

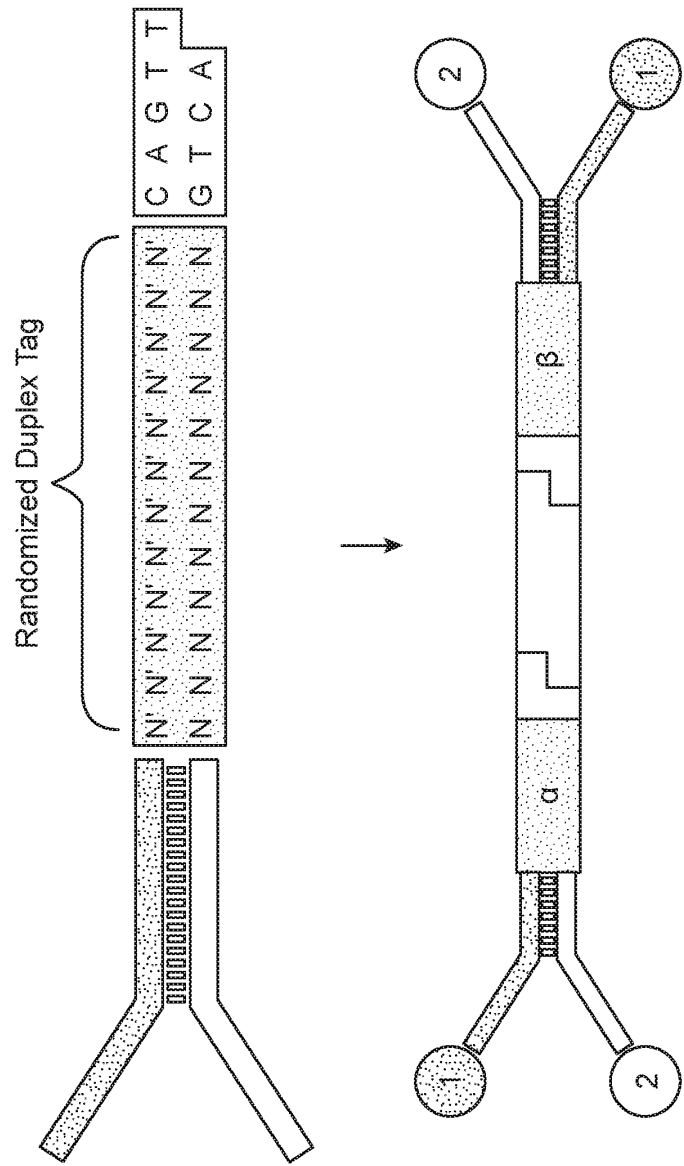


FIG. 1A

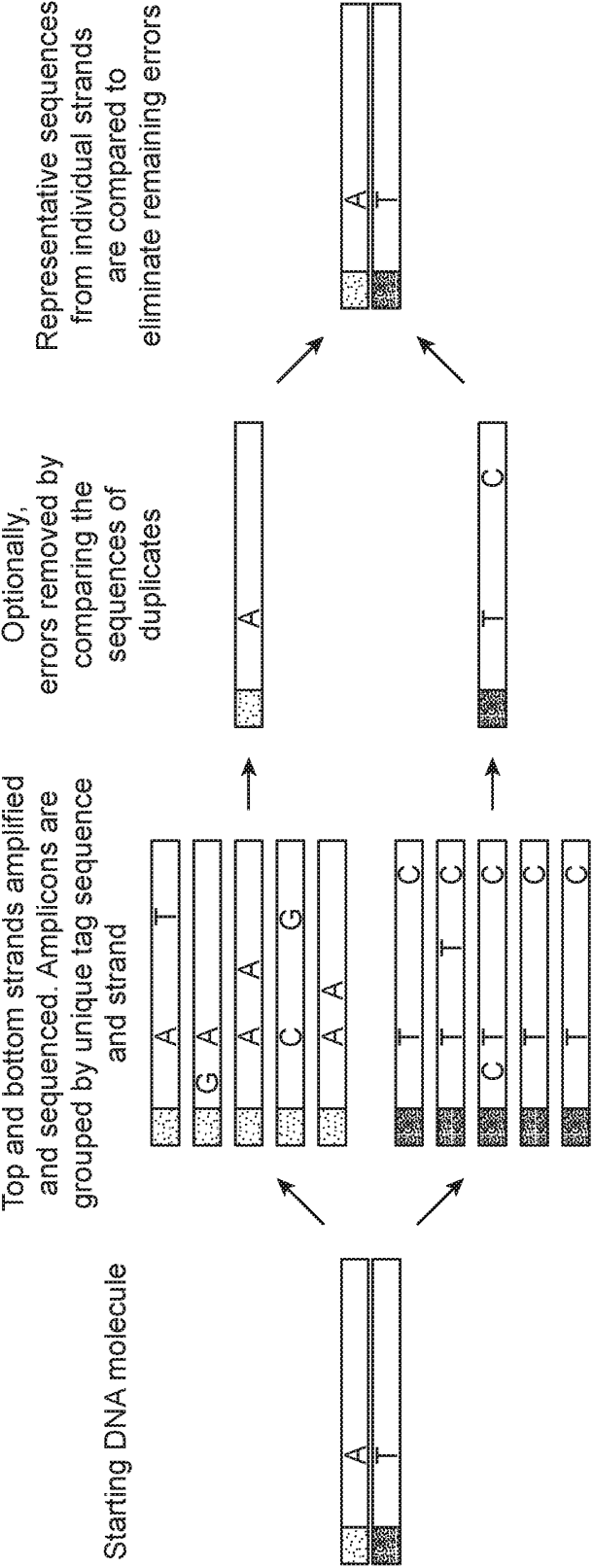


FIG. 1C

FIG. 1B

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Quantifying genotoxicity

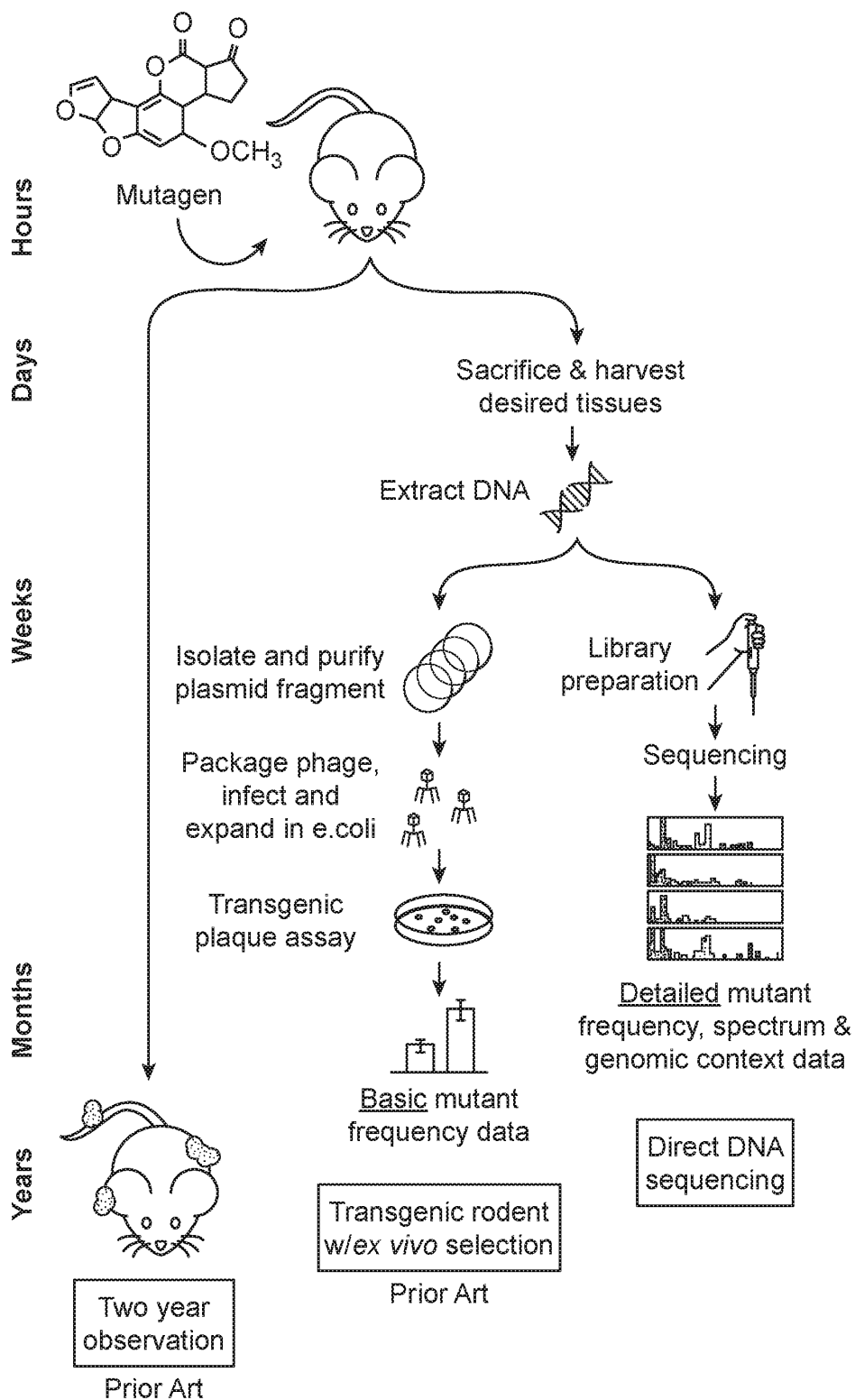


FIG. 2A

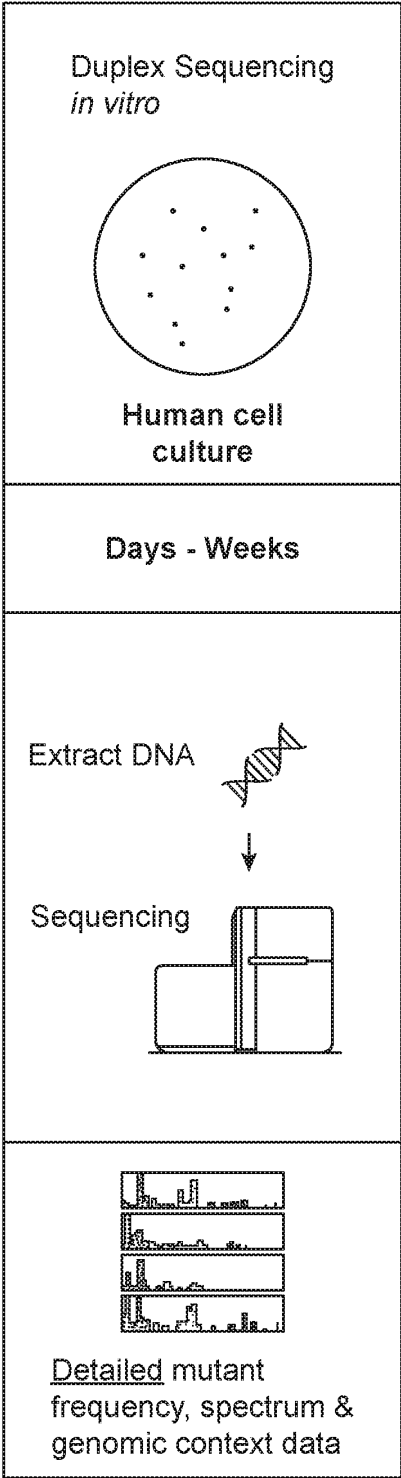


