

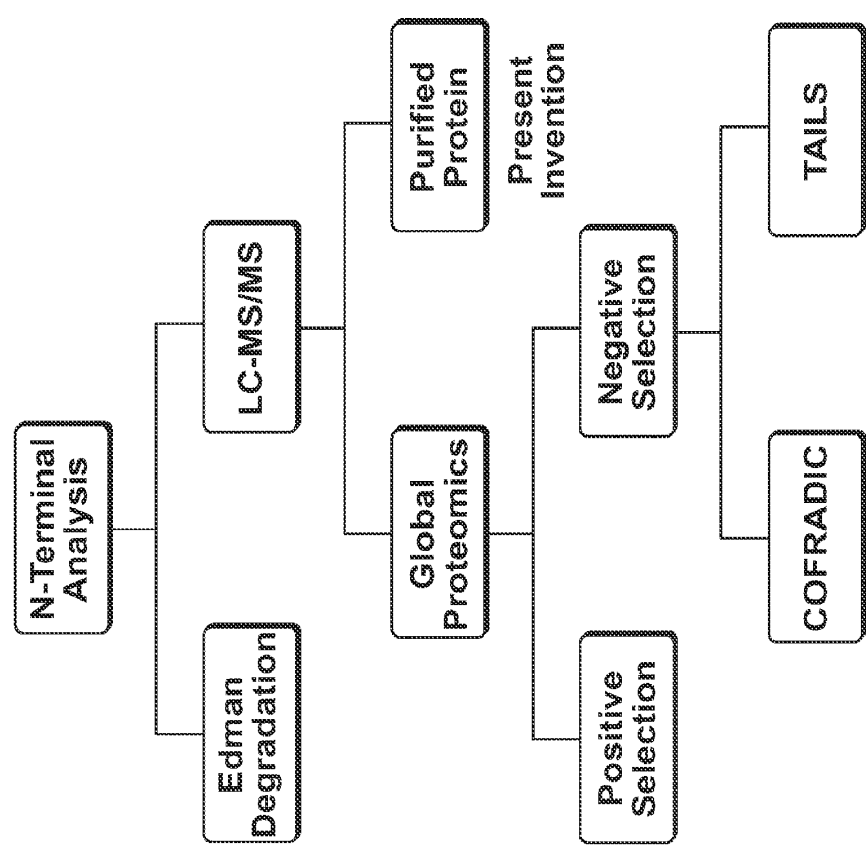


FIG. 1

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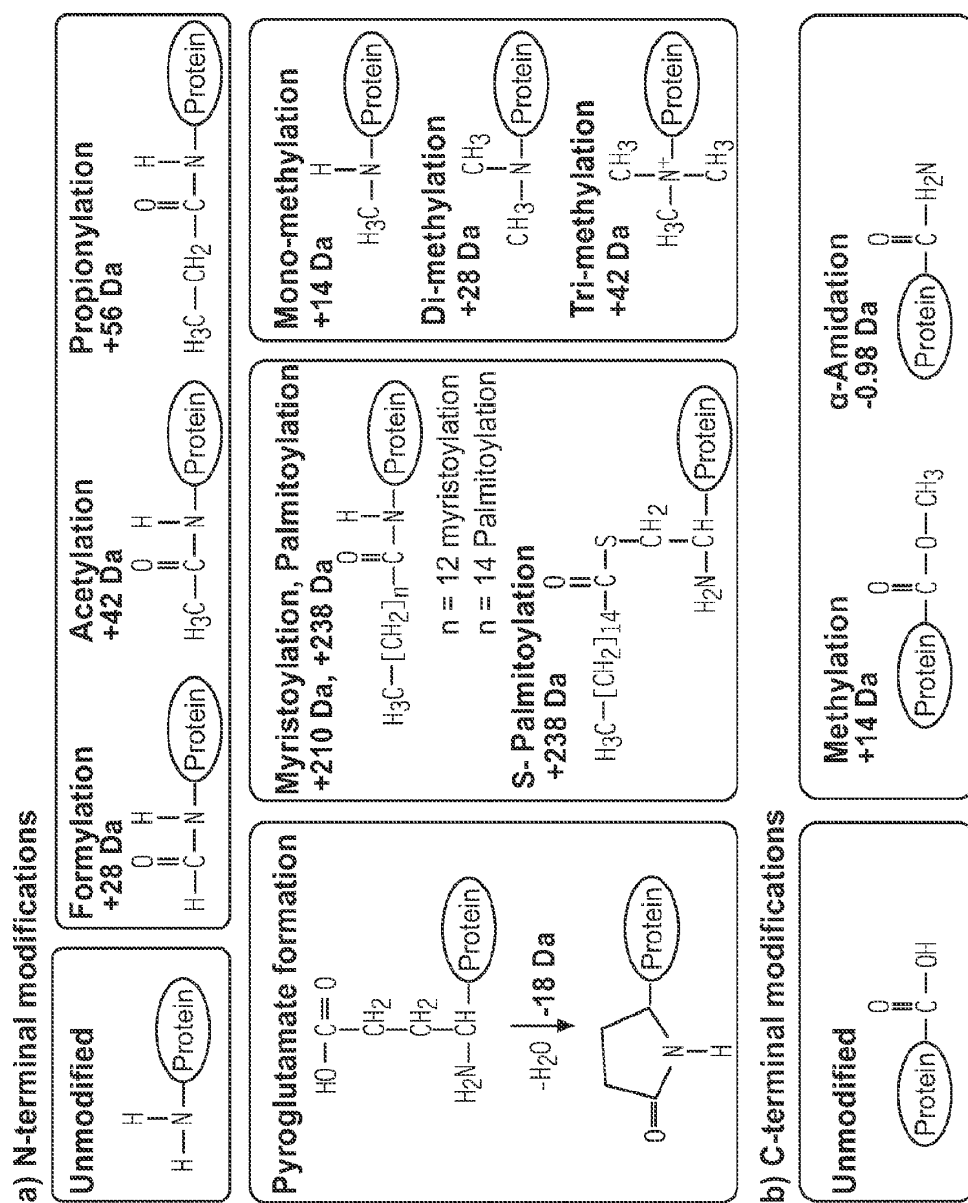


FIG. 2

ACS chemical biology, 2015, 10, 1754-1764.

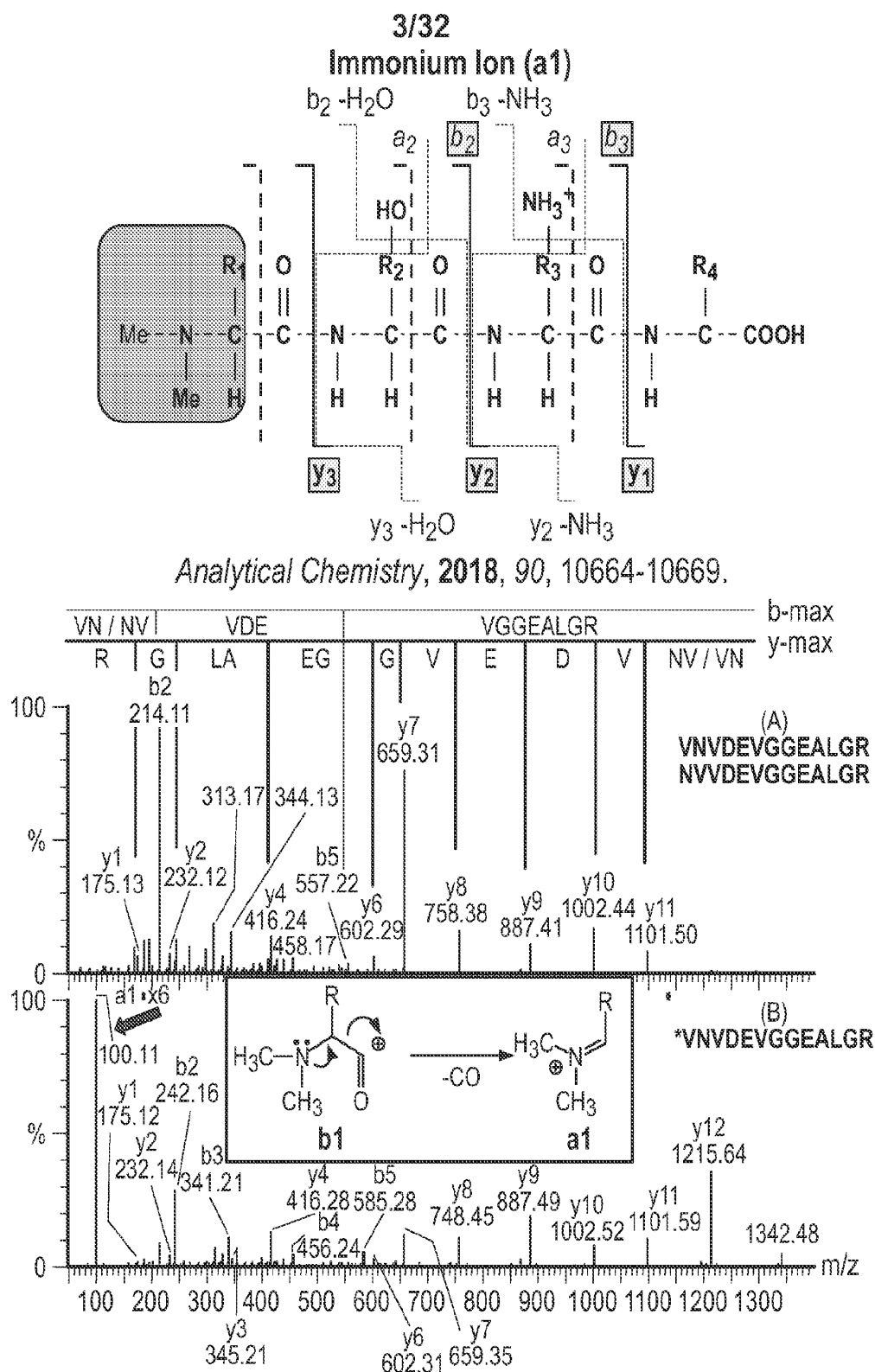


FIG. 3

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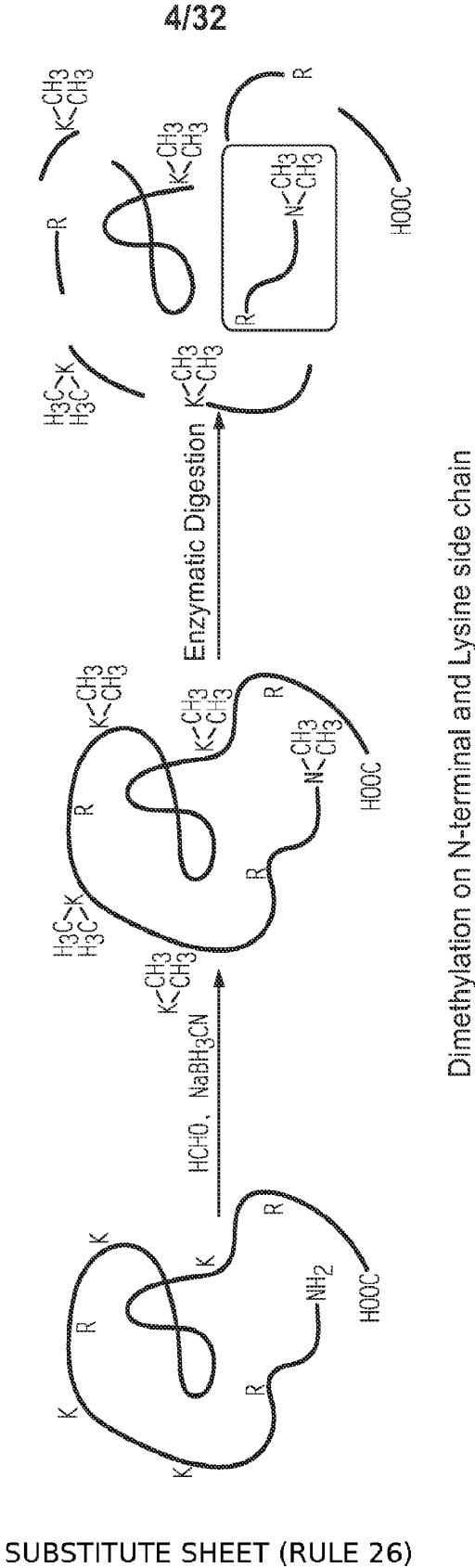


