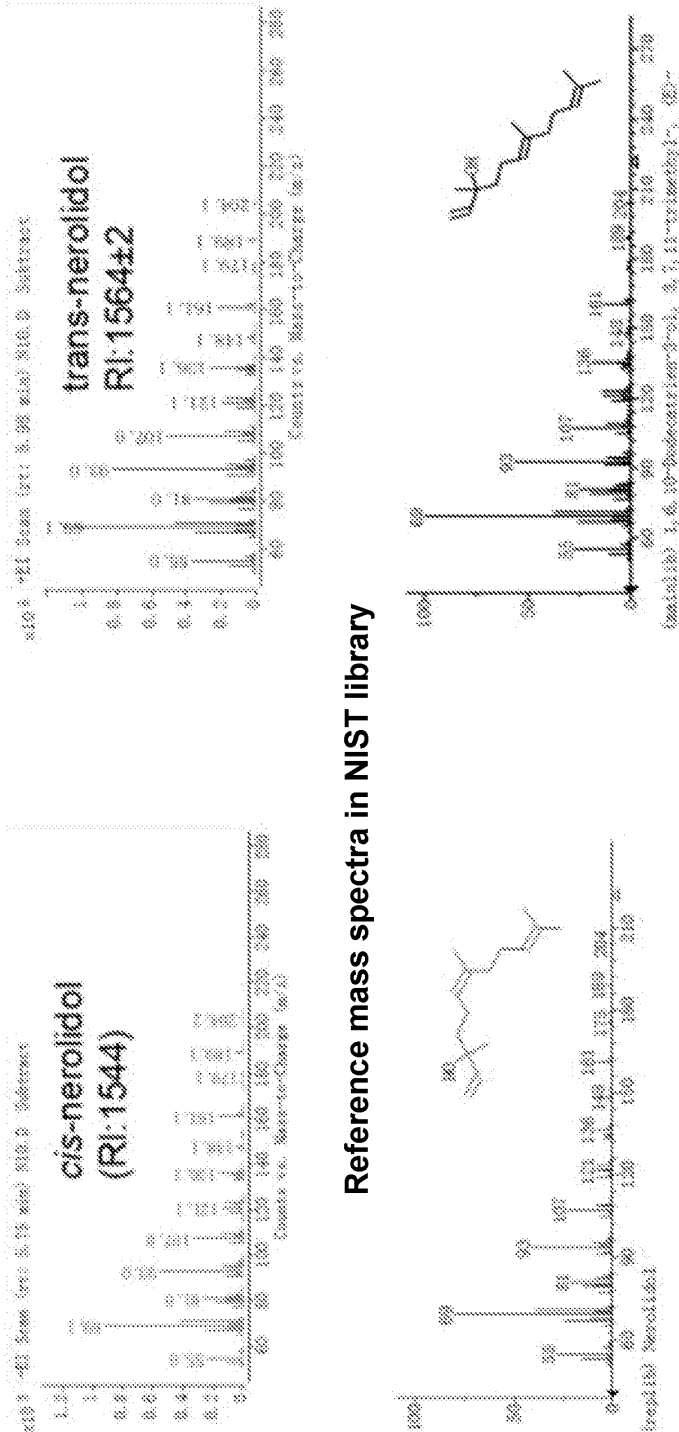


FIG. 11

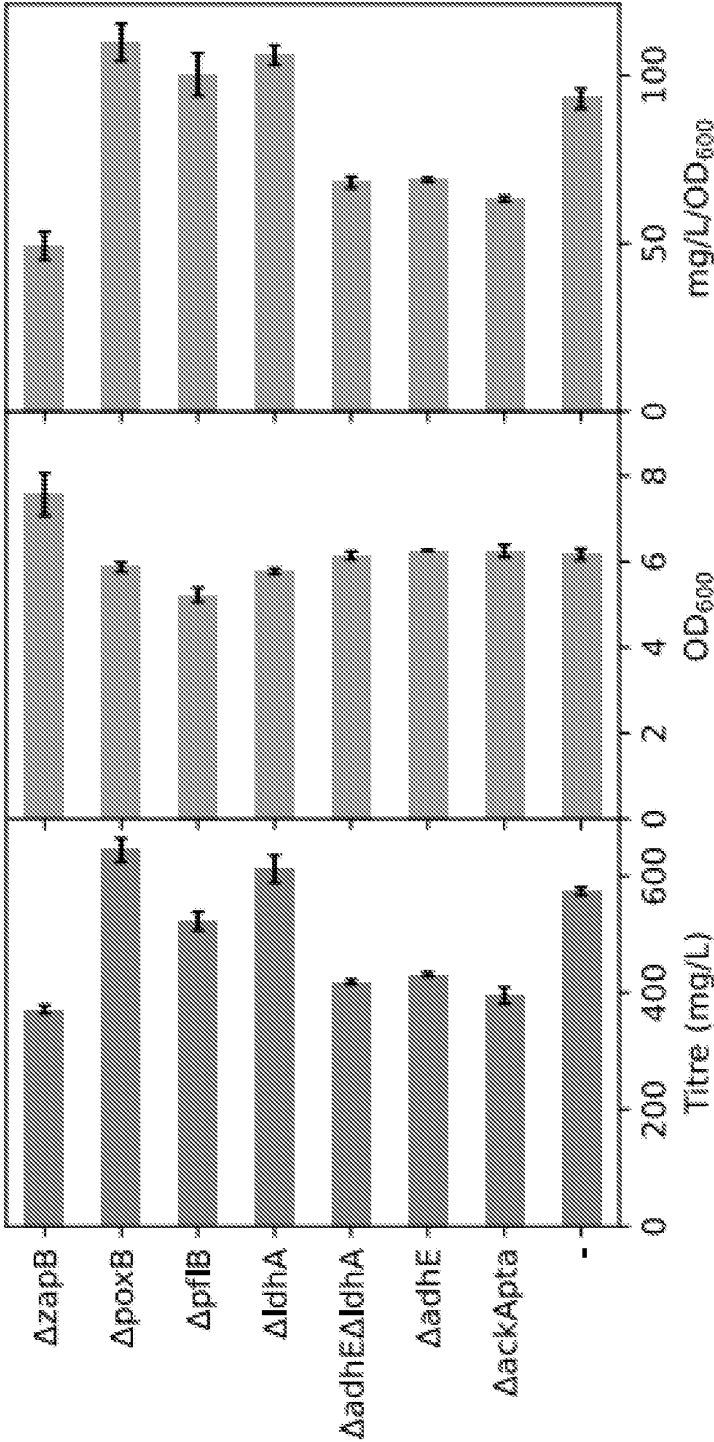


FIG. 12