FIG. 2B

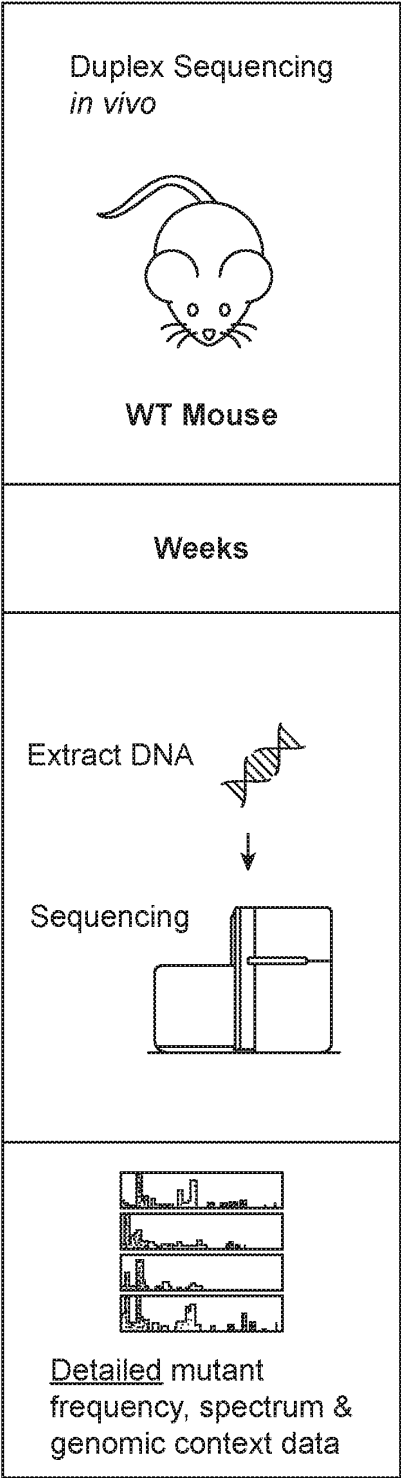
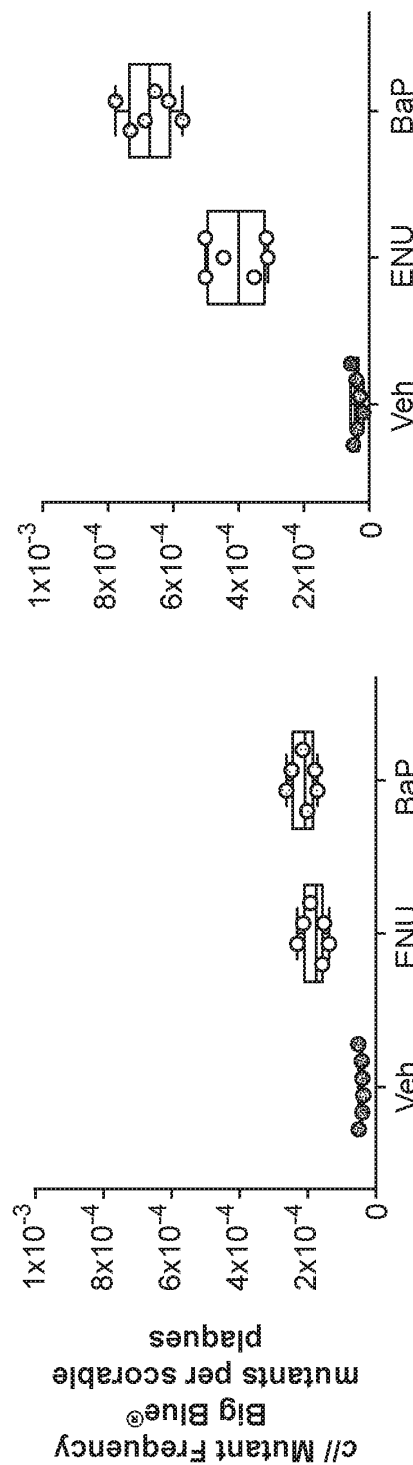
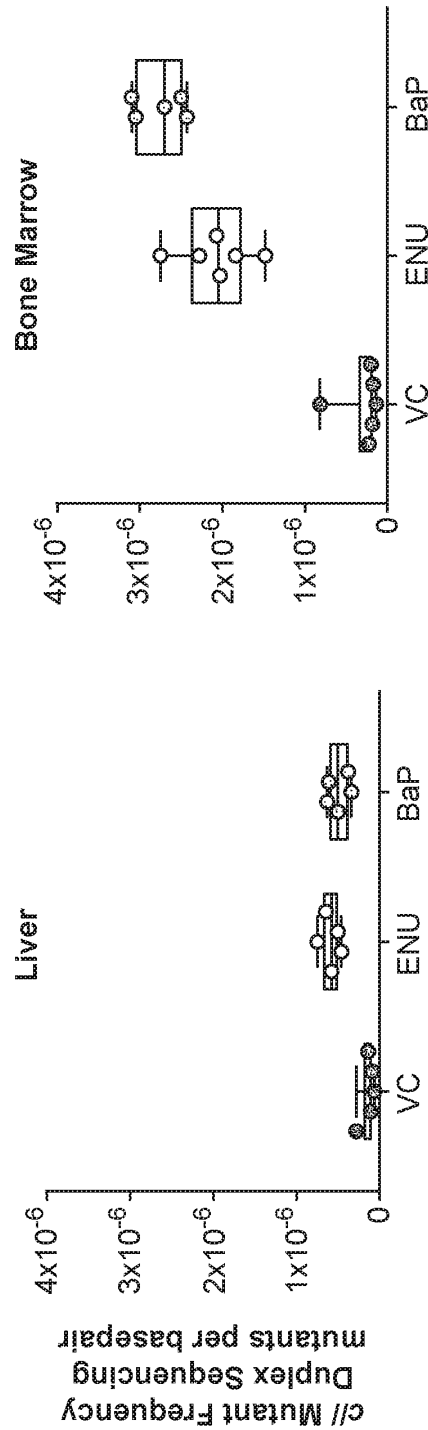


FIG. 2C



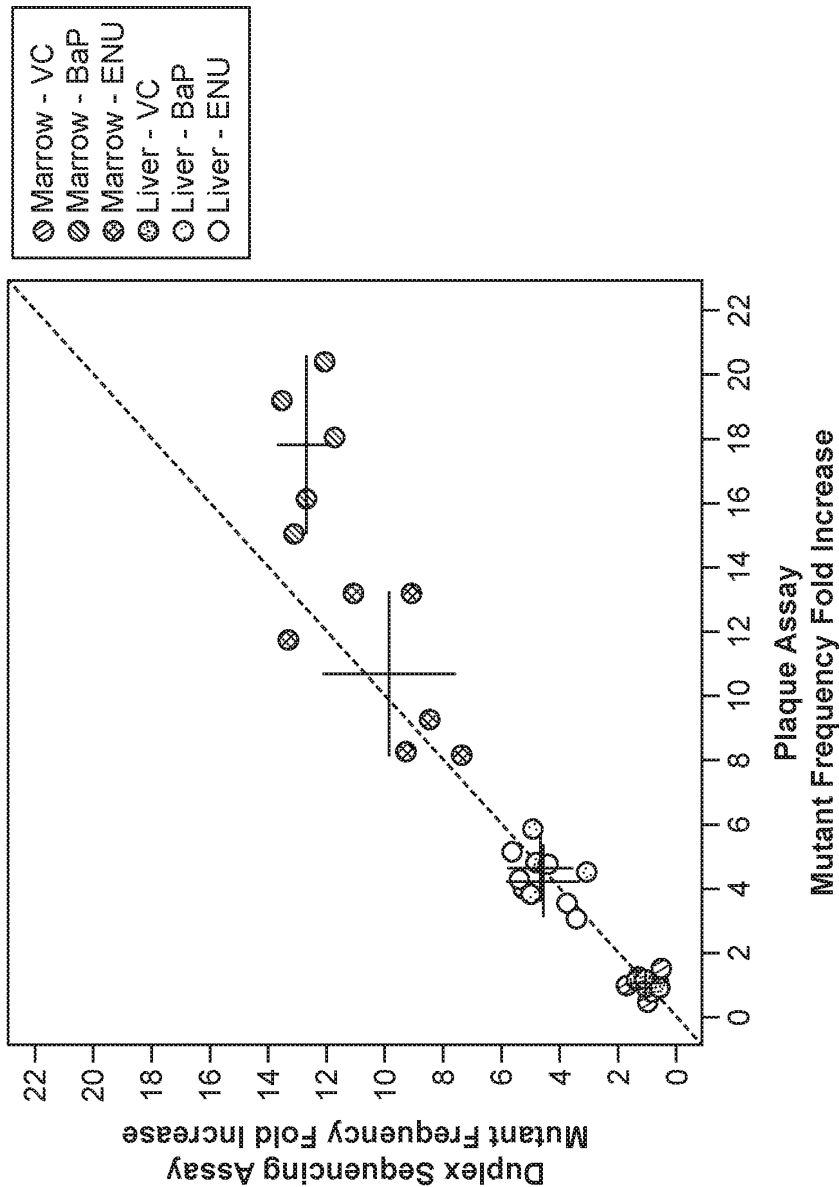


FIG. 3E

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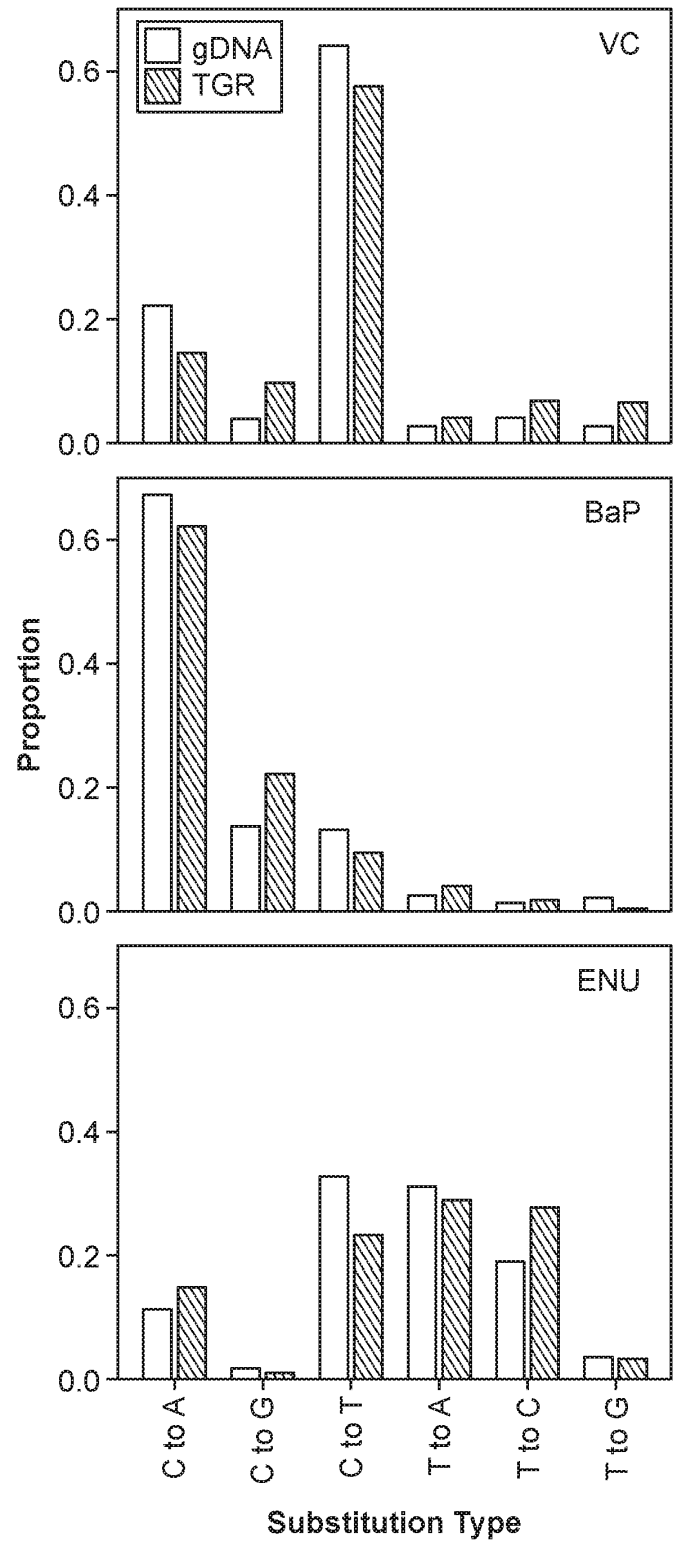