FIG. 4

Non-Position-Selective Dimethylation, 78% sequence coverage

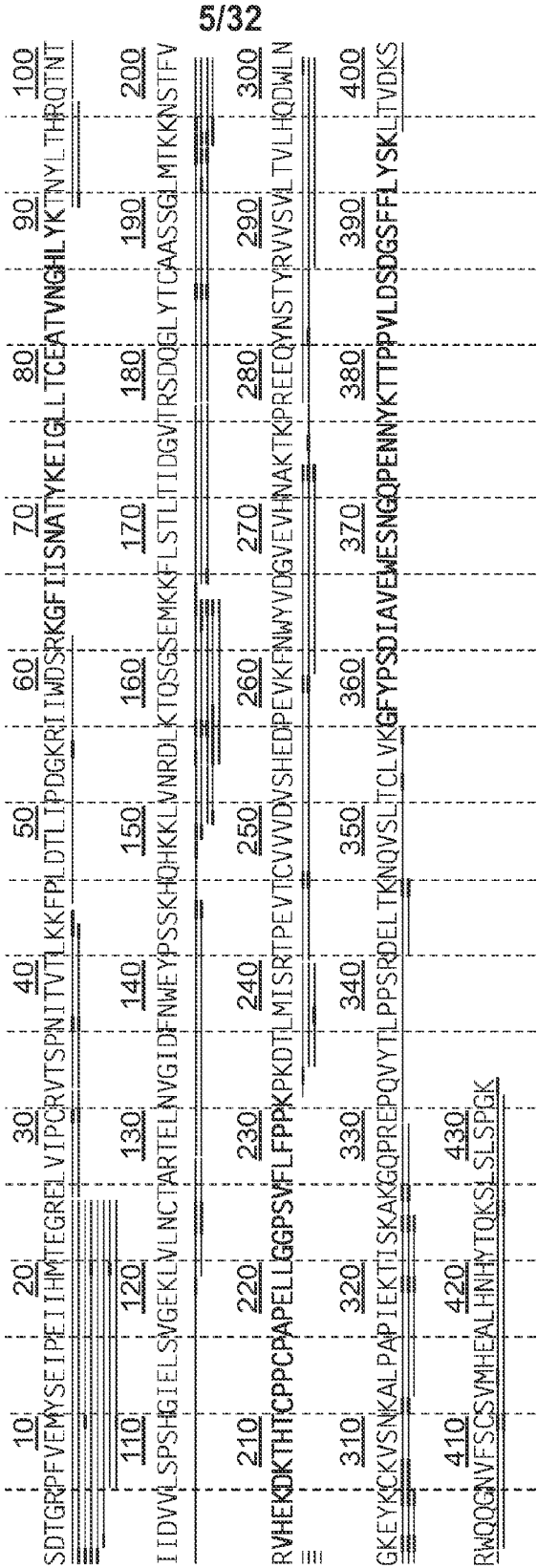


FIG. 5

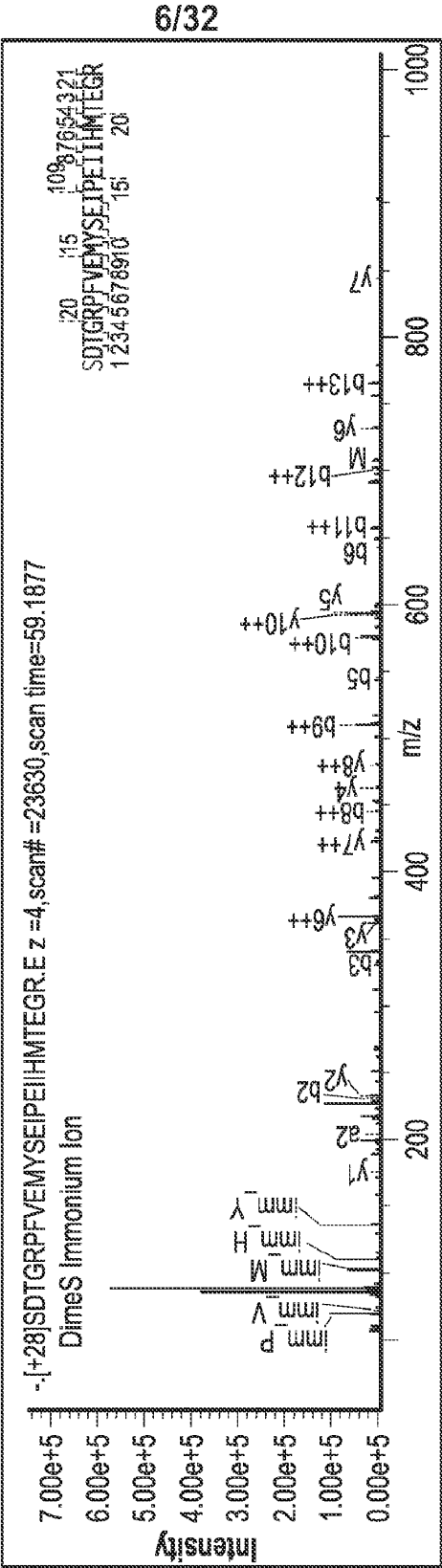
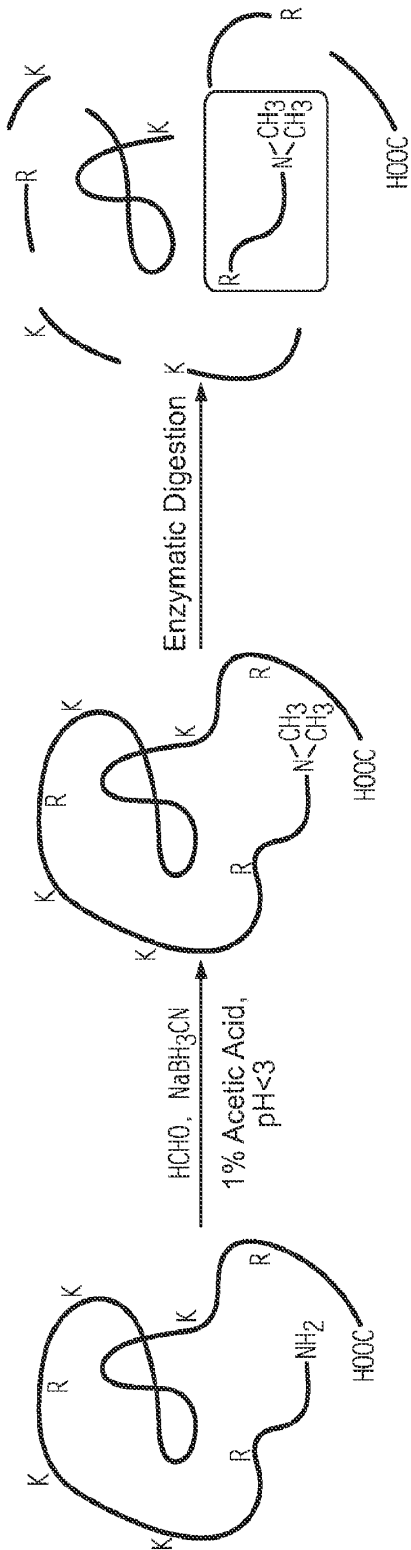


FIG. 6

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Position-Selective Dimethylation on N-terminal of Protein

FIG. 7

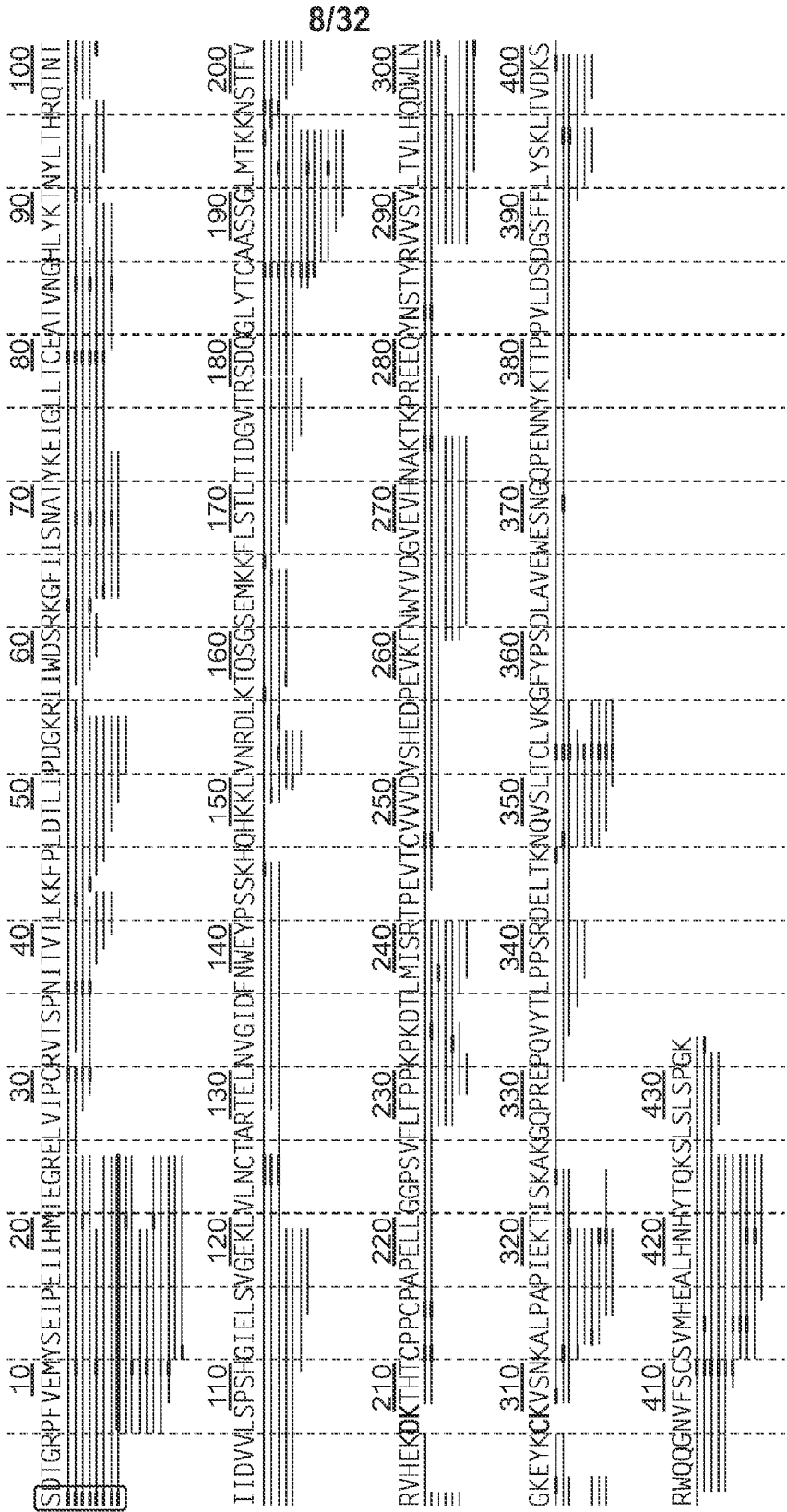


FIG. 8

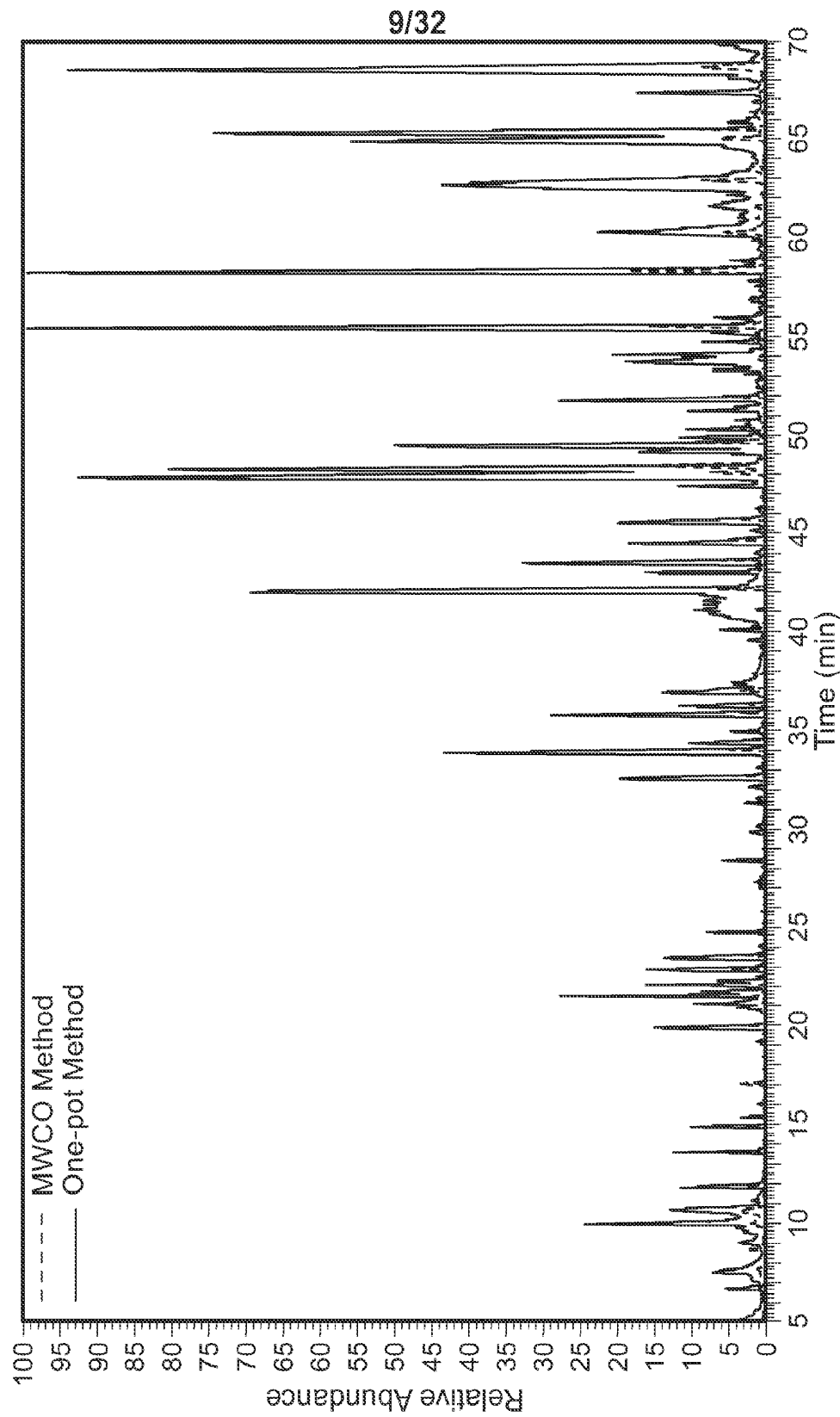
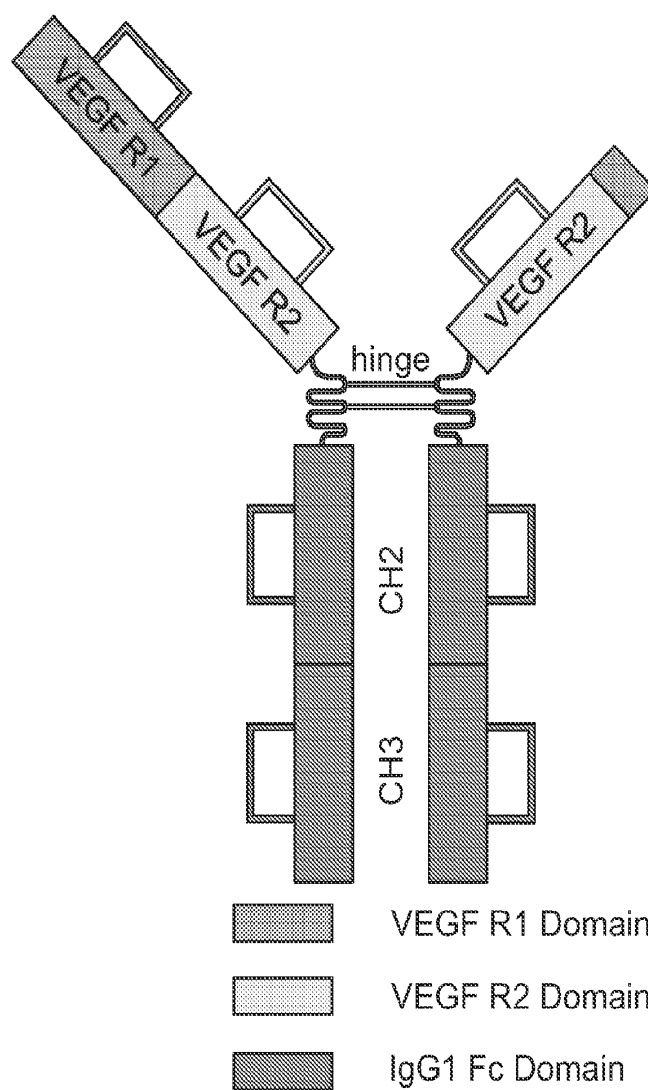