FIG. 3F

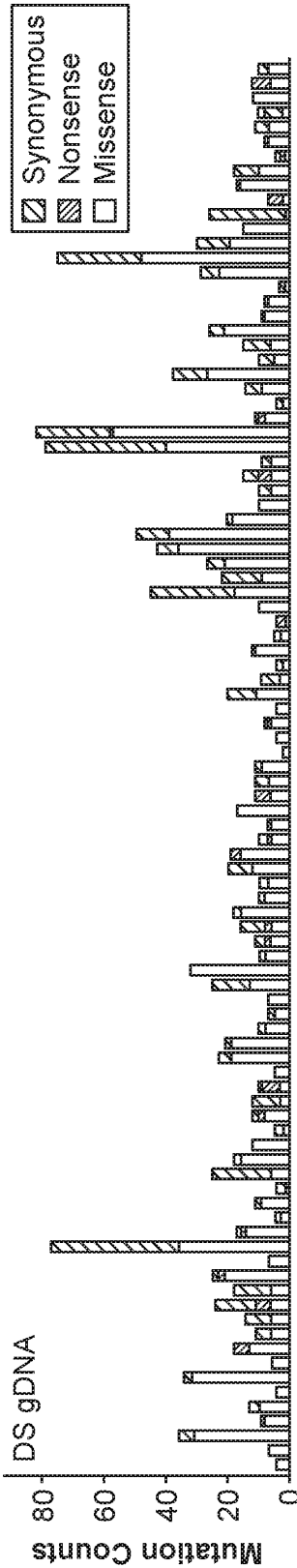


FIG. 3G

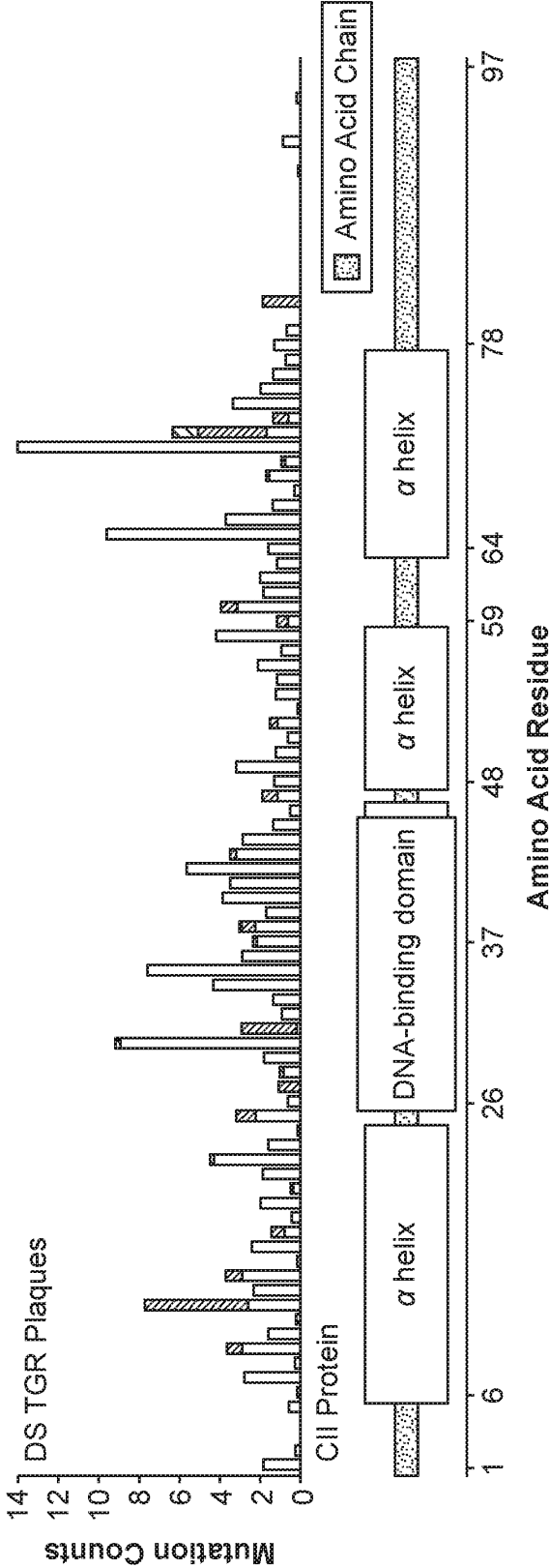


FIG. 3H

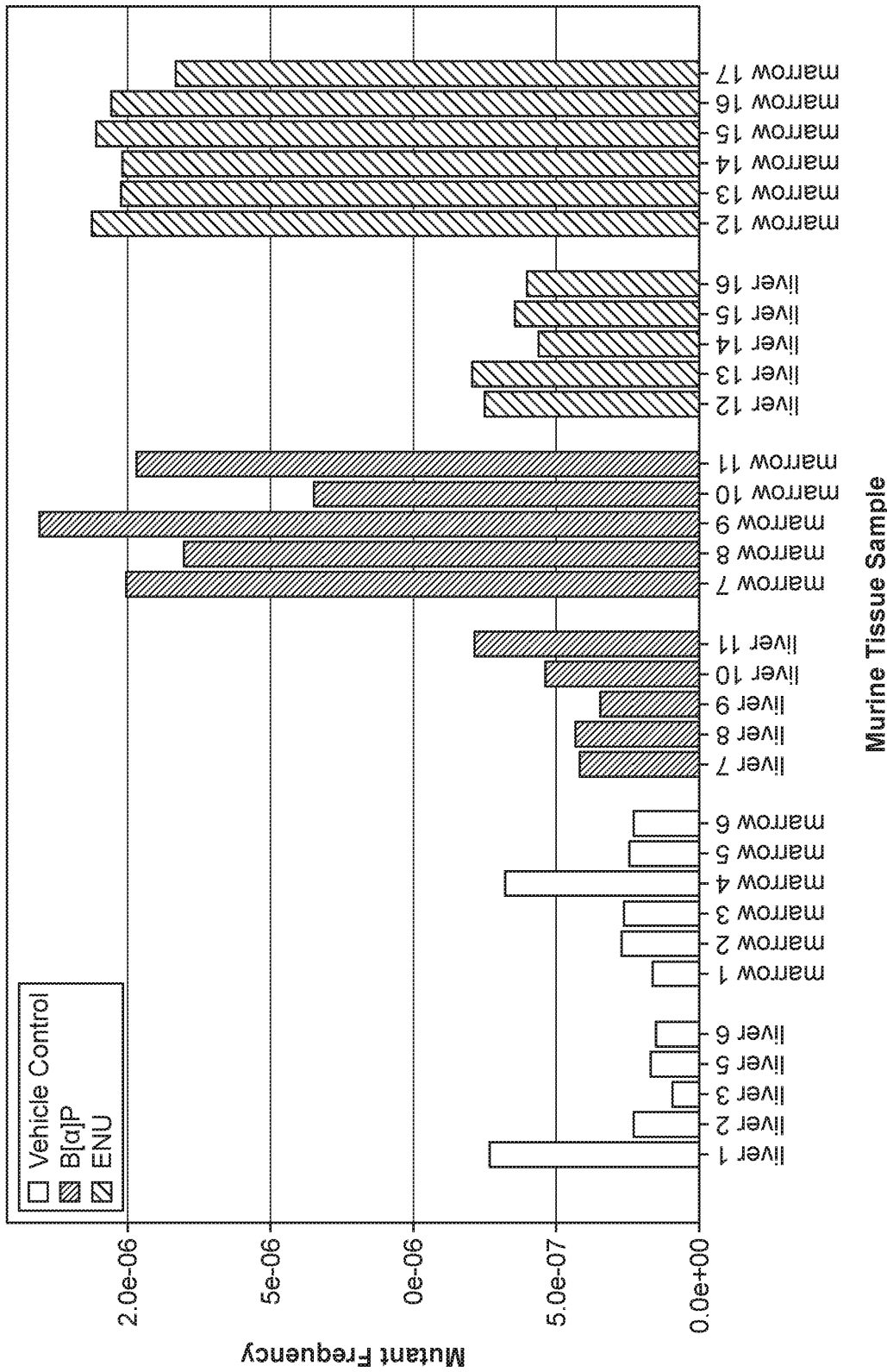


FIG. 4

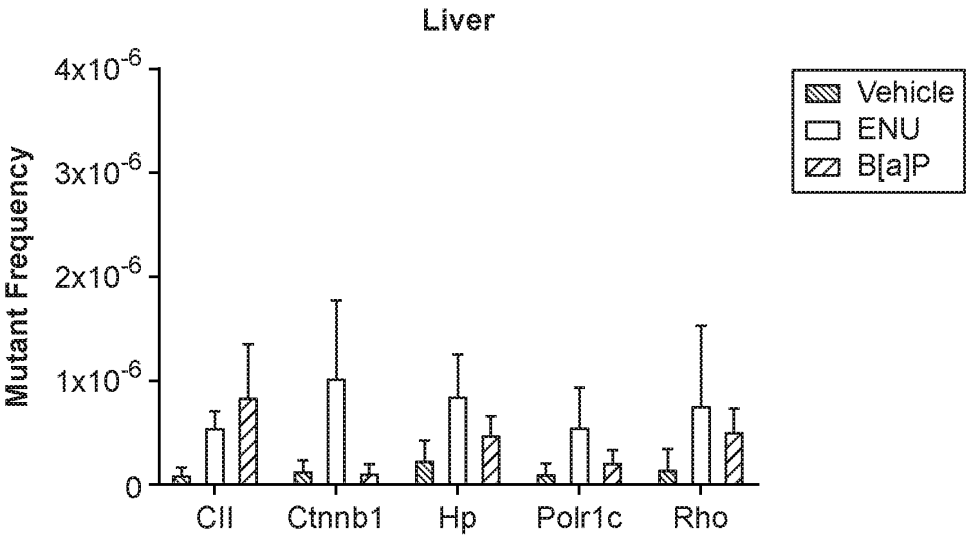