FIG. 9

Ab1	Method	Acetic Acid	HCHO	NaBH ₃ CN	Reaction time	Reaction temperature	Quench	Quench time	Quench temperature	Labeling Efficiency -SDT
MWCO	MWCO	1%	60 mM	24 mM	10 min	R.T	NH ₃	5 min	R.T	99.6%
20 mM HCHO	R.T, 10 min	1%	20 mM	10 mM	10 min	R.T	NH ₂ OH	10 min	R.T	38.8%
10 mM NaBH ₃ CN	R.T, 60 min	1%	20 mM	10 mM	1h	R.T	NH ₂ OH	1h	R.T	85.9%
	37°C, 60 min	1%	20 mM	10 mM	1h	37°C	NH ₂ OH	1h	37°C	90.1%
60 mM HCHO	37°C, 15 min	1%	60 mM	24 mM	15 min	37°C	NH ₂ OH	15 min	37°C	98.4%
24 mM NaBH ₃ CN	37°C, 30 min	1%	60 mM	24 mM	30 min	37°C	NH ₂ OH	30 min	37°C	97.1%

FIG. 10

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 N-linked Glycosylation Sites
(N36, N68, N123, N196, N282)

FIG. 11A

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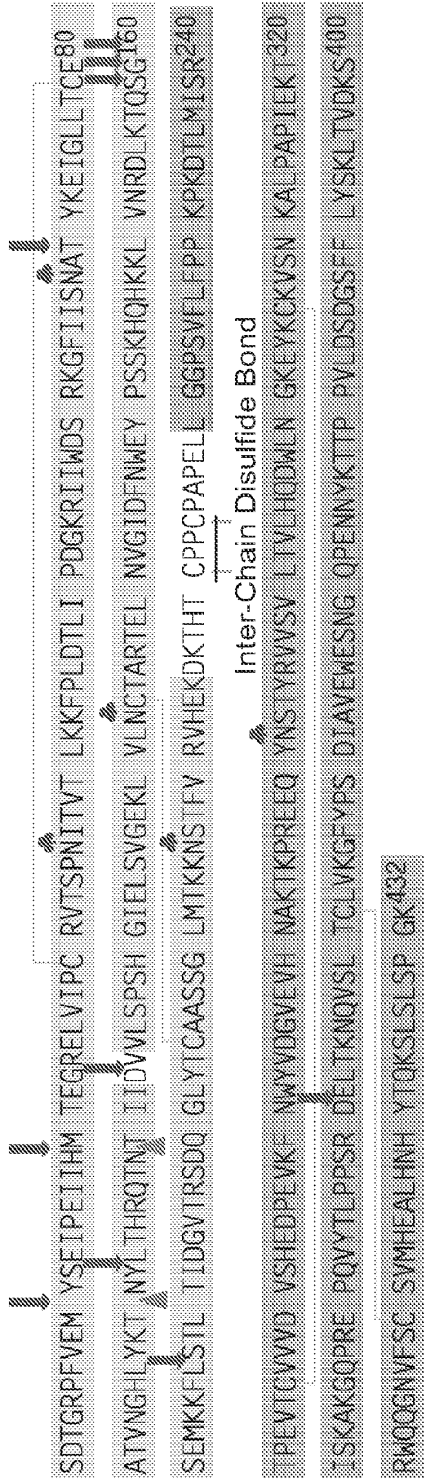


FIG. 11B

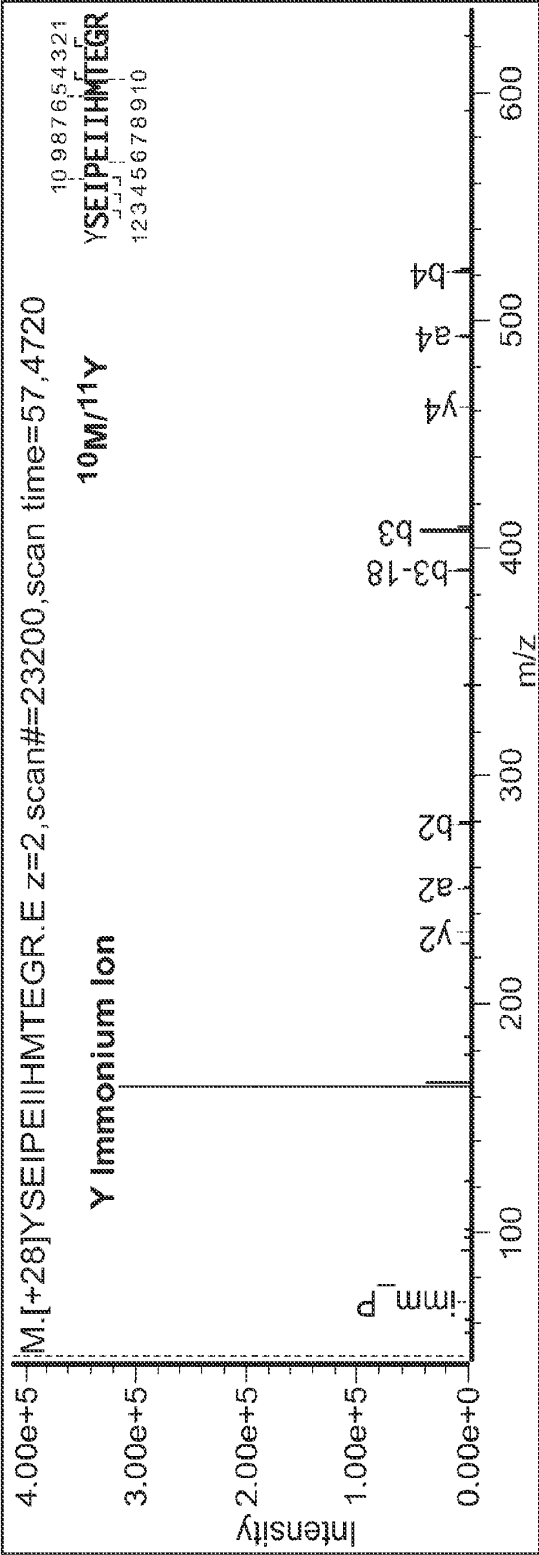


FIG. 11C

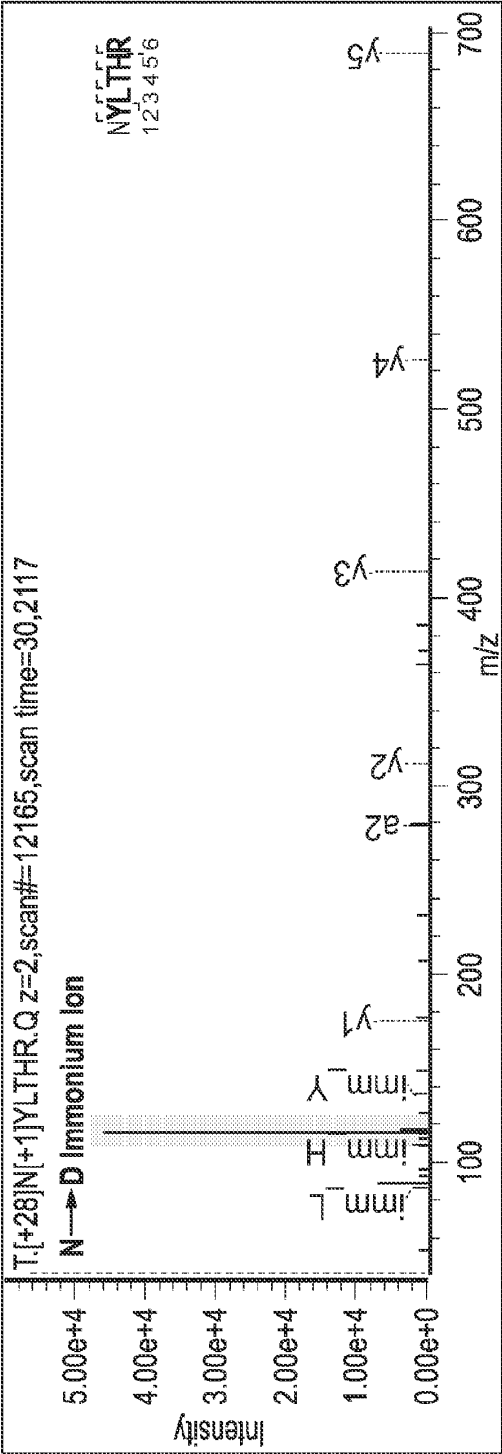


FIG. 11D

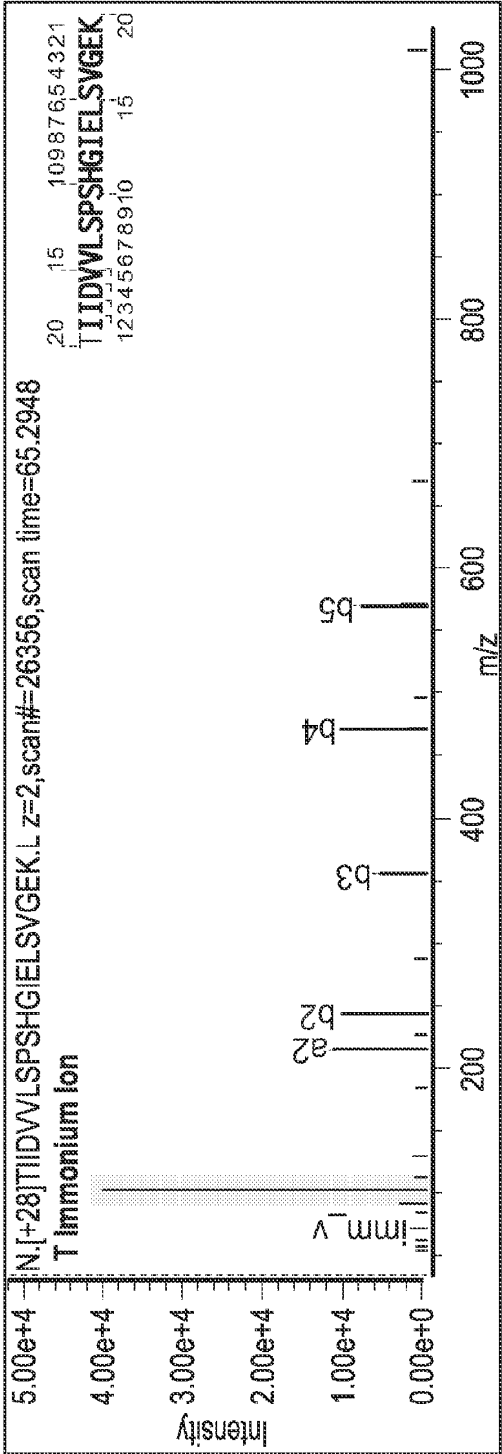


FIG. 11E

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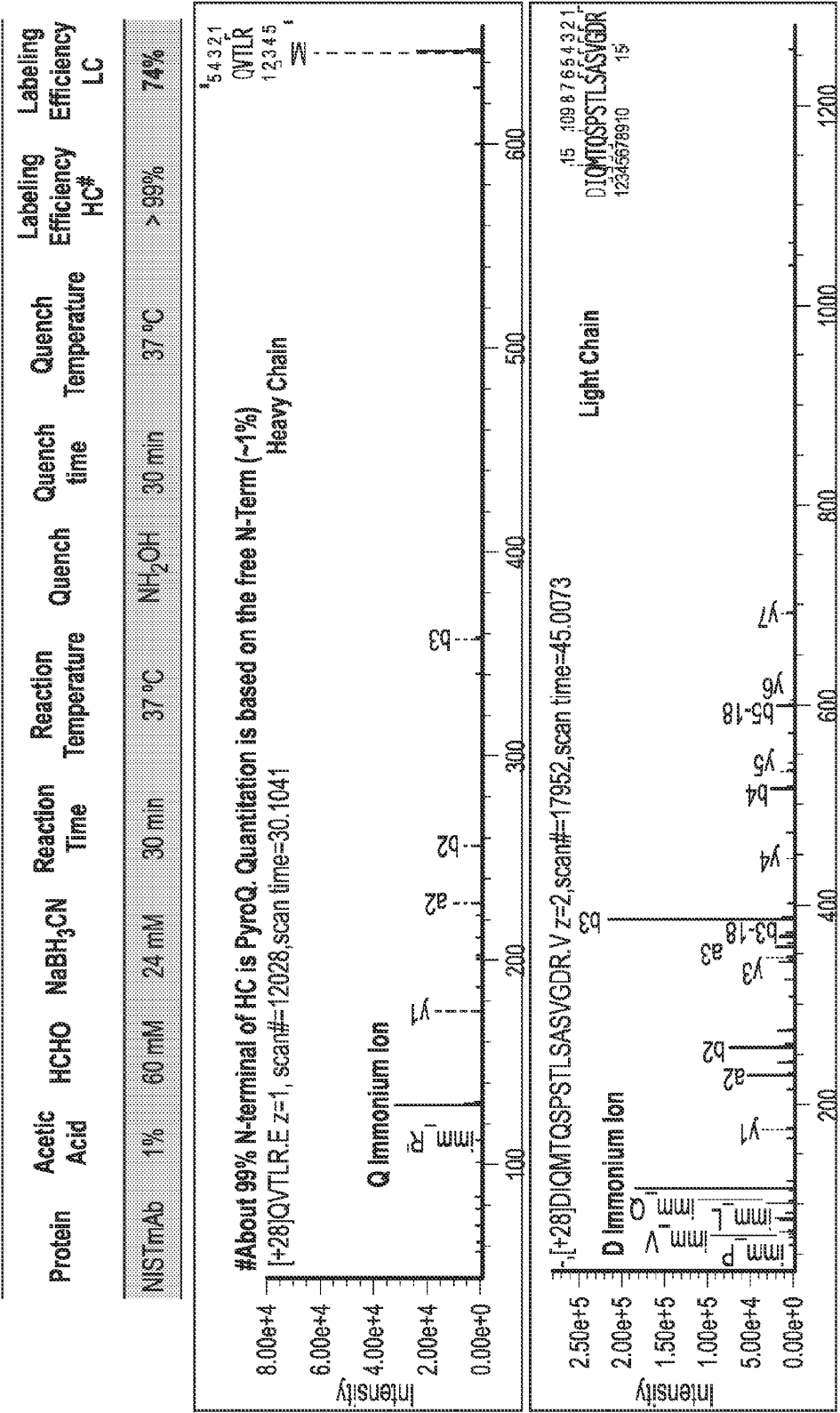


FIG. 12

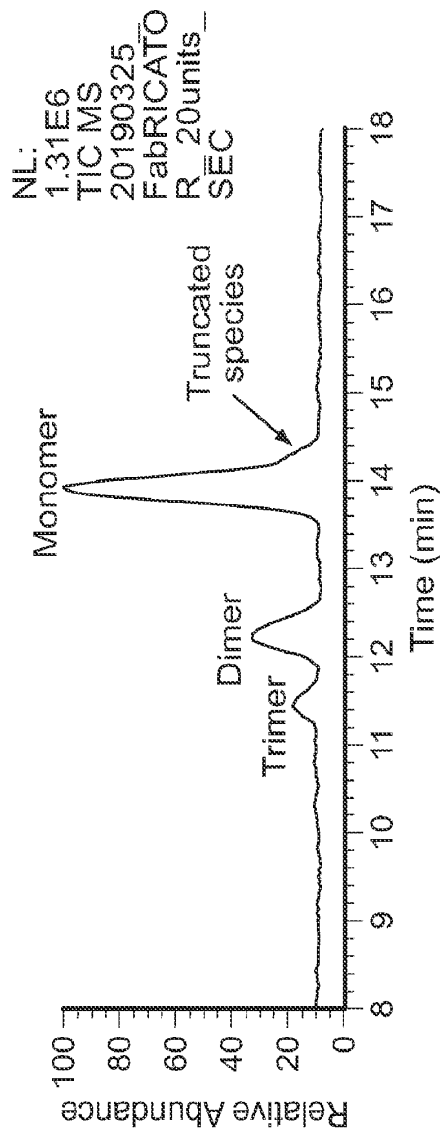


FIG. 13A

IdeS from patent:

Average Mass = 35762.9837 Monoisotopic Mass = 35740.7970

N-Terminus = H, C-Terminus = OH

1 DSFSA NQEIR YSEVT PYHVT SVWTK GVTTP ANFTQ GEDVF HAPYV ANQGW
51 YDITK TFNGK DLLLC GAATA GNMHL WDFDQ NKDQI KRYLE EHPEK QKINF
101 NGEQM FDVKE AIDTK NHQLD SKLFE YFKEK AFPYL STKHL GVFPD HVIDM
151 FINGY RLSLT NHGPT PVKEG SKDPR GGIFD AVFTR GDQSK LLTSR HDFKE
201 KNLKE ISDLI KKELT EGKAL GLSHT YANVR INHVI NLWGA DFDSN GNLKA
251 IYVTD SDSNA SIGMK KYFVG VNSAG KVAIS AKEIK EDNIG AQLVG LFTLS
301 TGQDS WNQTN HHHHH H

Predicted mass: 35763.0 + 552.3 + 329.2 = 36644.5 Da
N-Term C-Term

FIG. 13B

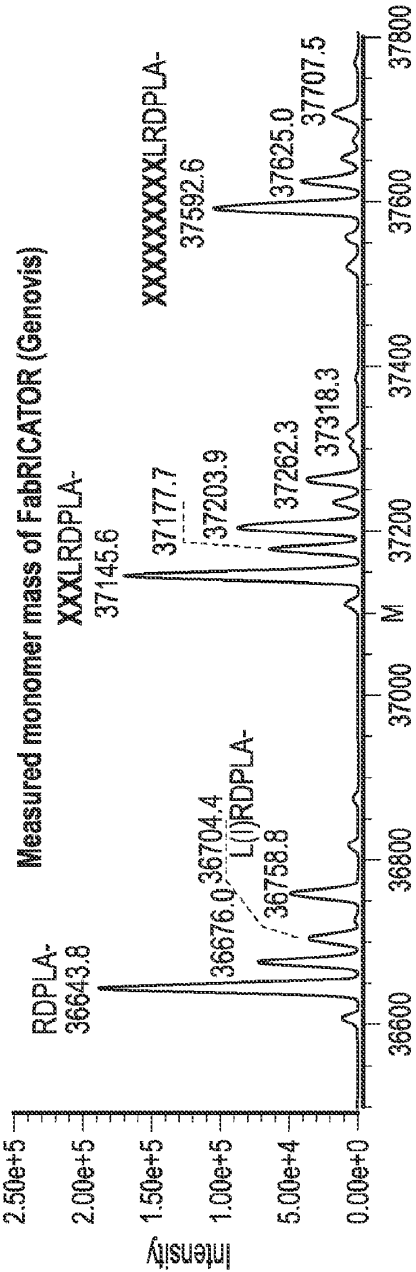


FIG. 13C

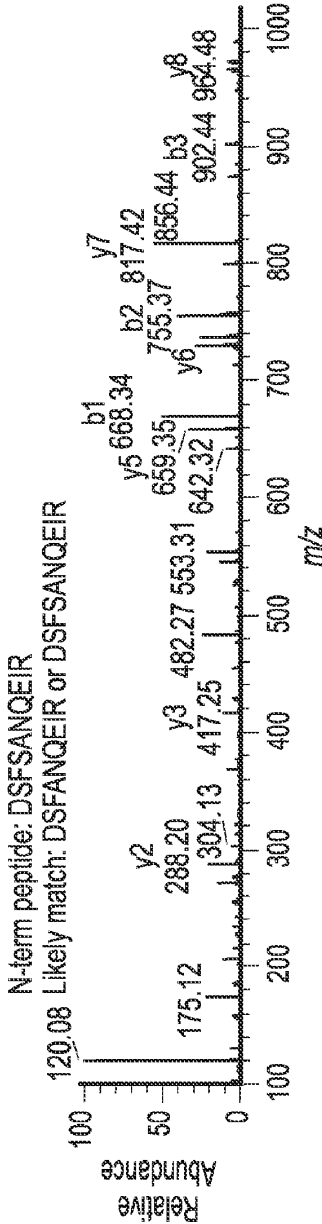
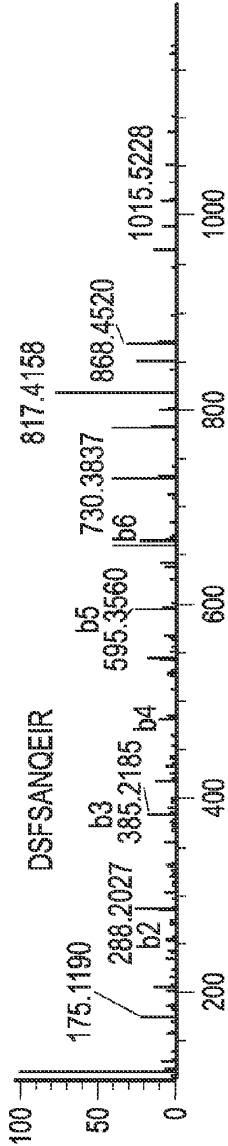
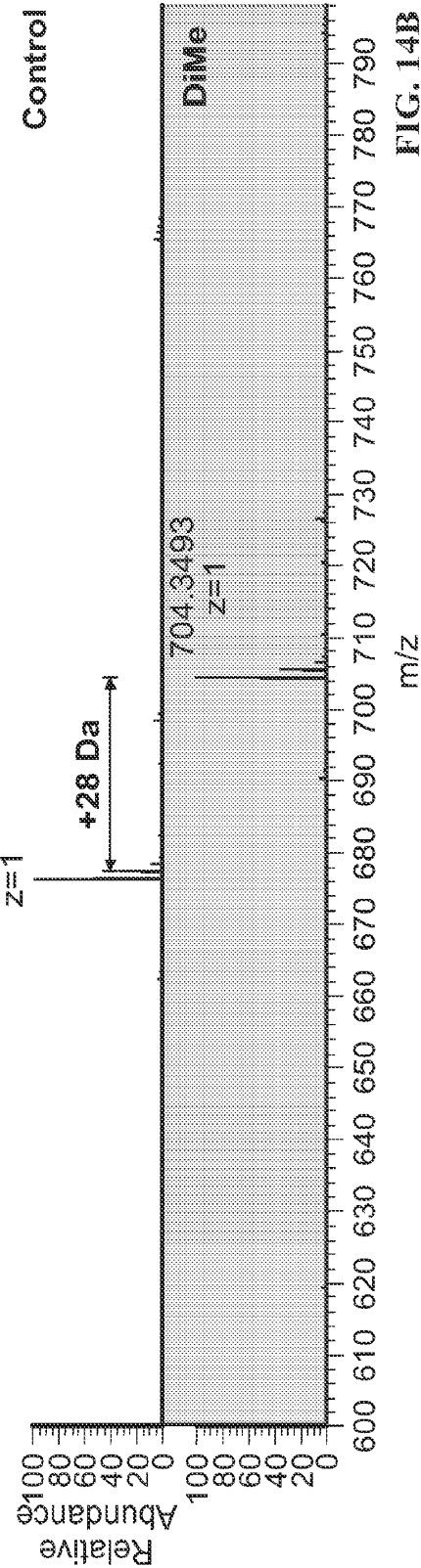
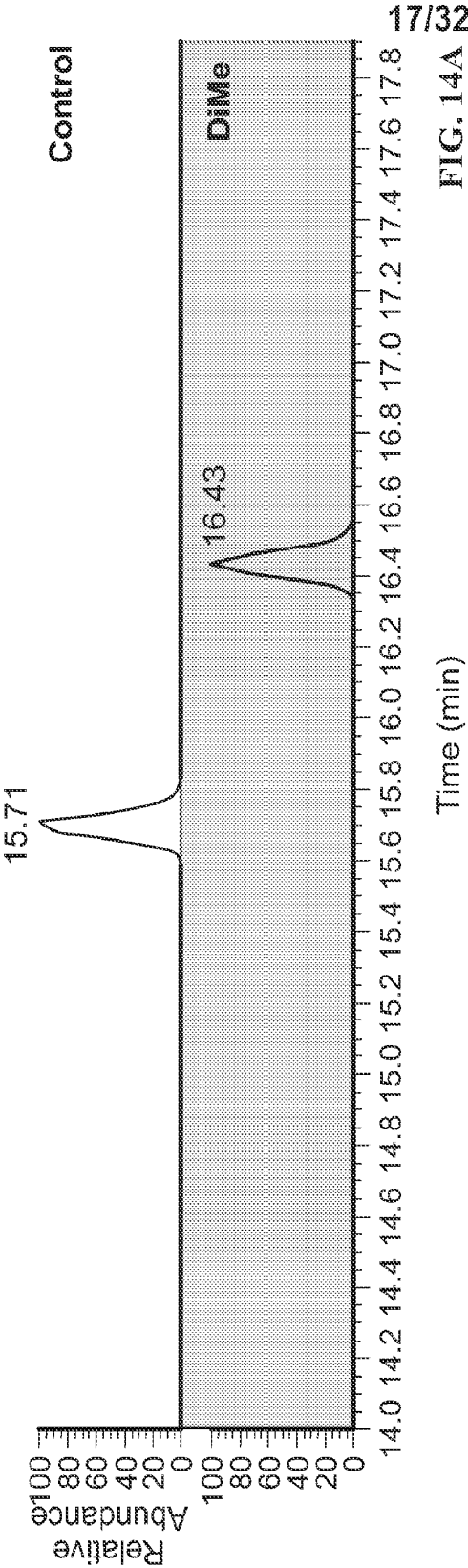
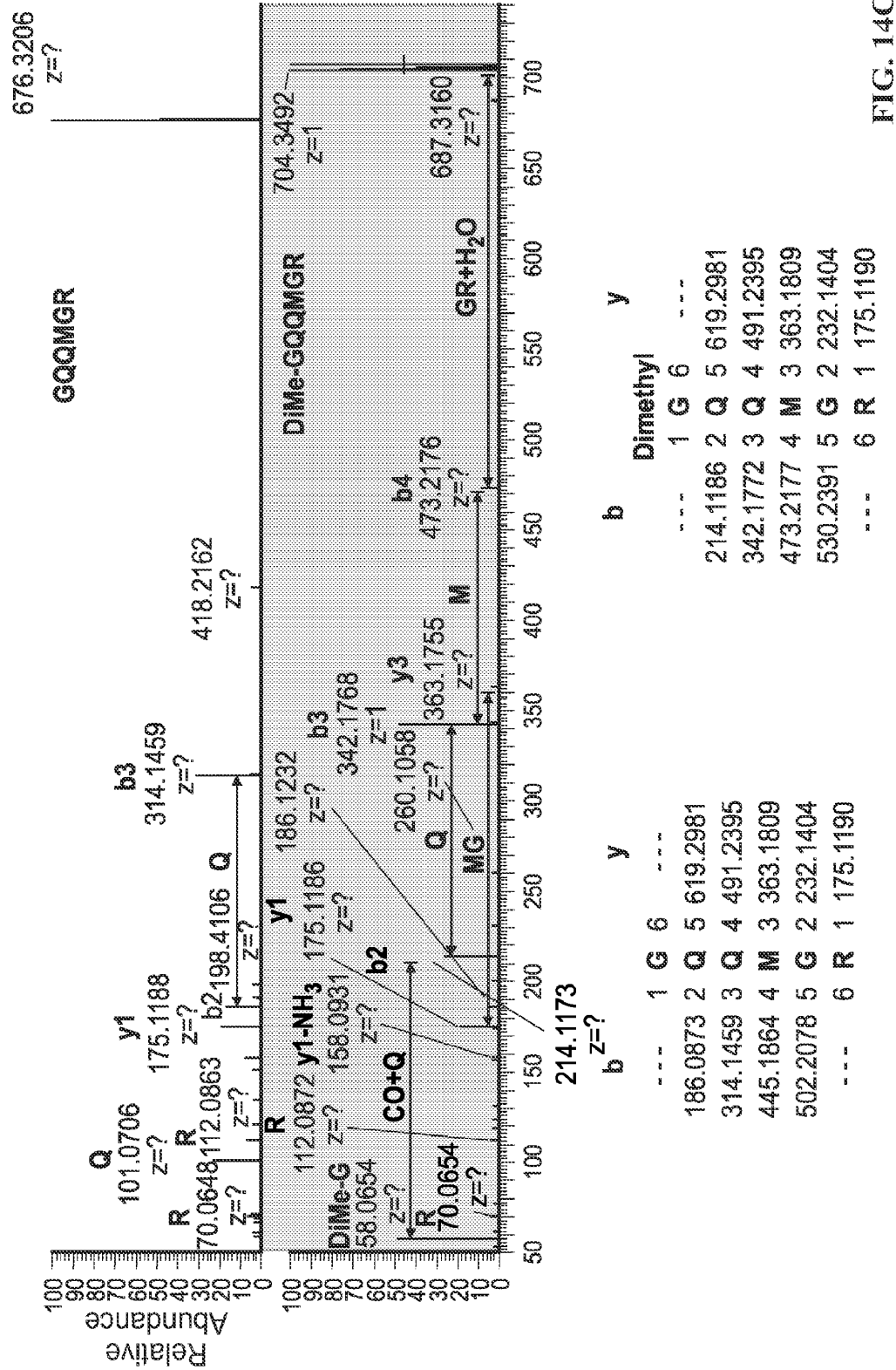
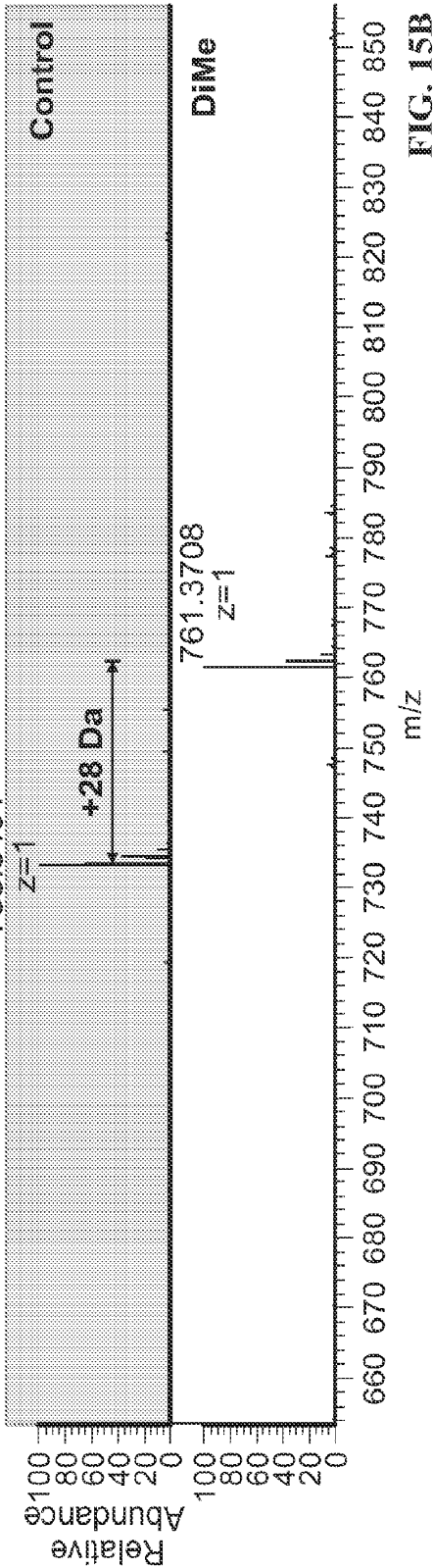
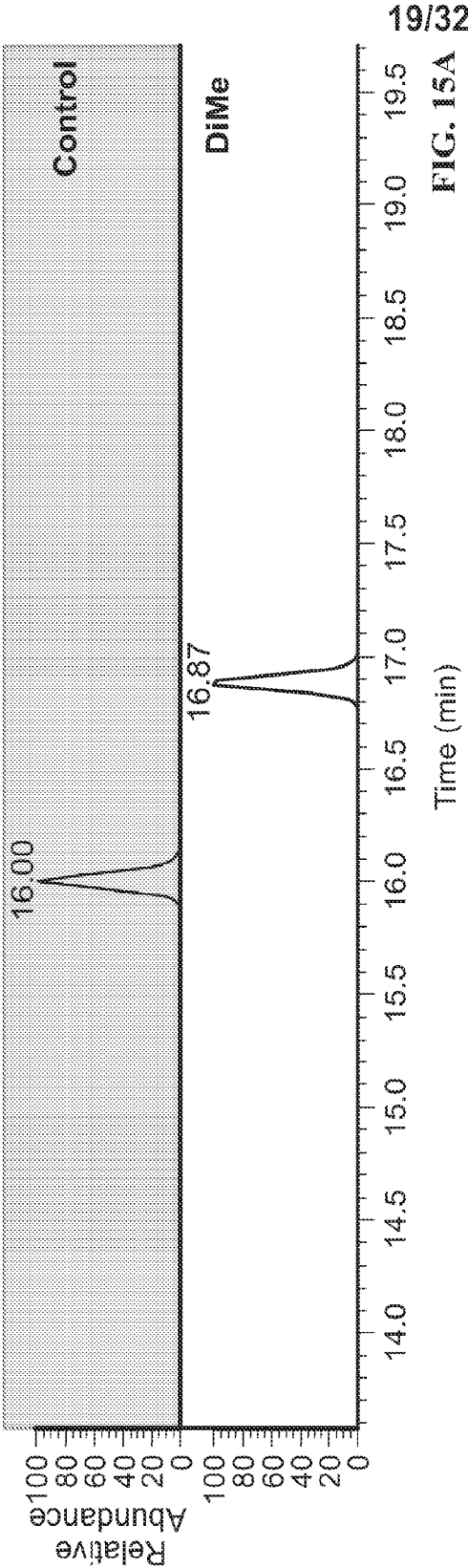