FIG. 5A

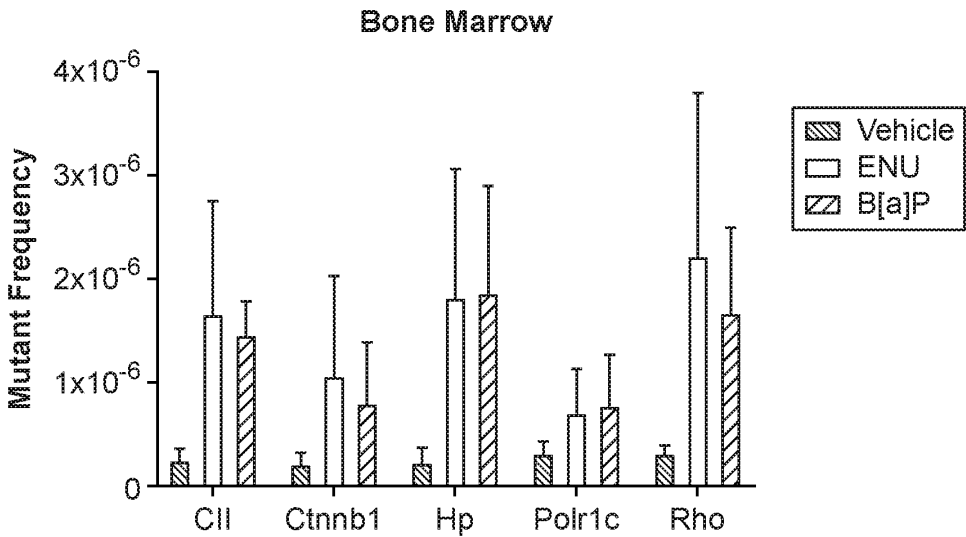


FIG. 5B

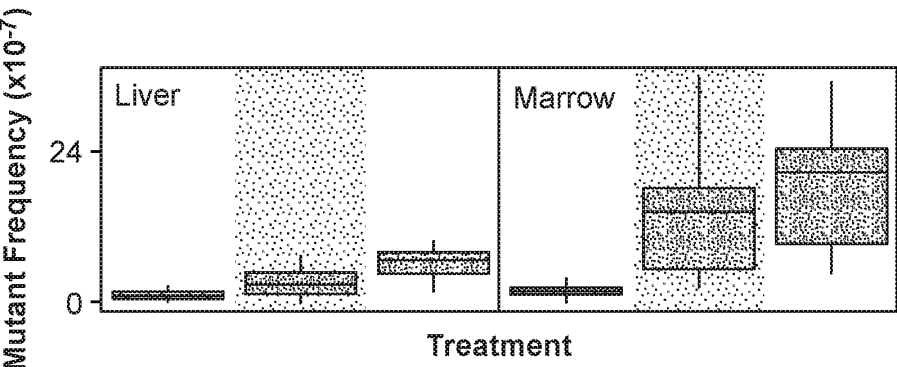


FIG. 5C

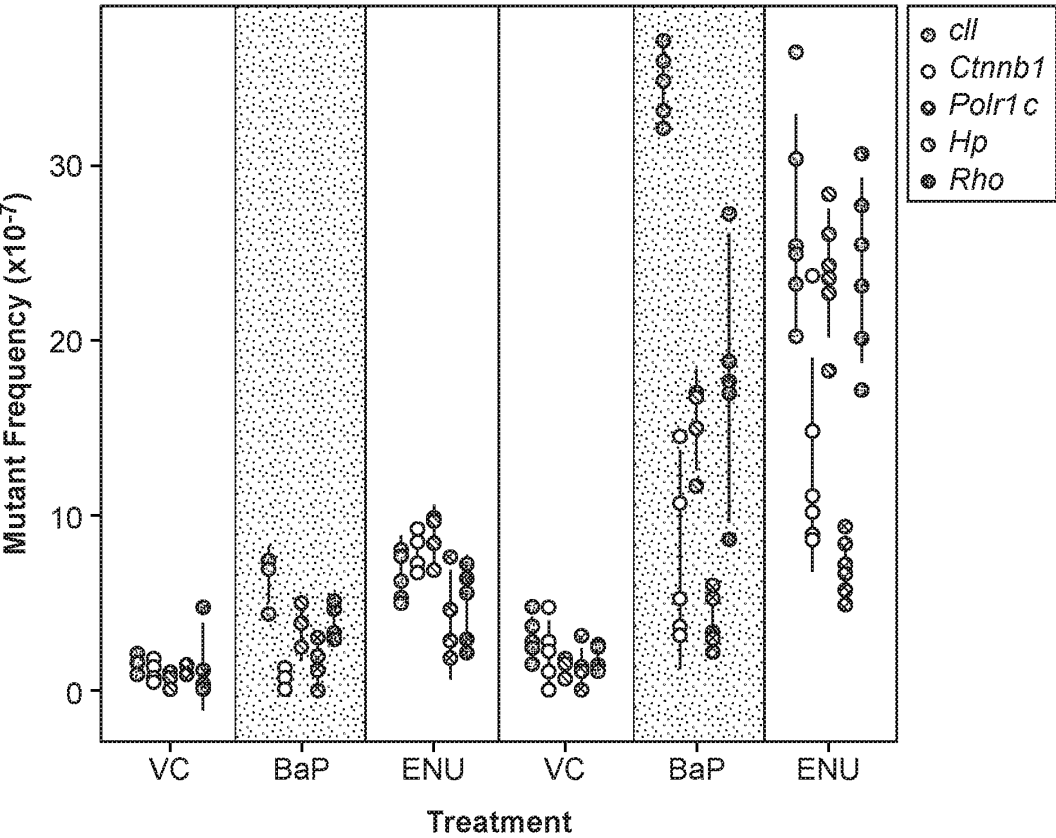


FIG. 5D

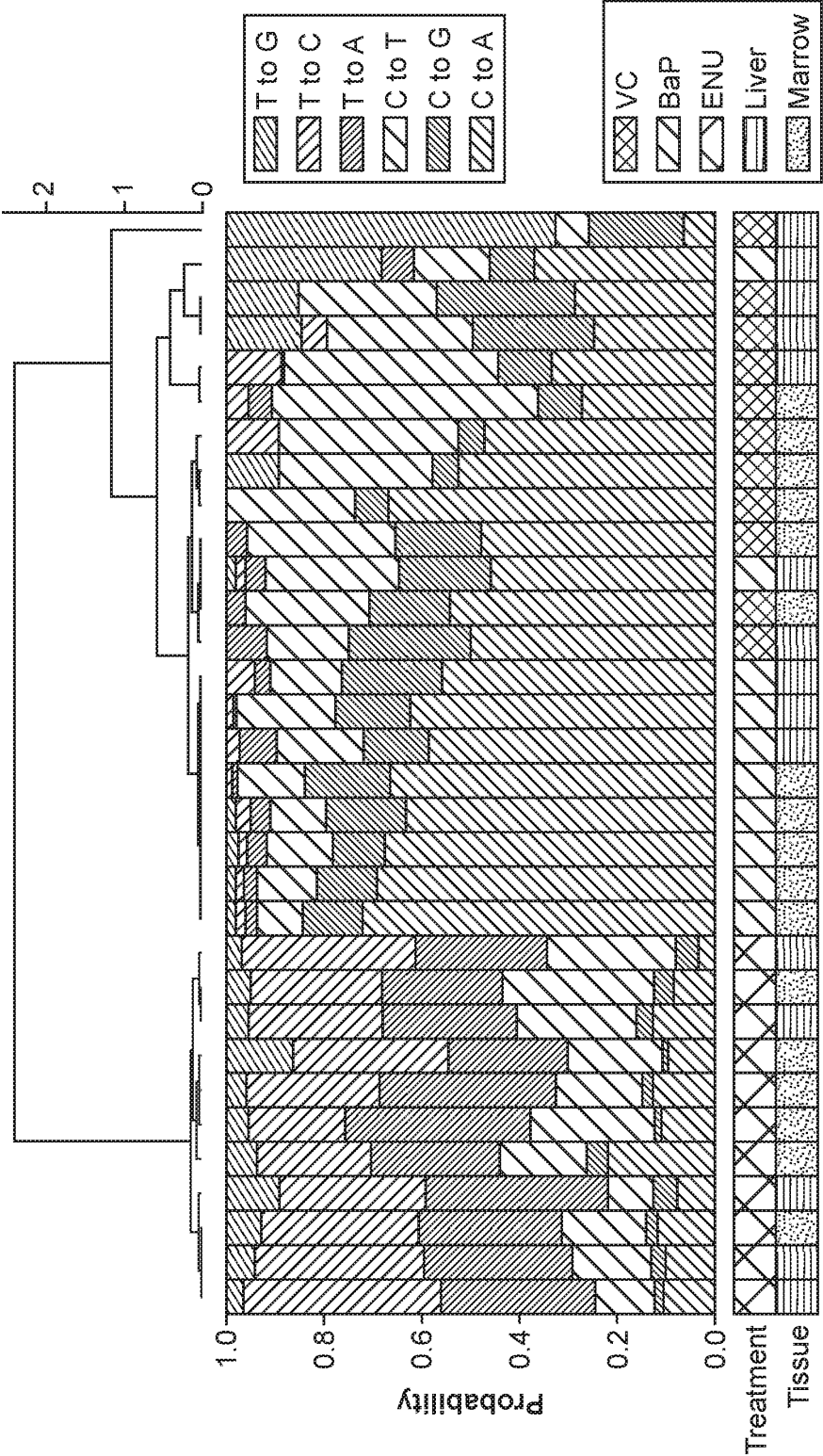