FIG. 13D









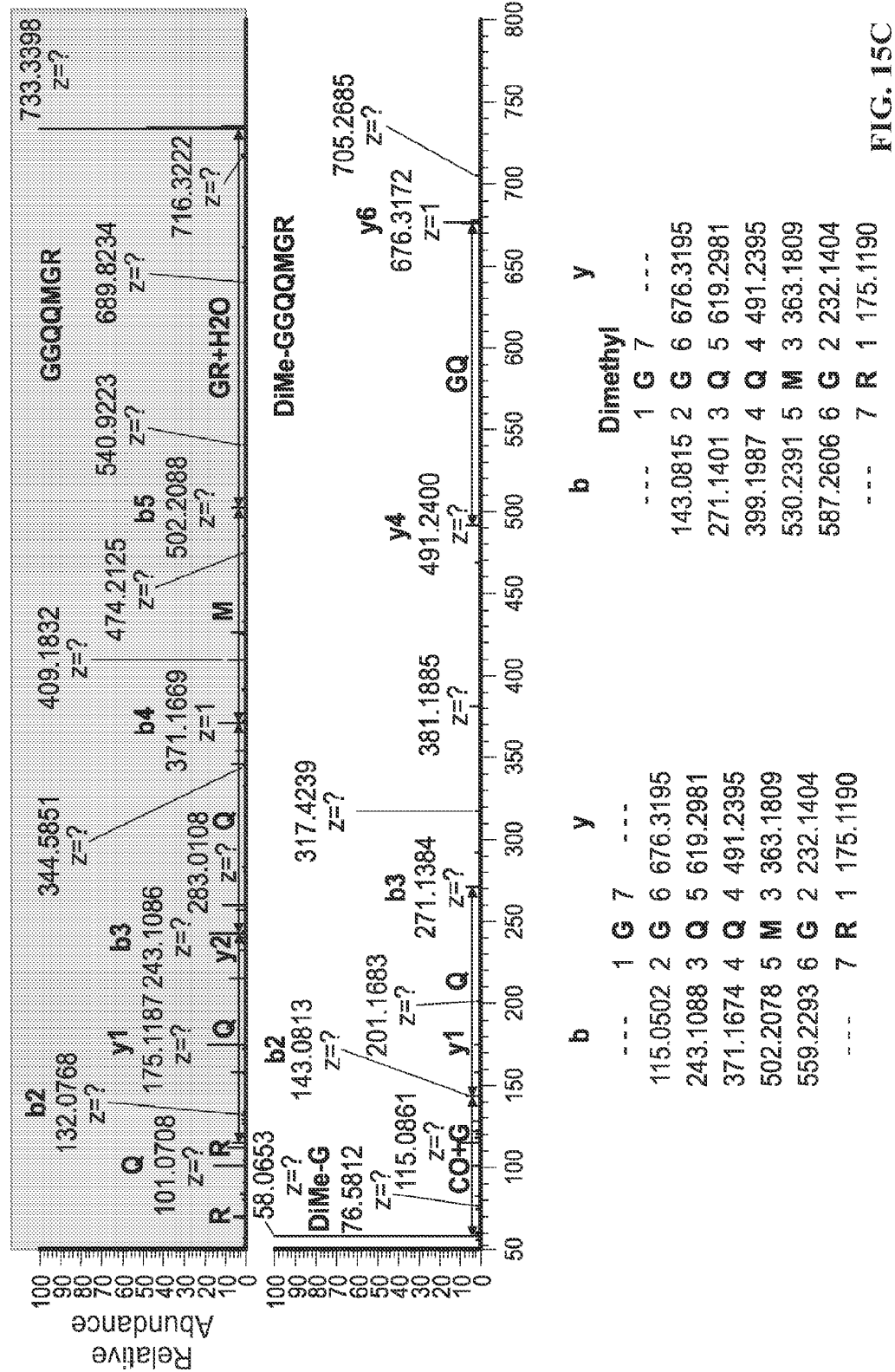


FIG. 15C

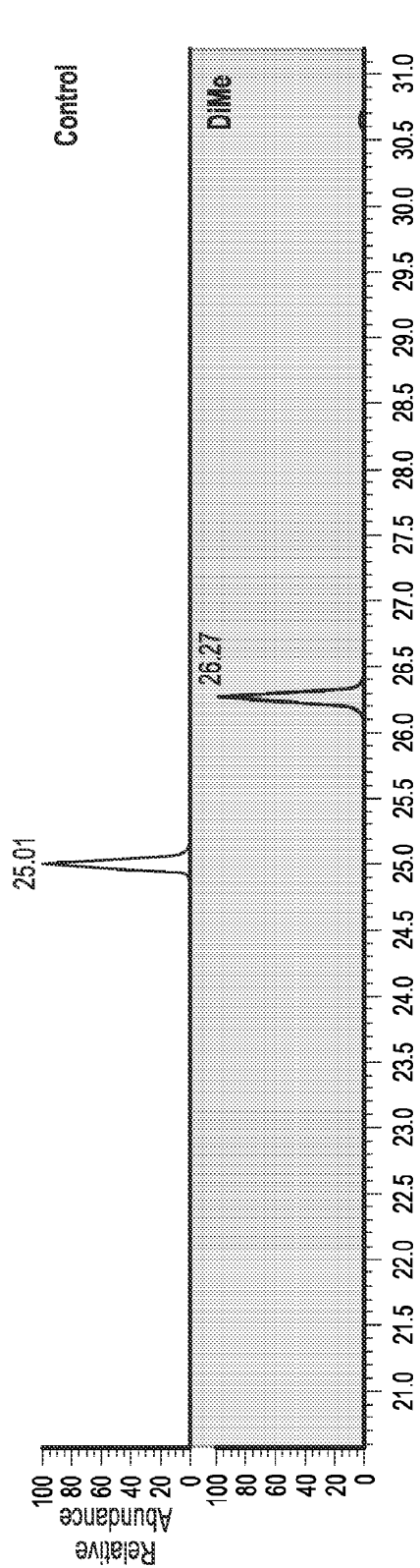


FIG. 16A

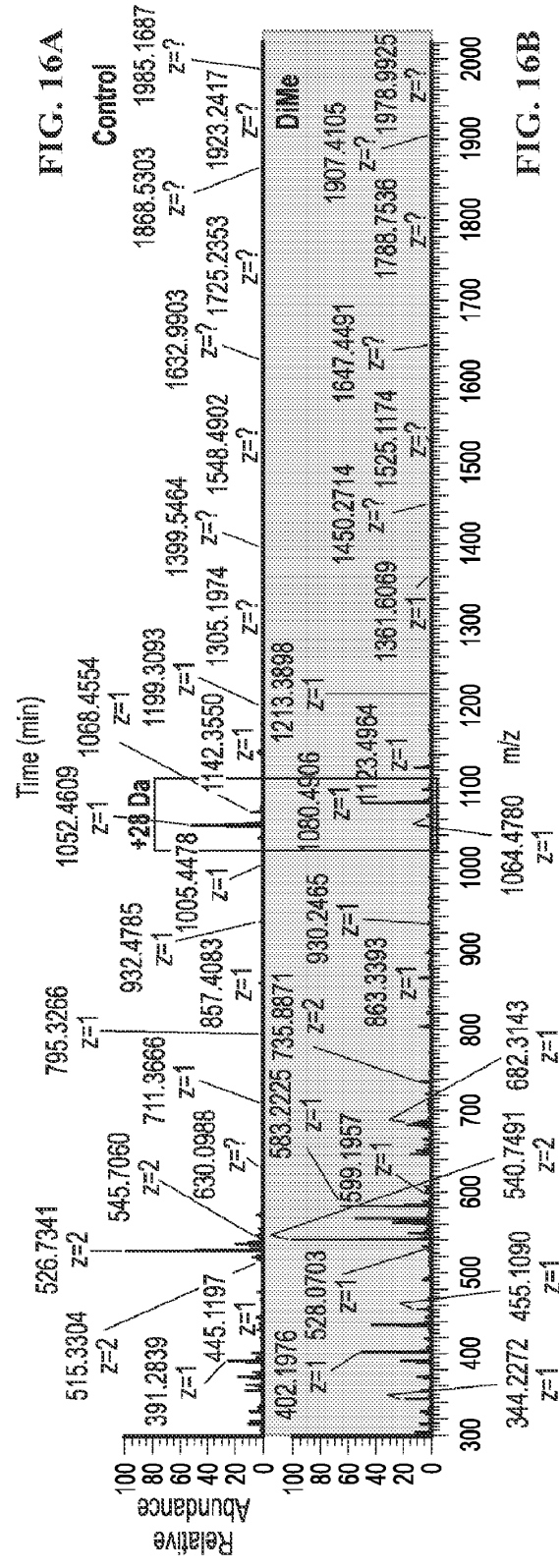


FIG. 16B

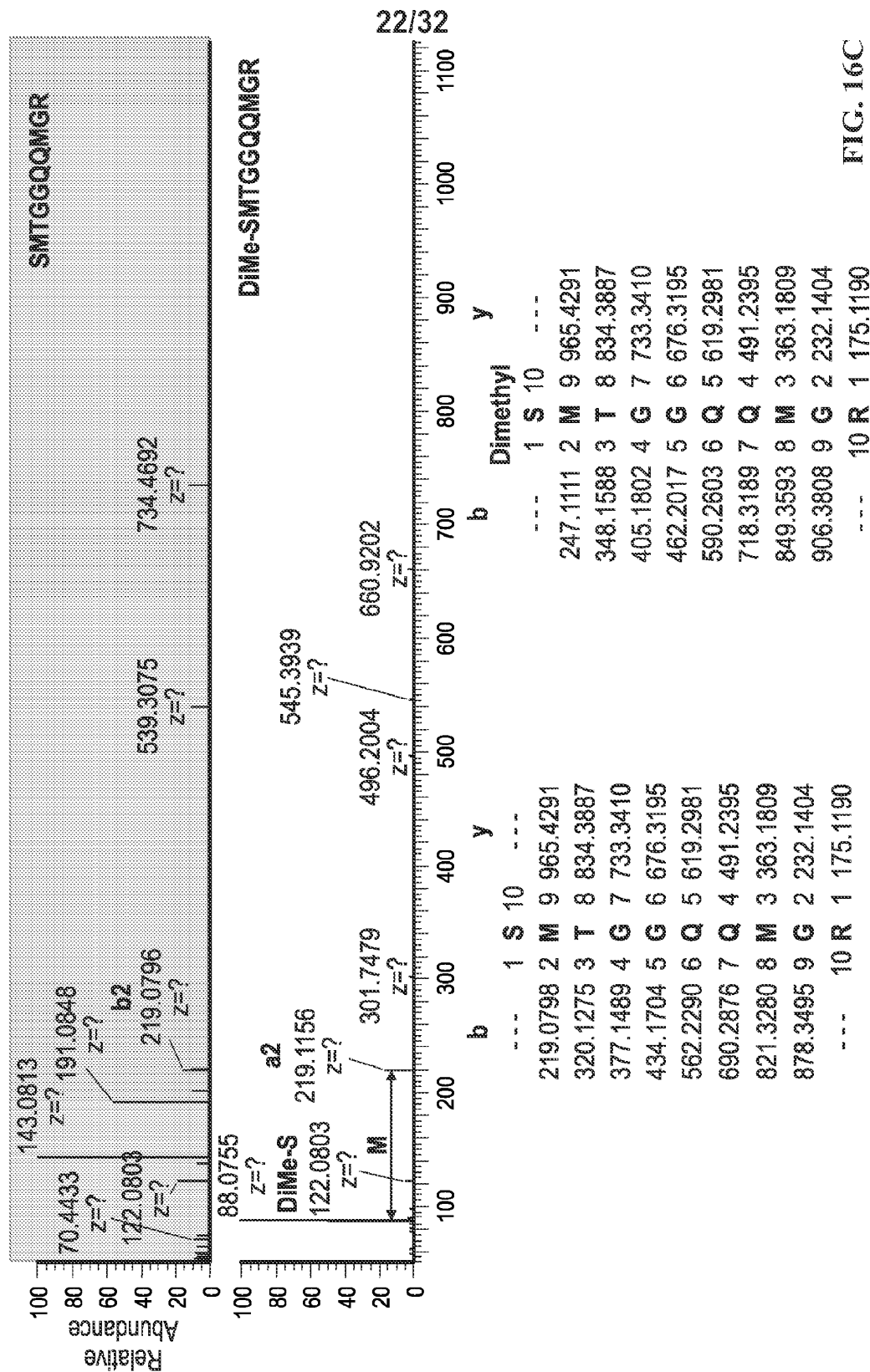
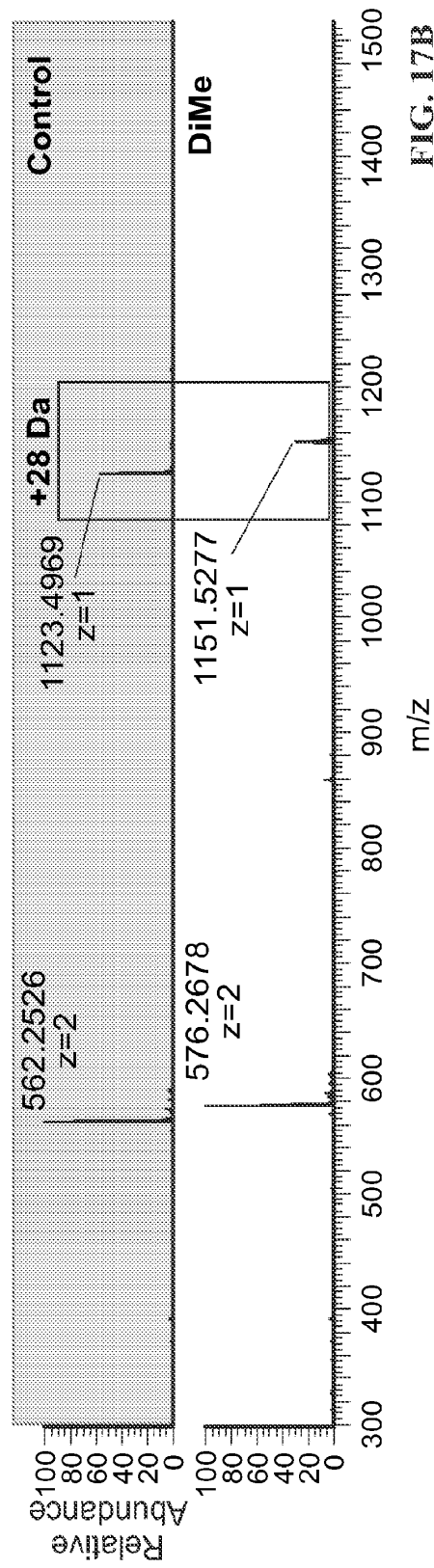
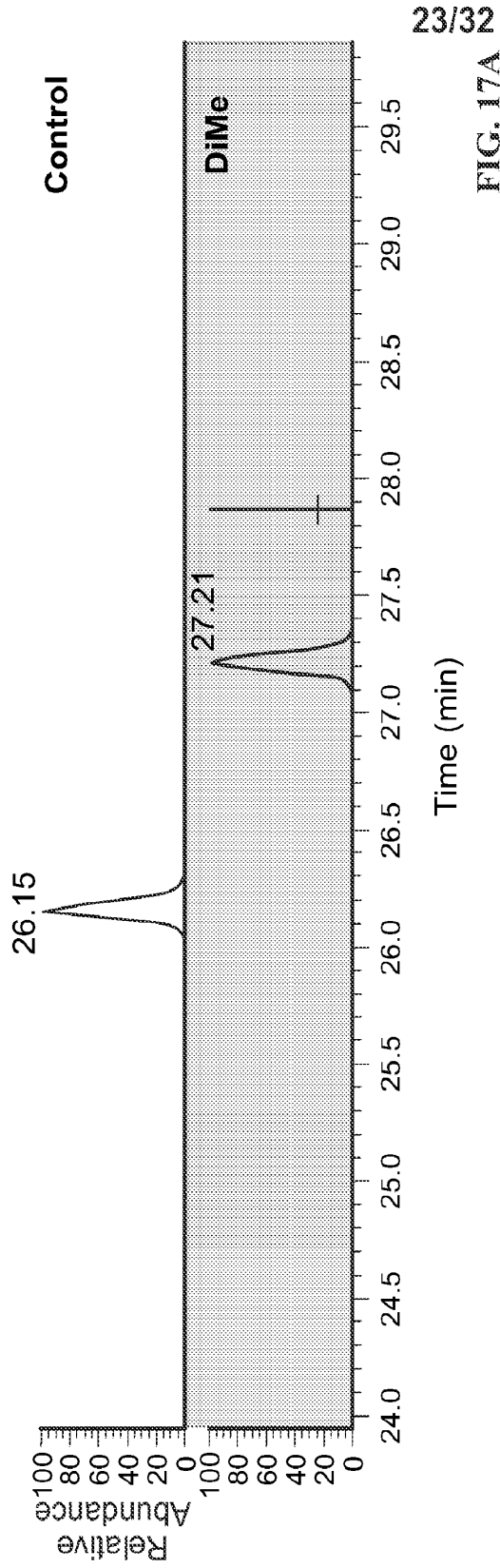
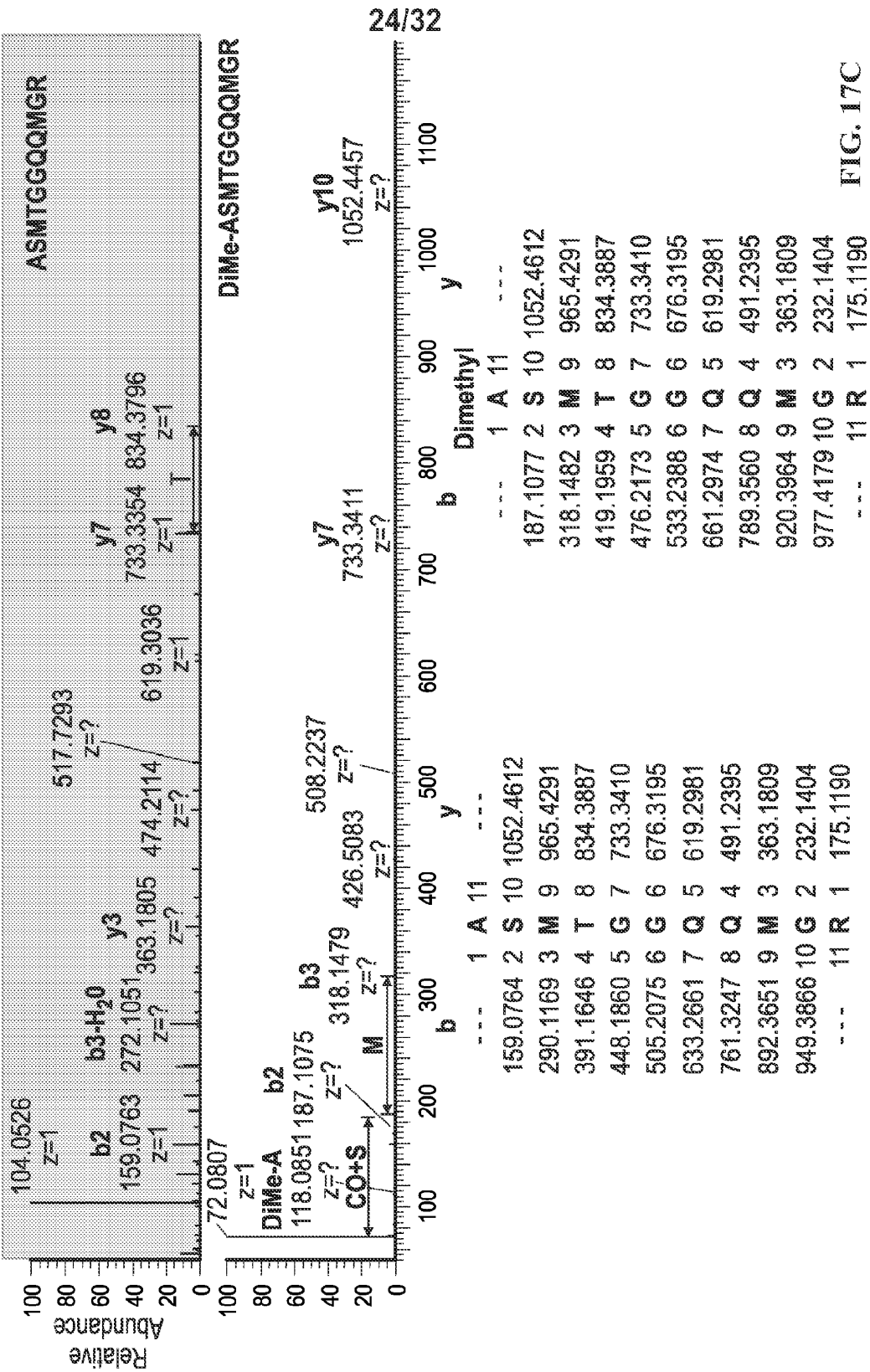
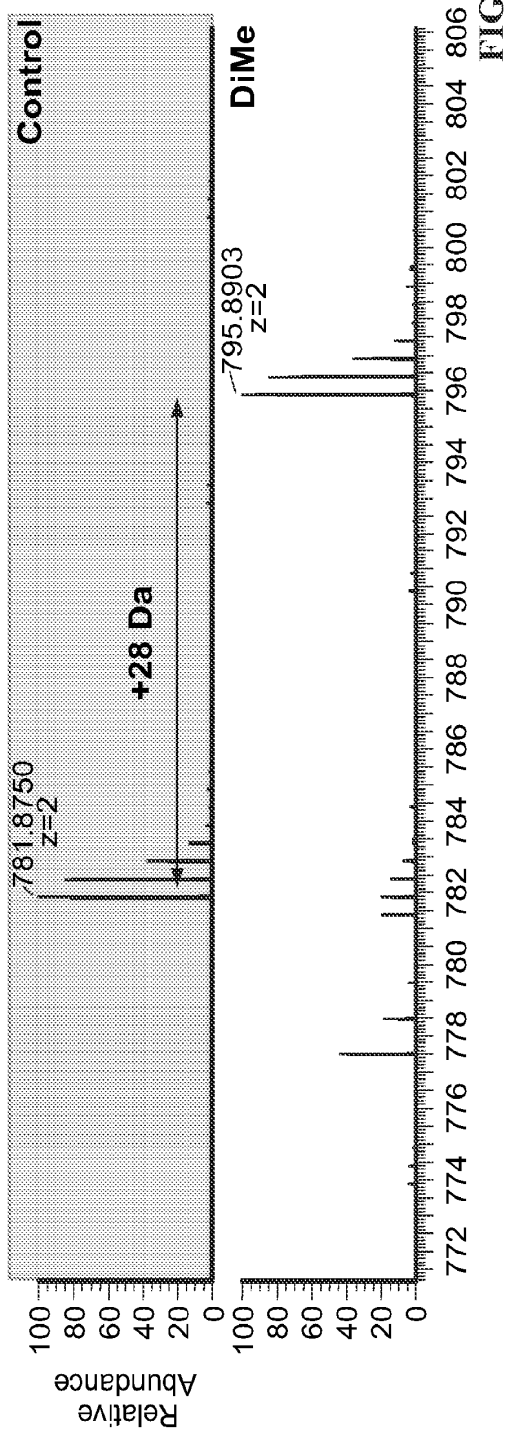
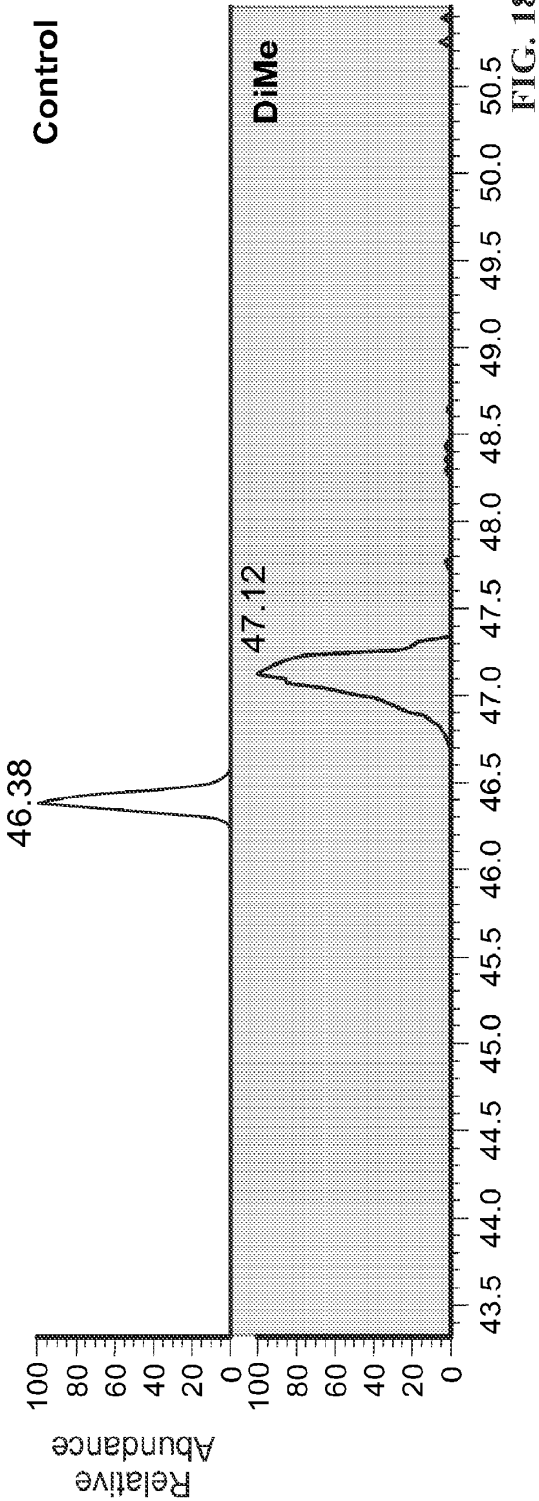