FIG. 6

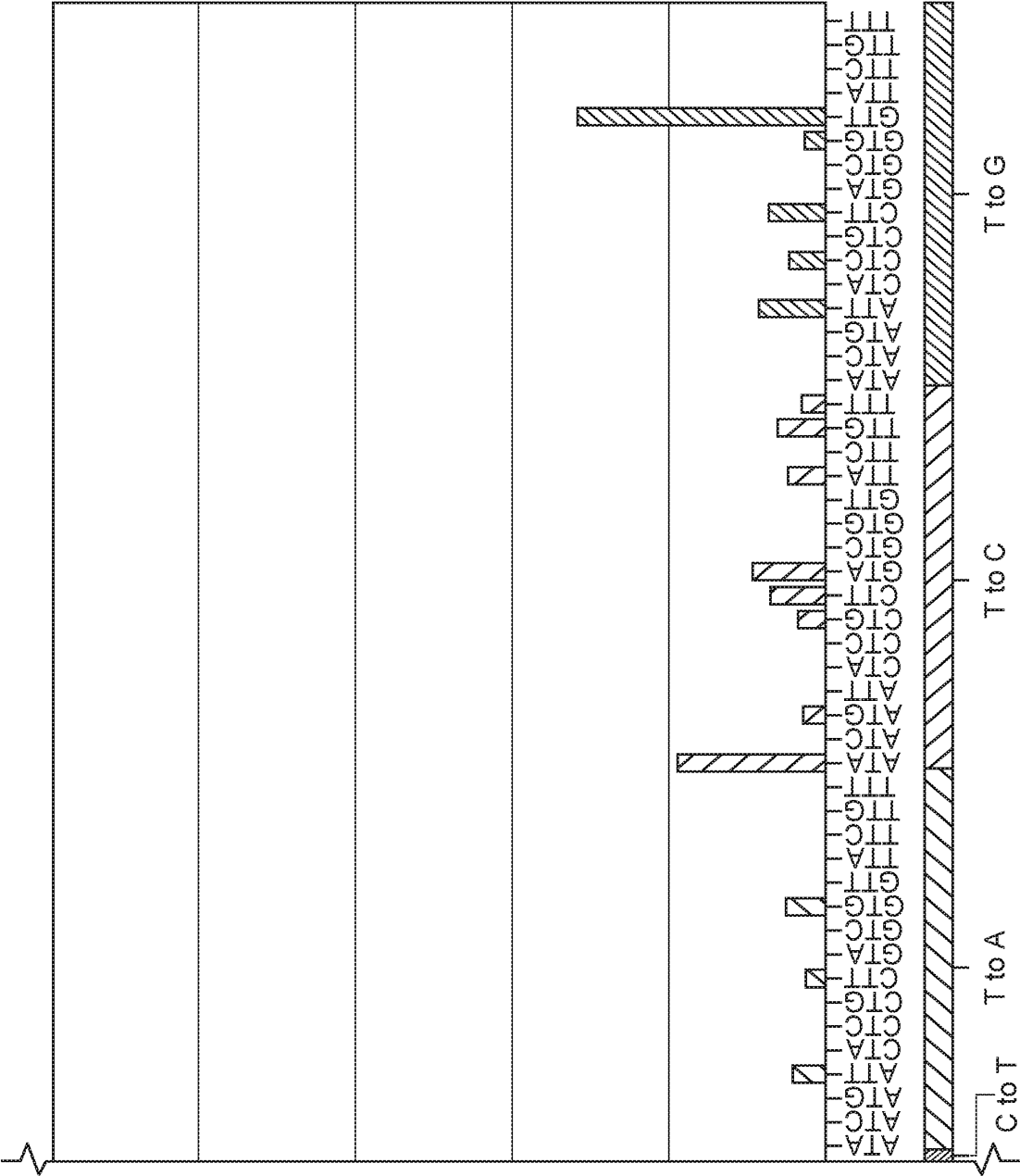
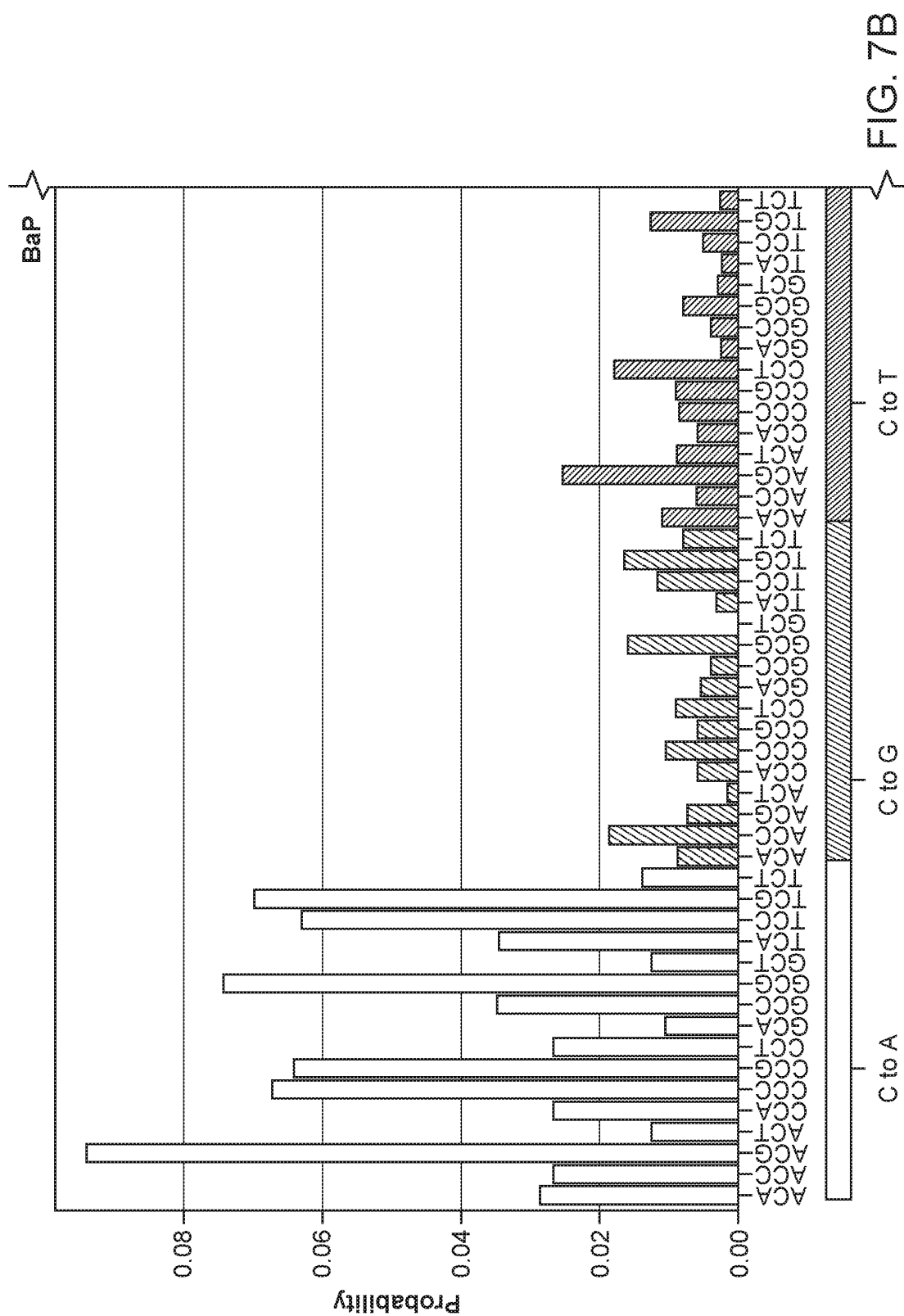


FIG. 7A (Cont.)



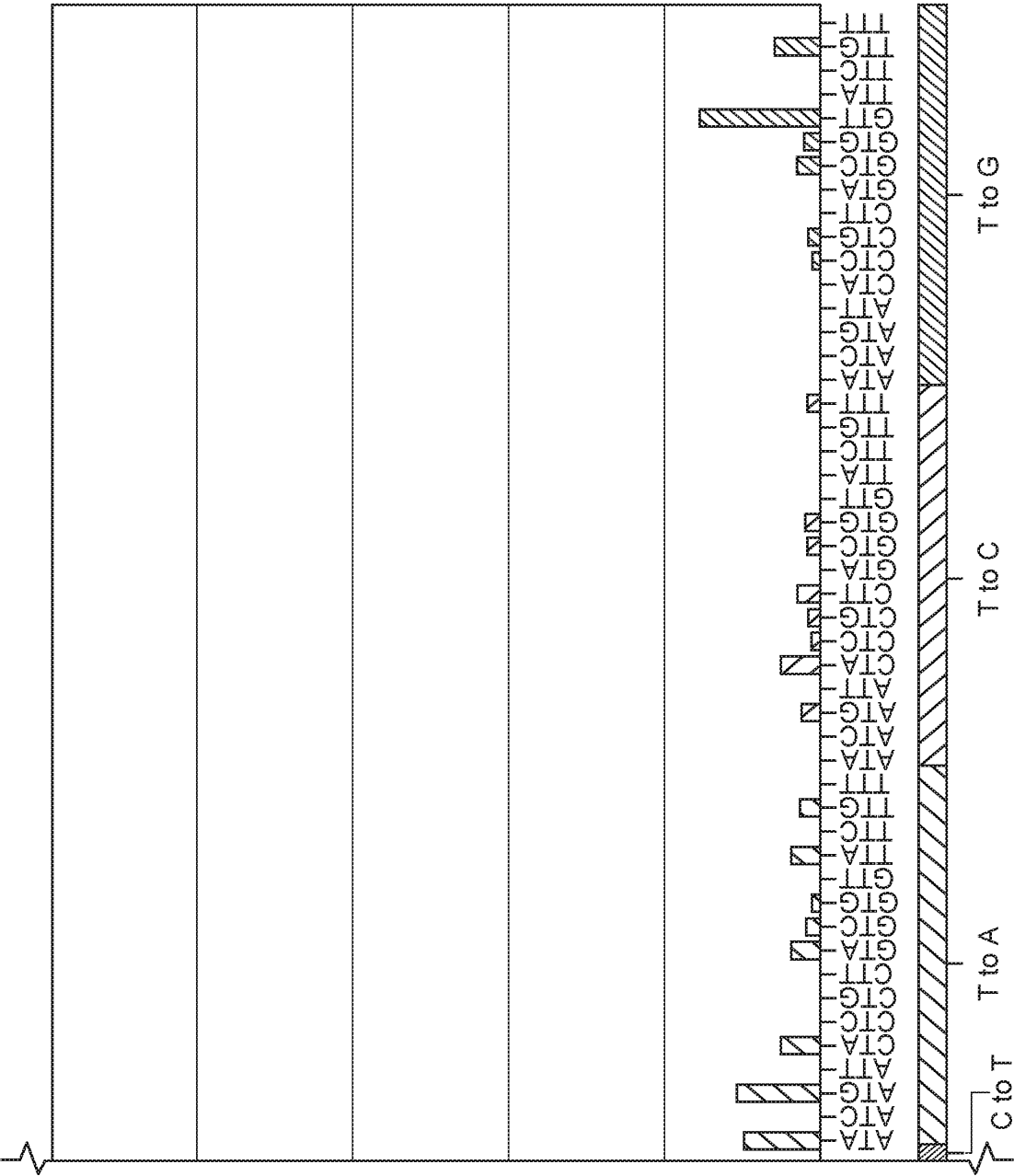
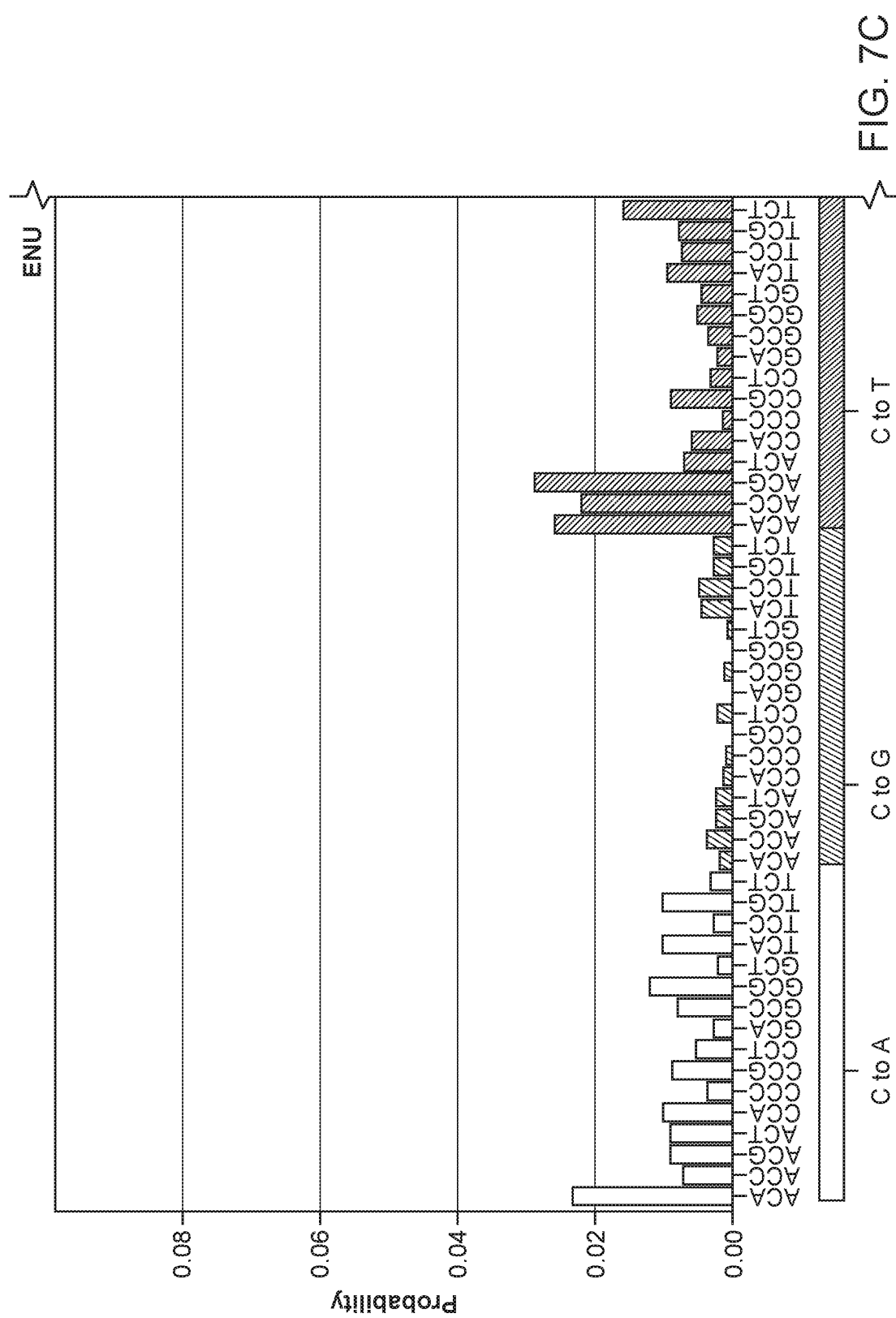


FIG. 7B (Cont.)



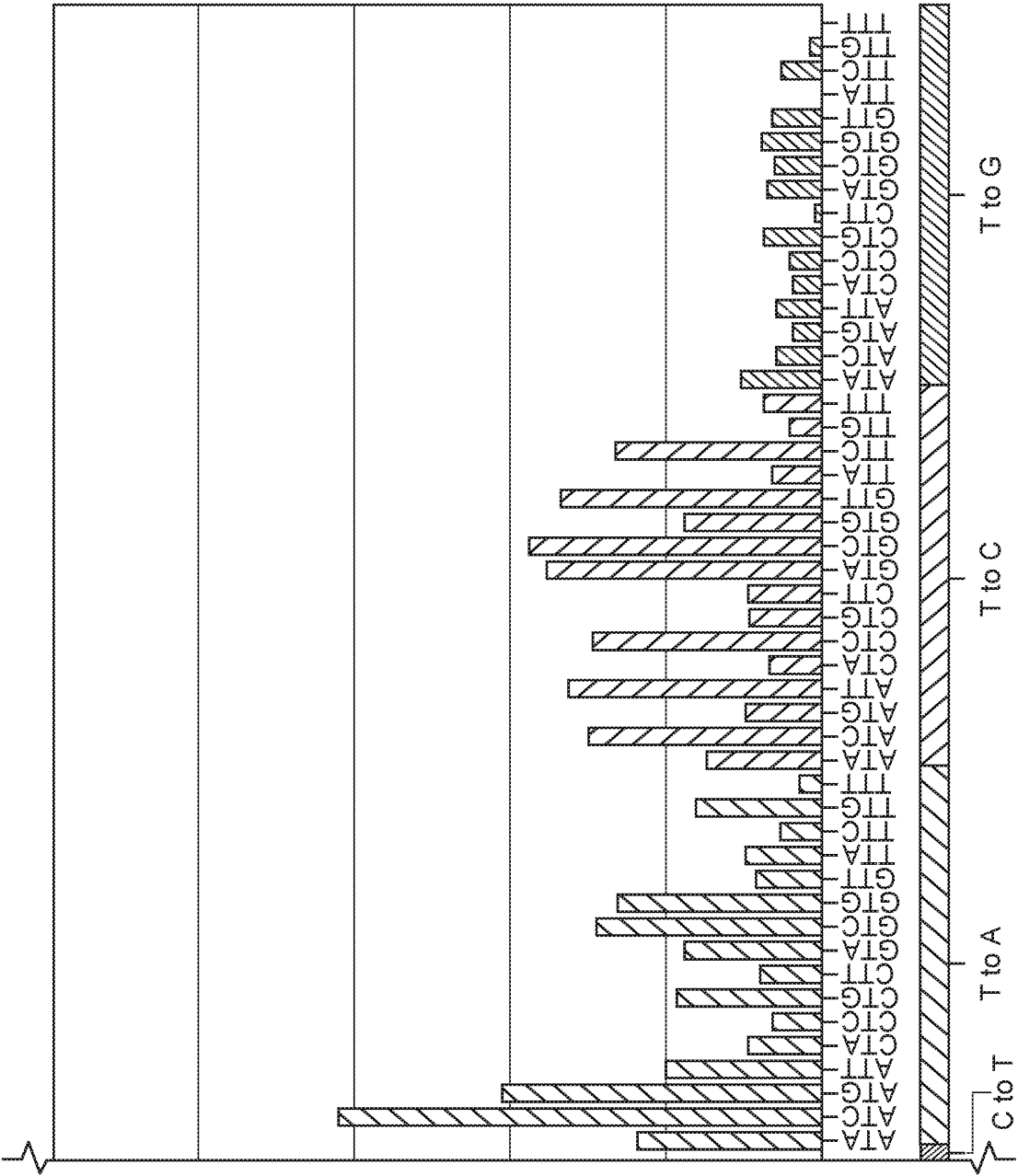


FIG. 7C (Cont.)