FIG. 16C





SUBSTITUTE SHEET (RULE 26)



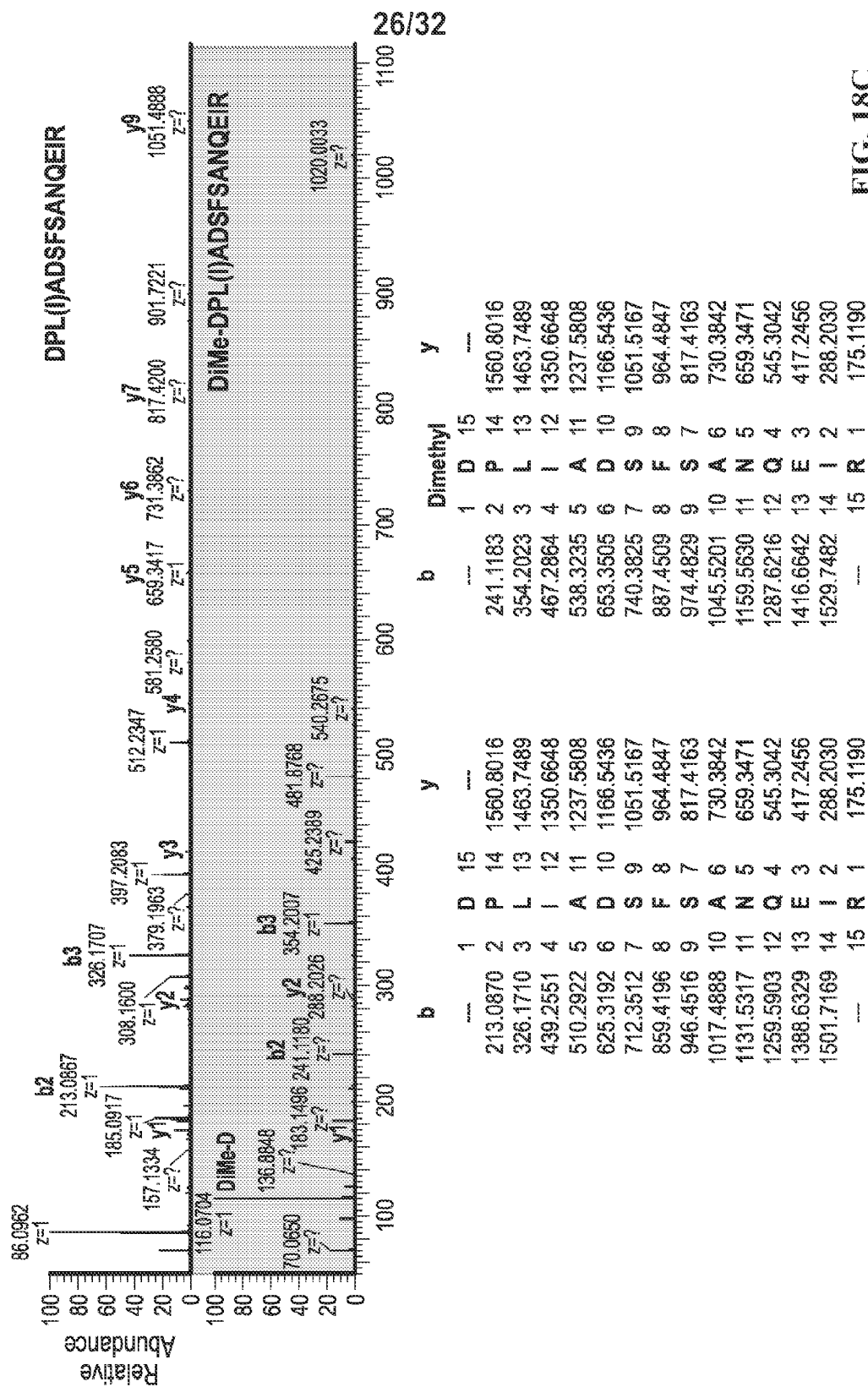
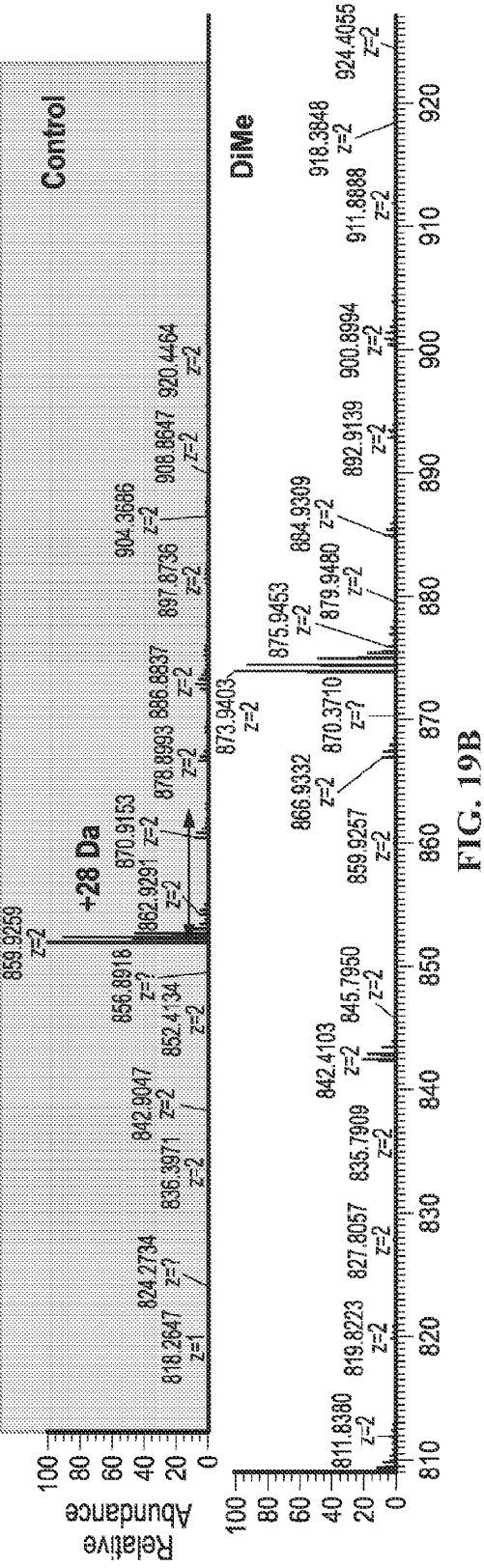
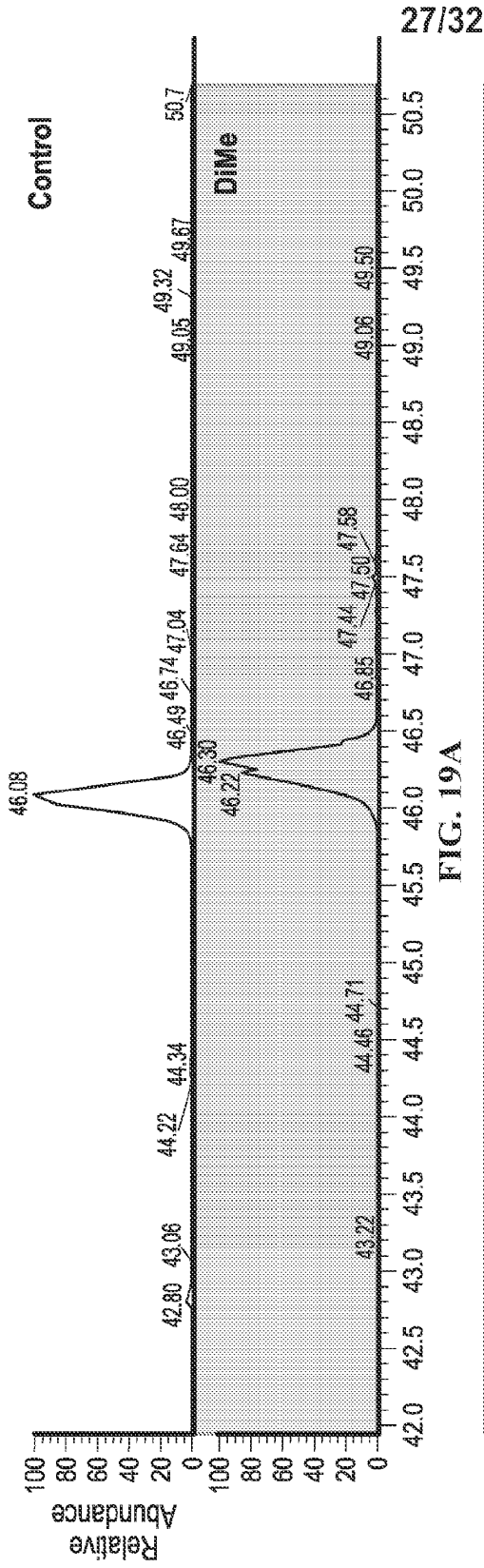