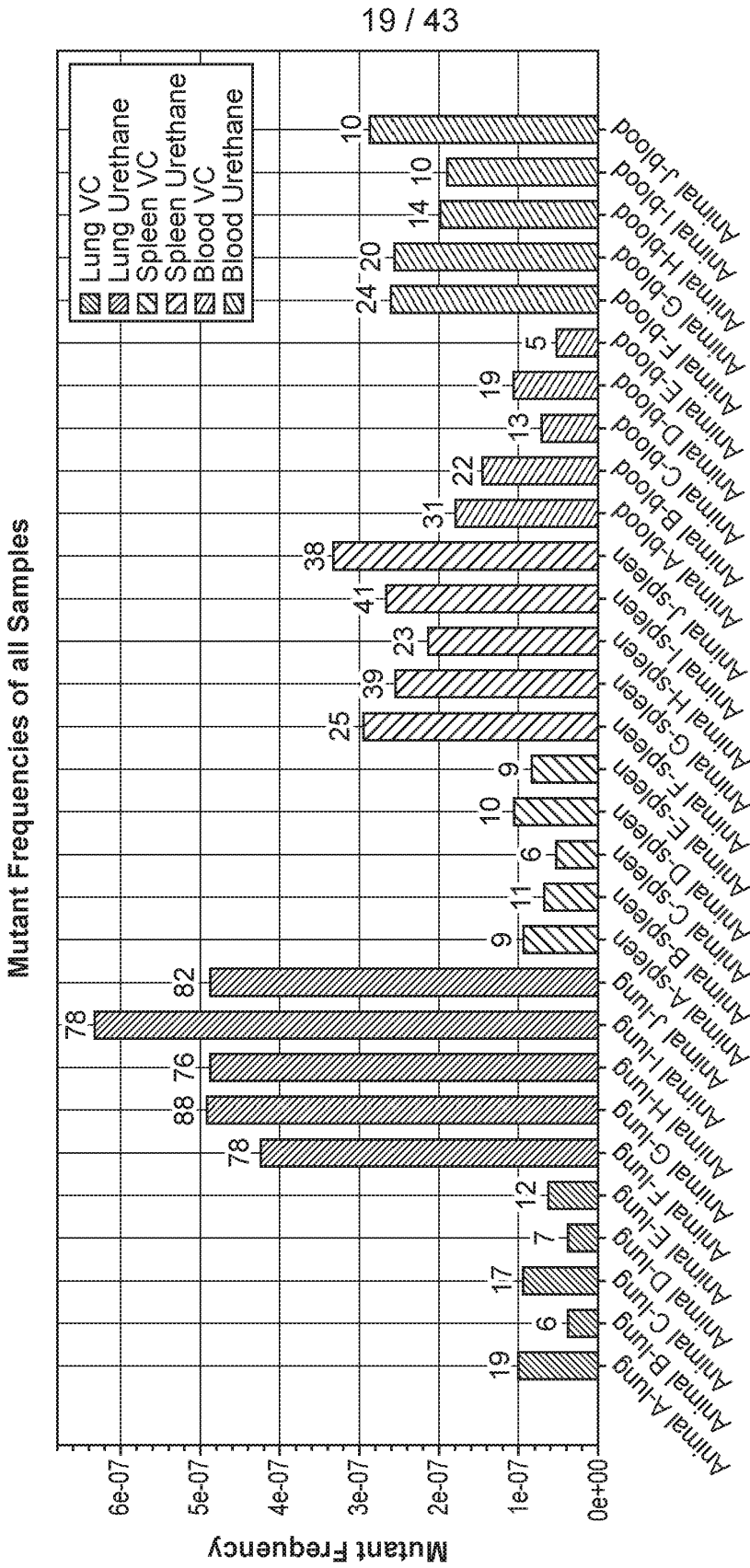


FIG. 8

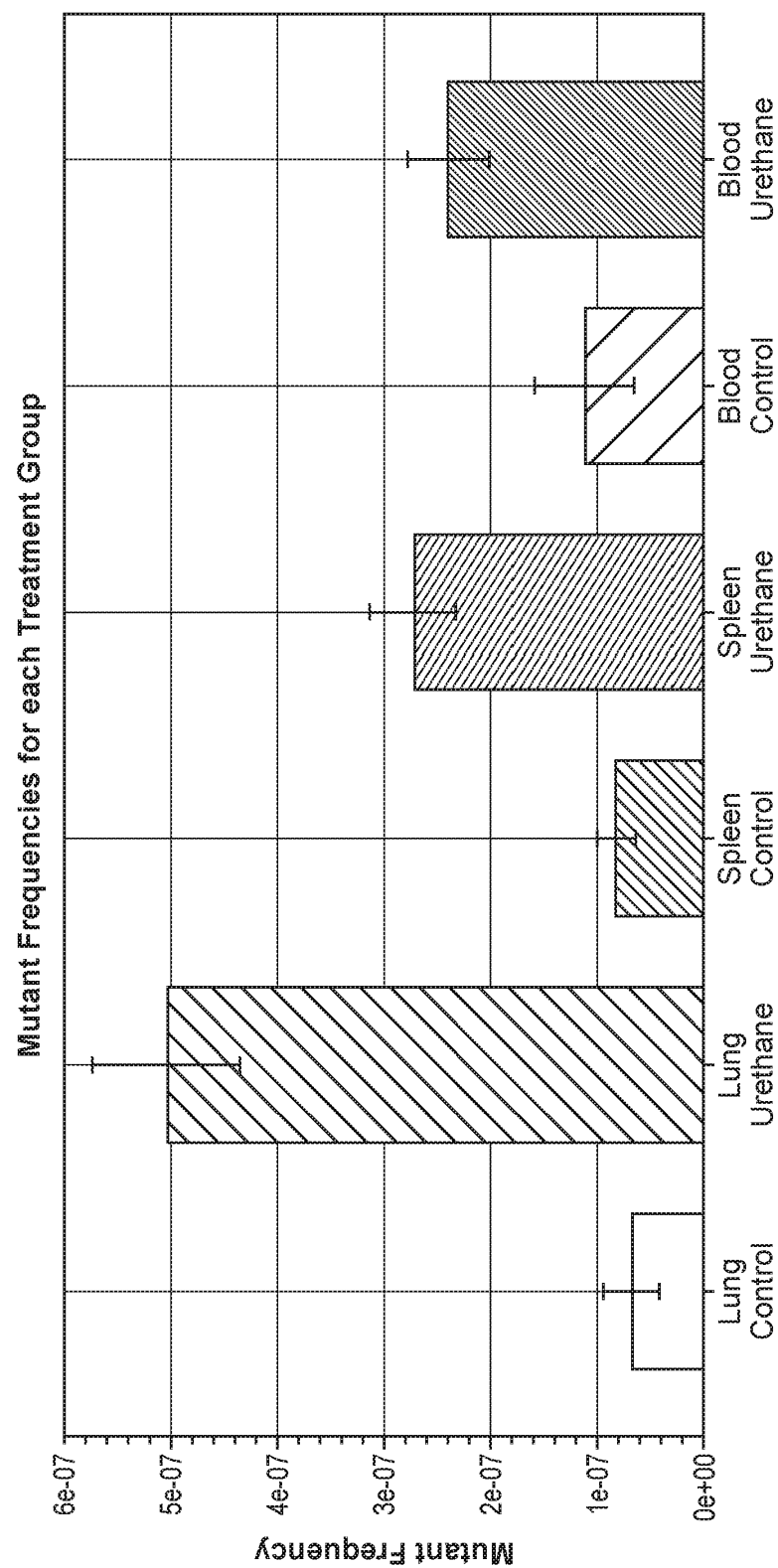


FIG. 9

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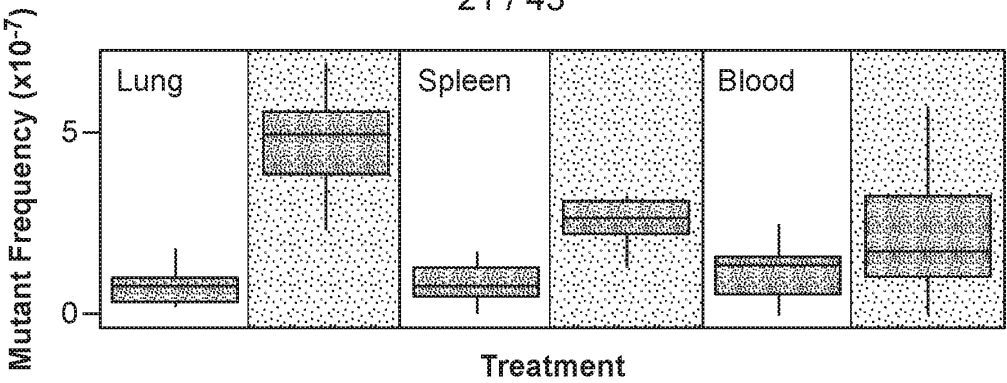


FIG. 10A

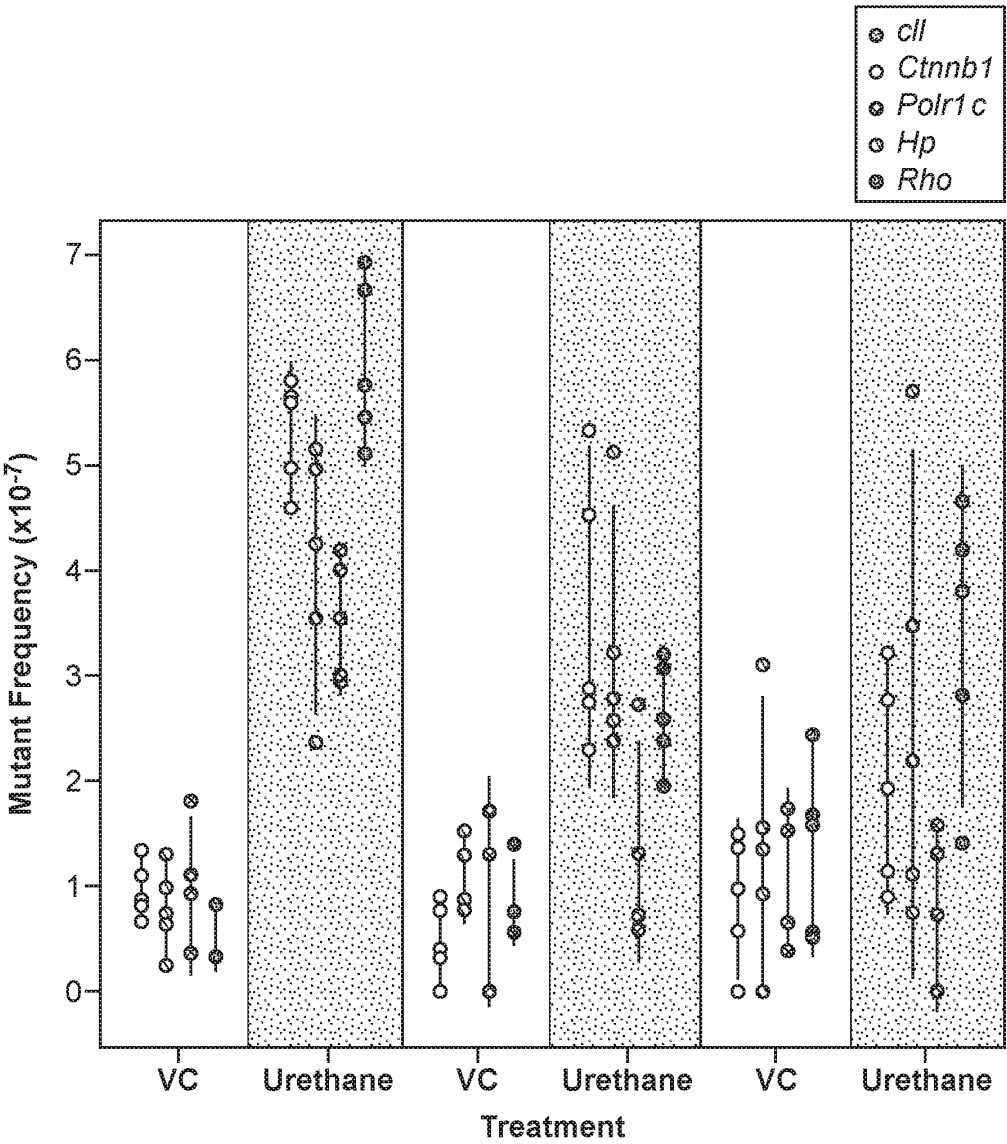
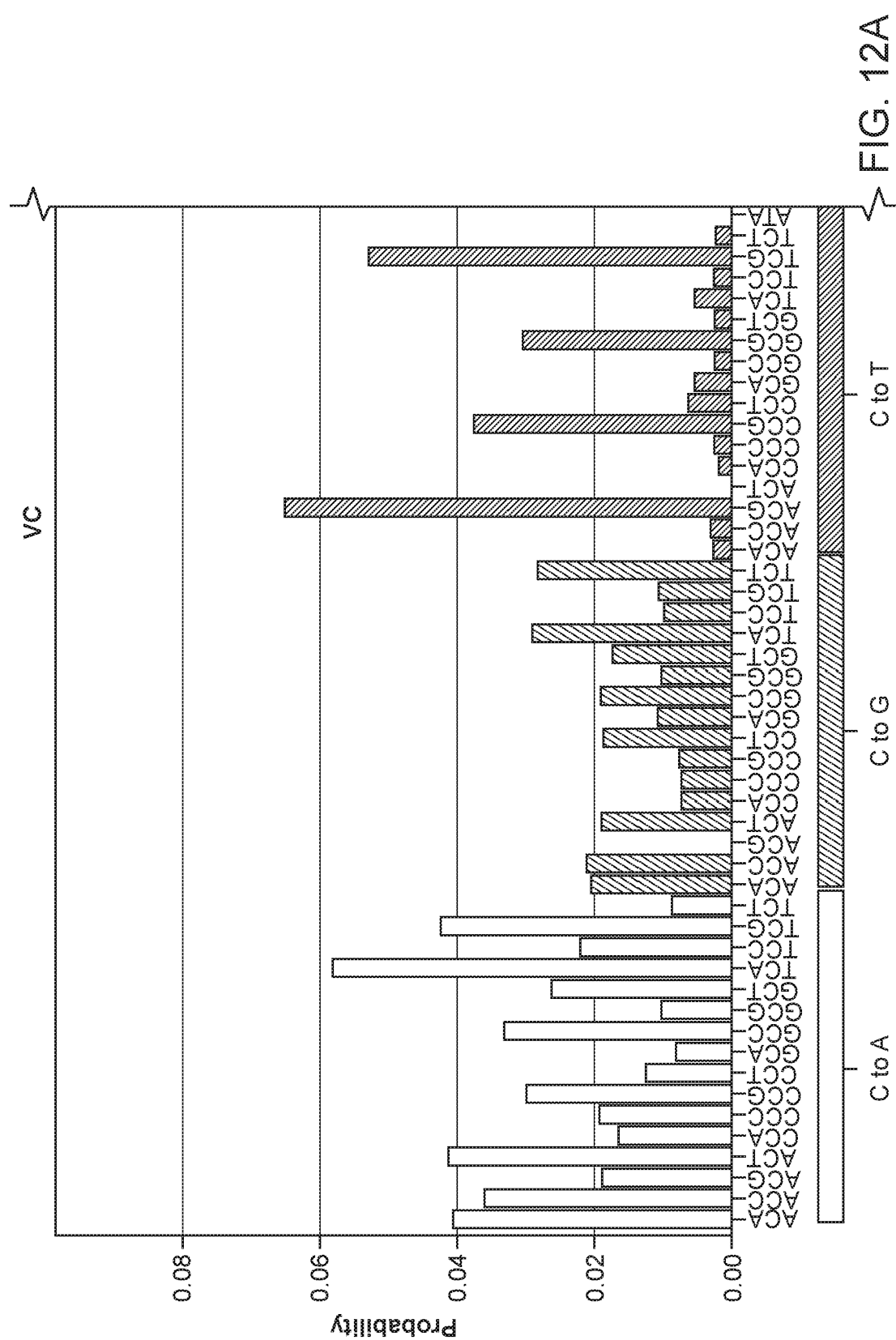
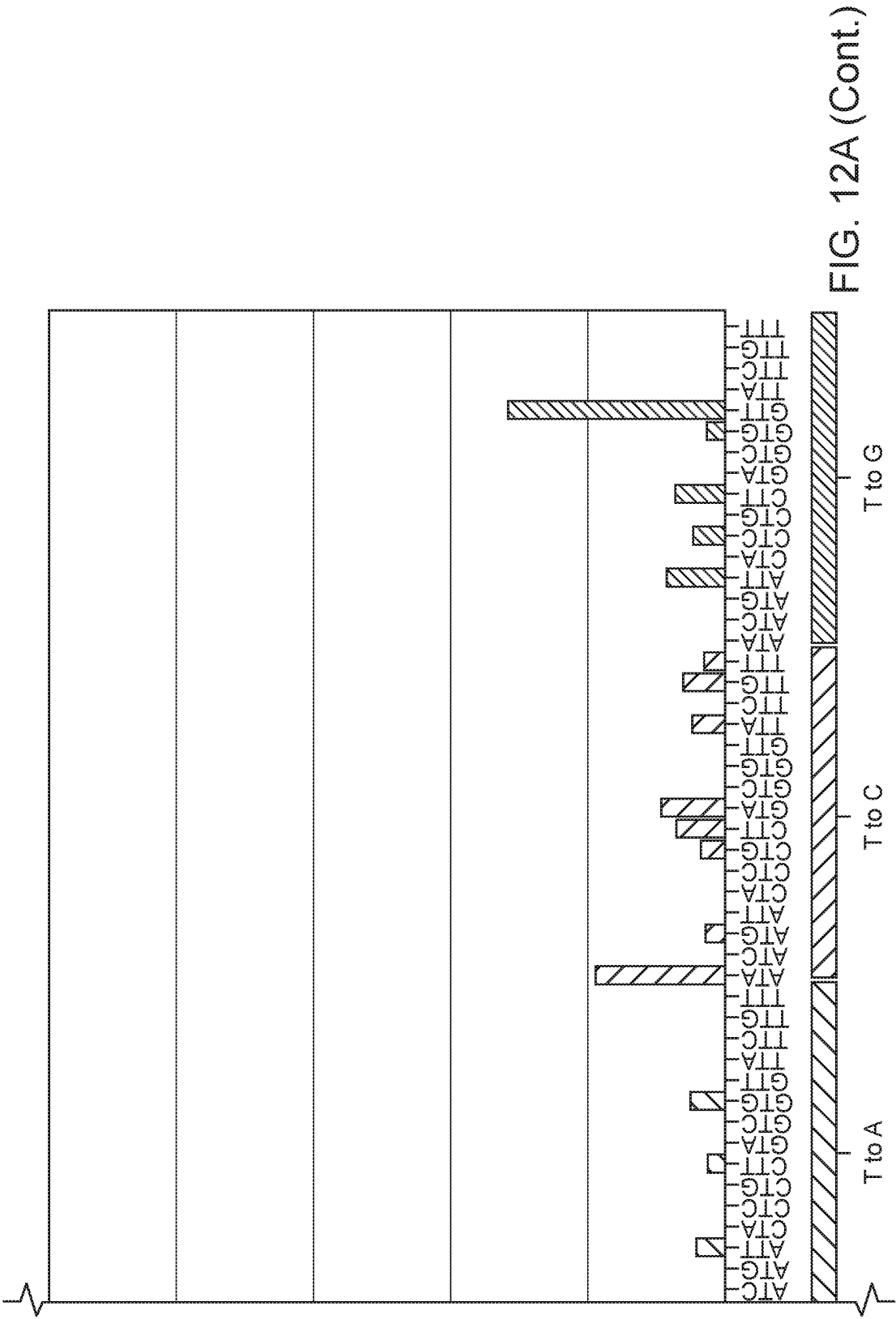