FIG. 18C



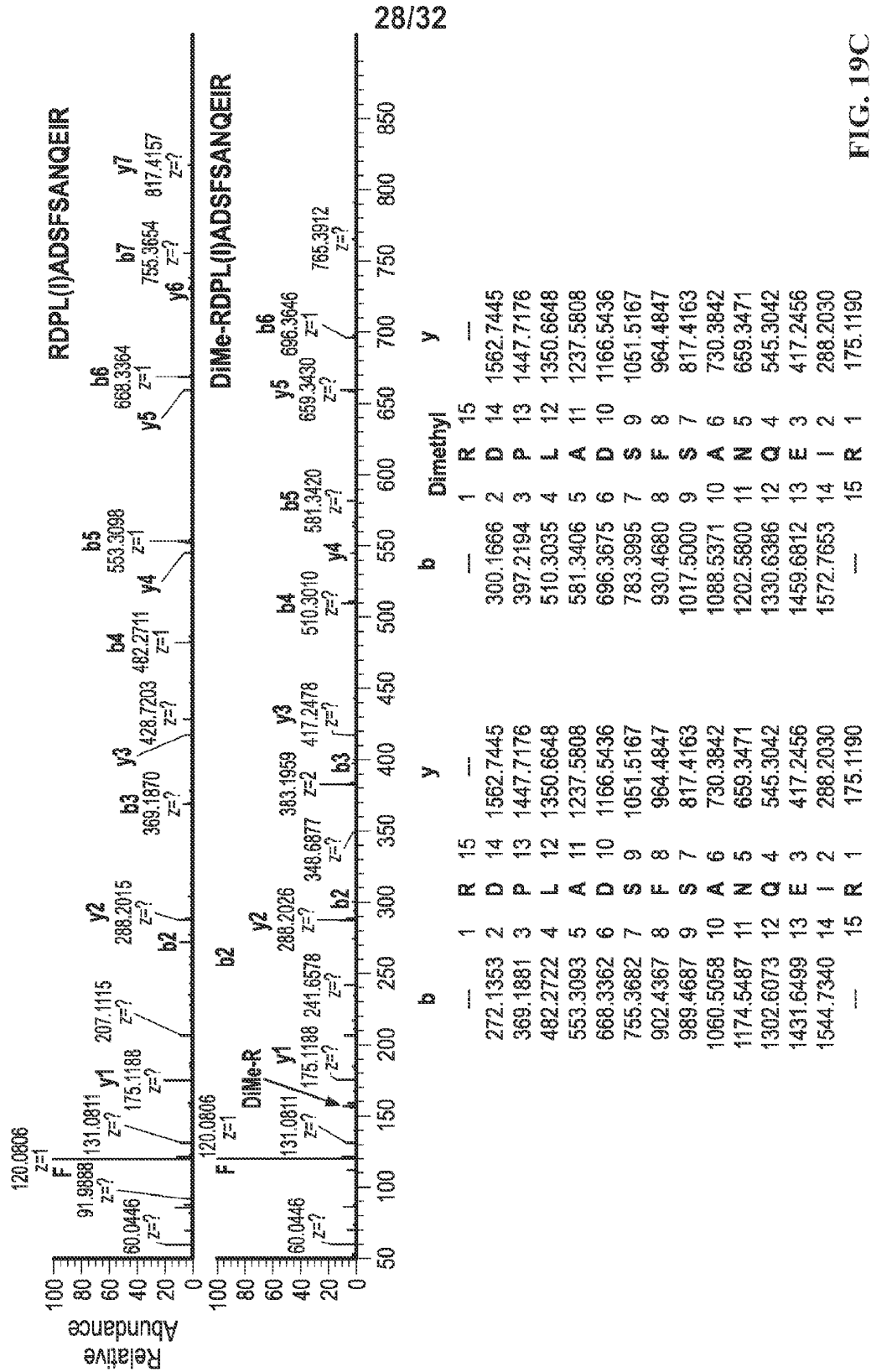
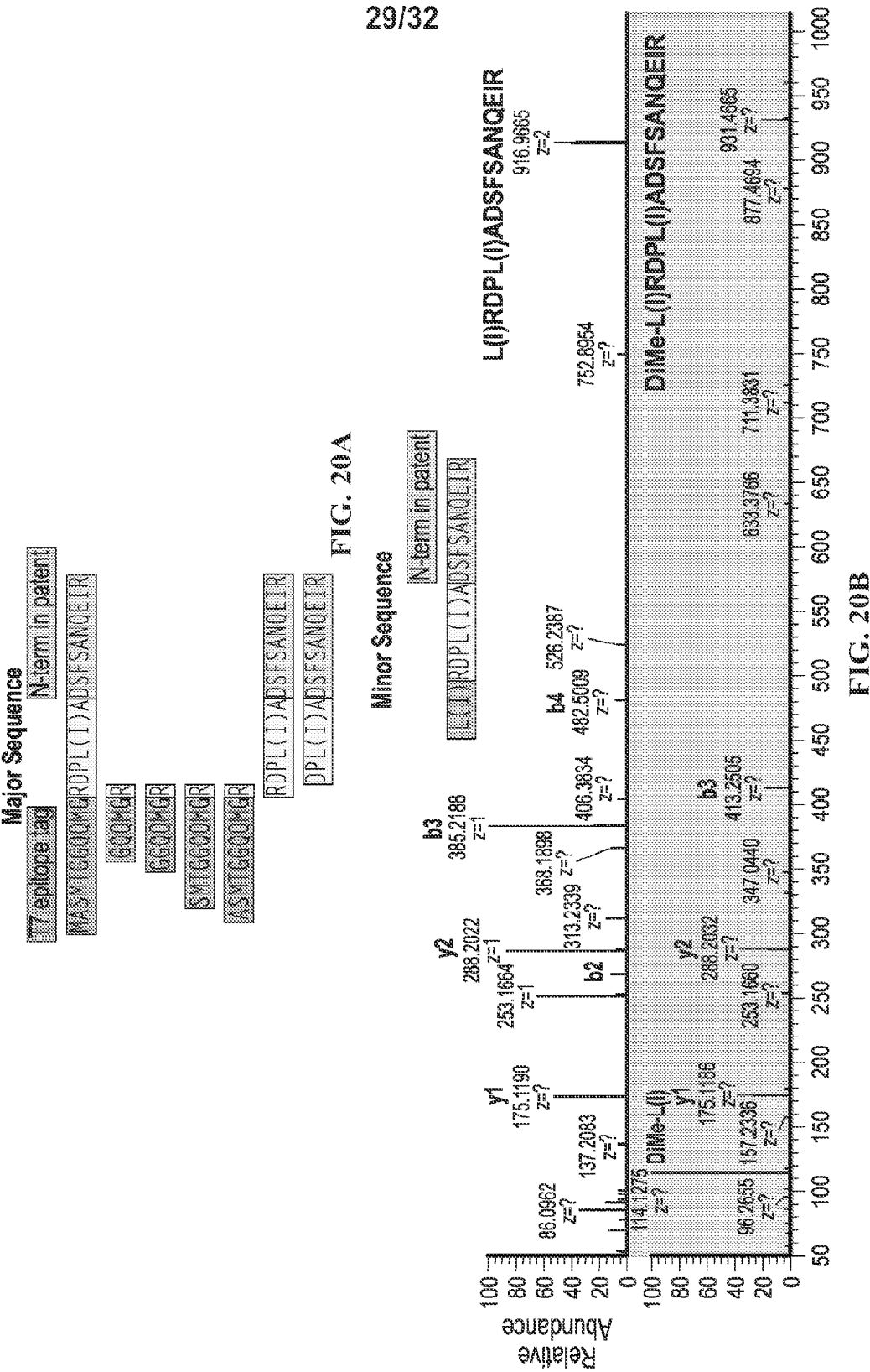


FIG. 19C



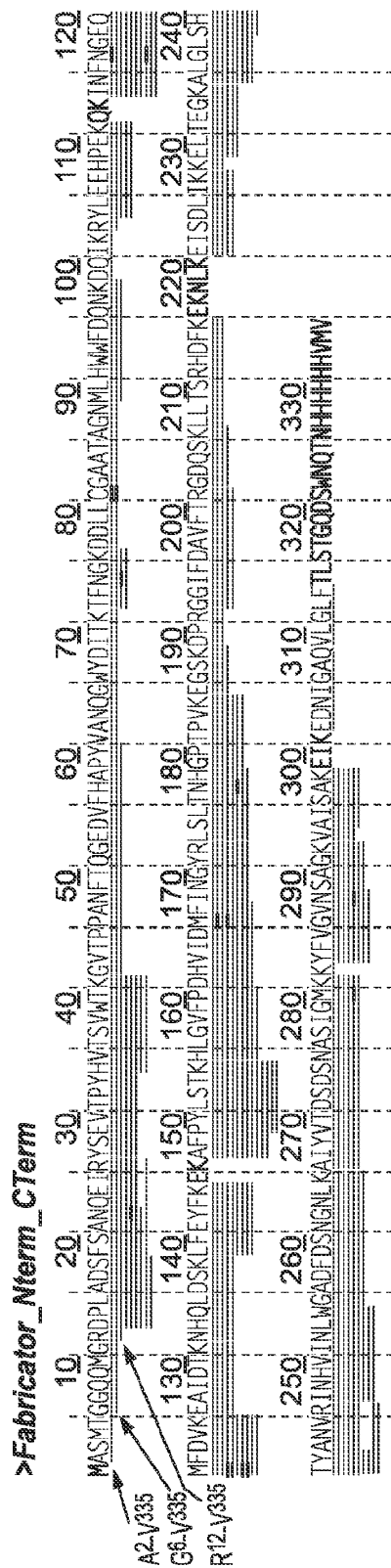


FIG. 20E

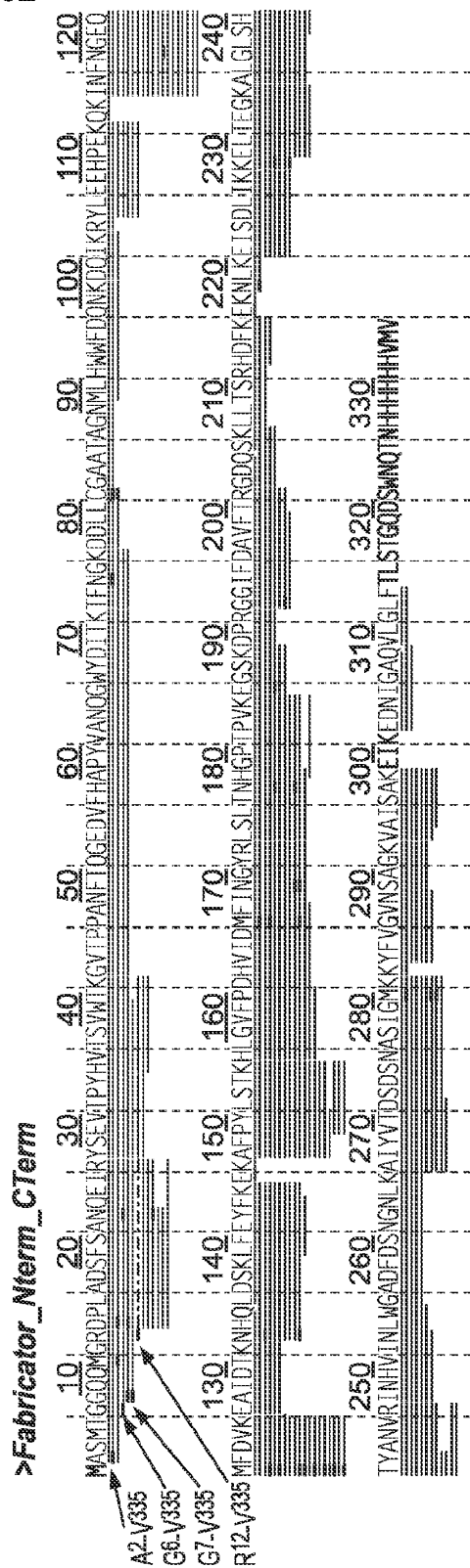


FIG. 20F

Ab1	Acetic Acid	HCHO	NaBH ₃ CN	Reaction time	Reaction temperature	Quench	Quench time	Quench Temperature	Labeling Efficiency -SDT
DTT/IAA- DiMe	1%	60 mM	24 mM	30 min	37 °C	NH ₂ OH	30 min	37 °C	99.1%

FIG. 21A

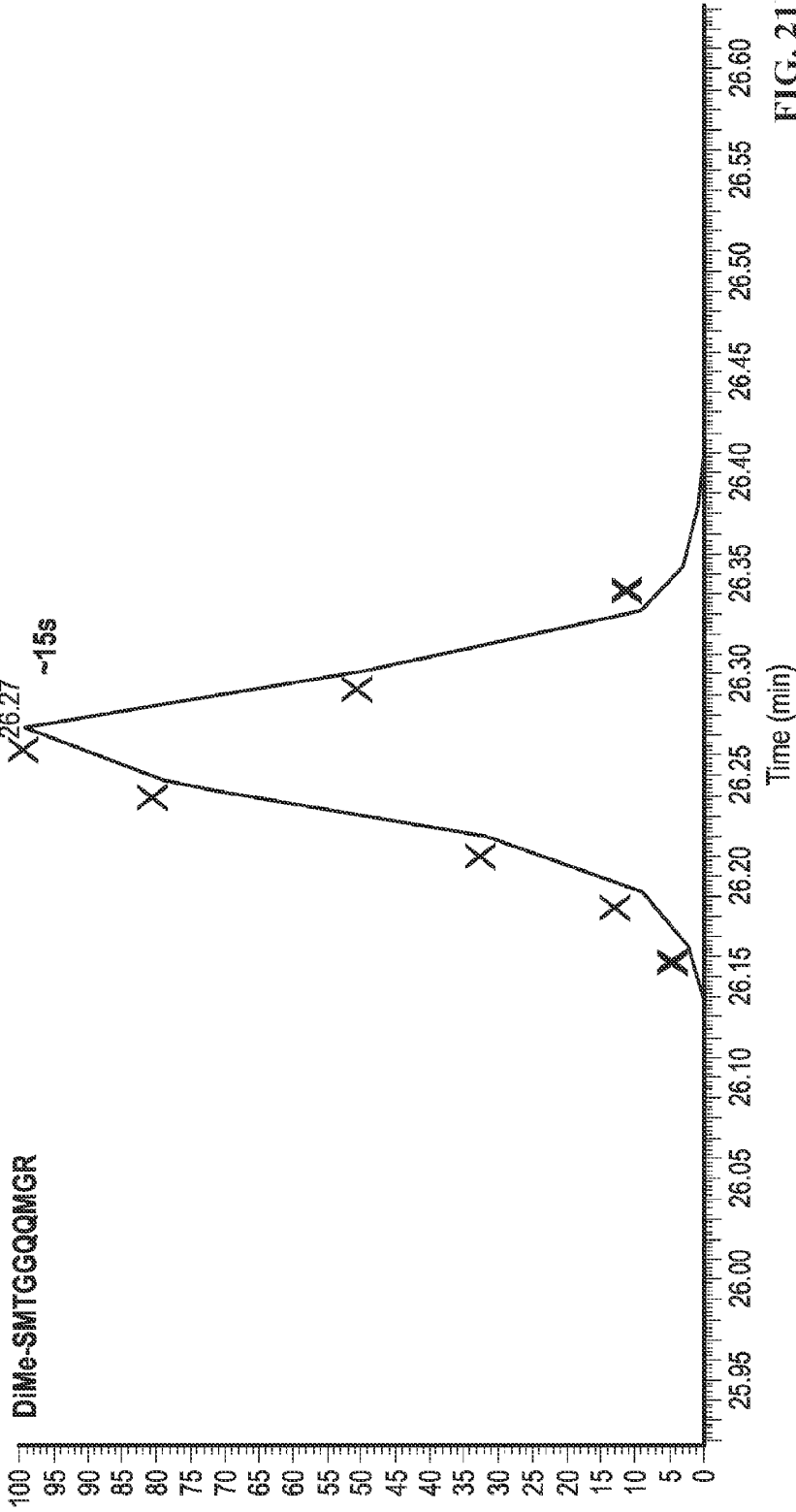


FIG. 21B