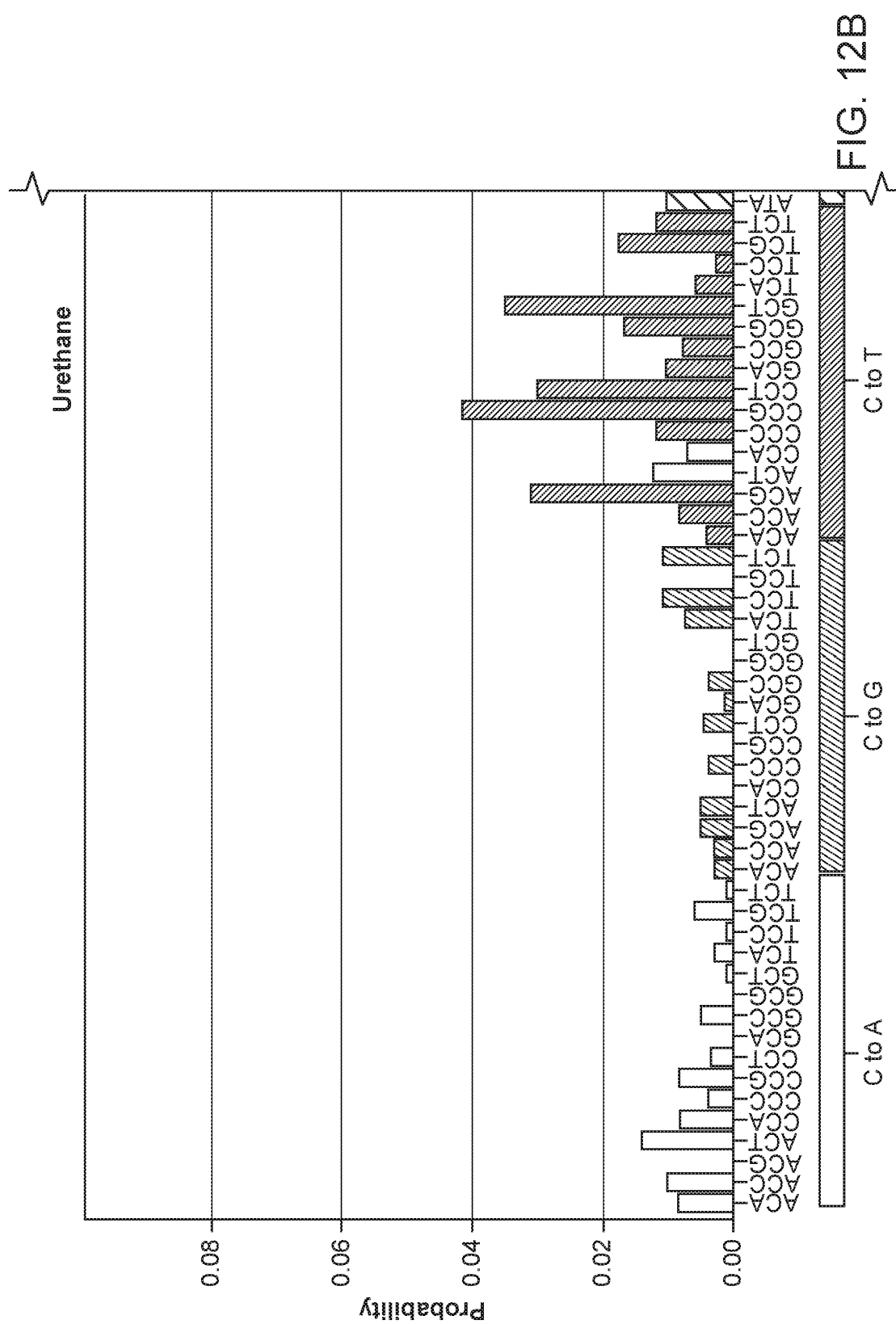
FIG. 10B

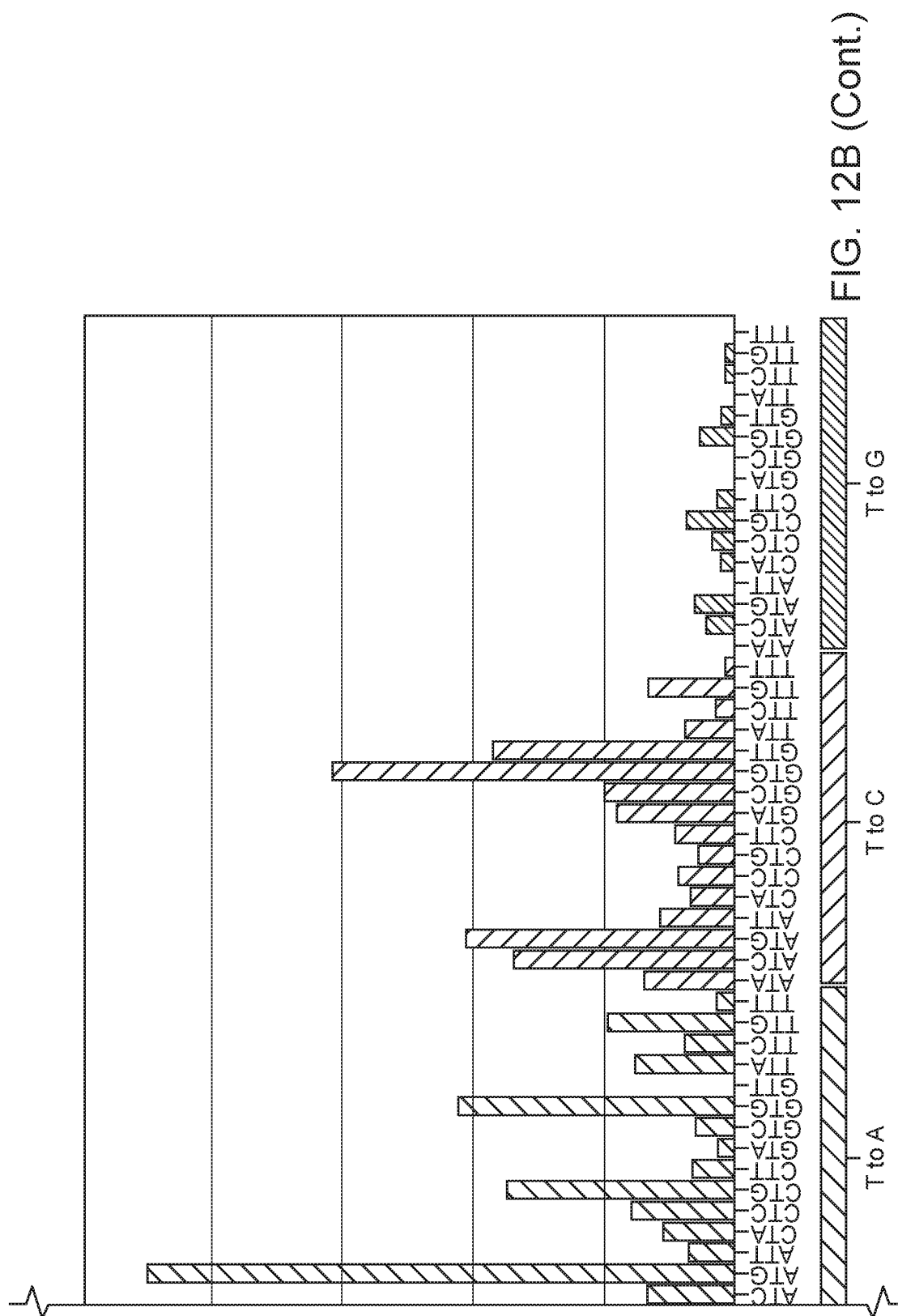


FIG. 11









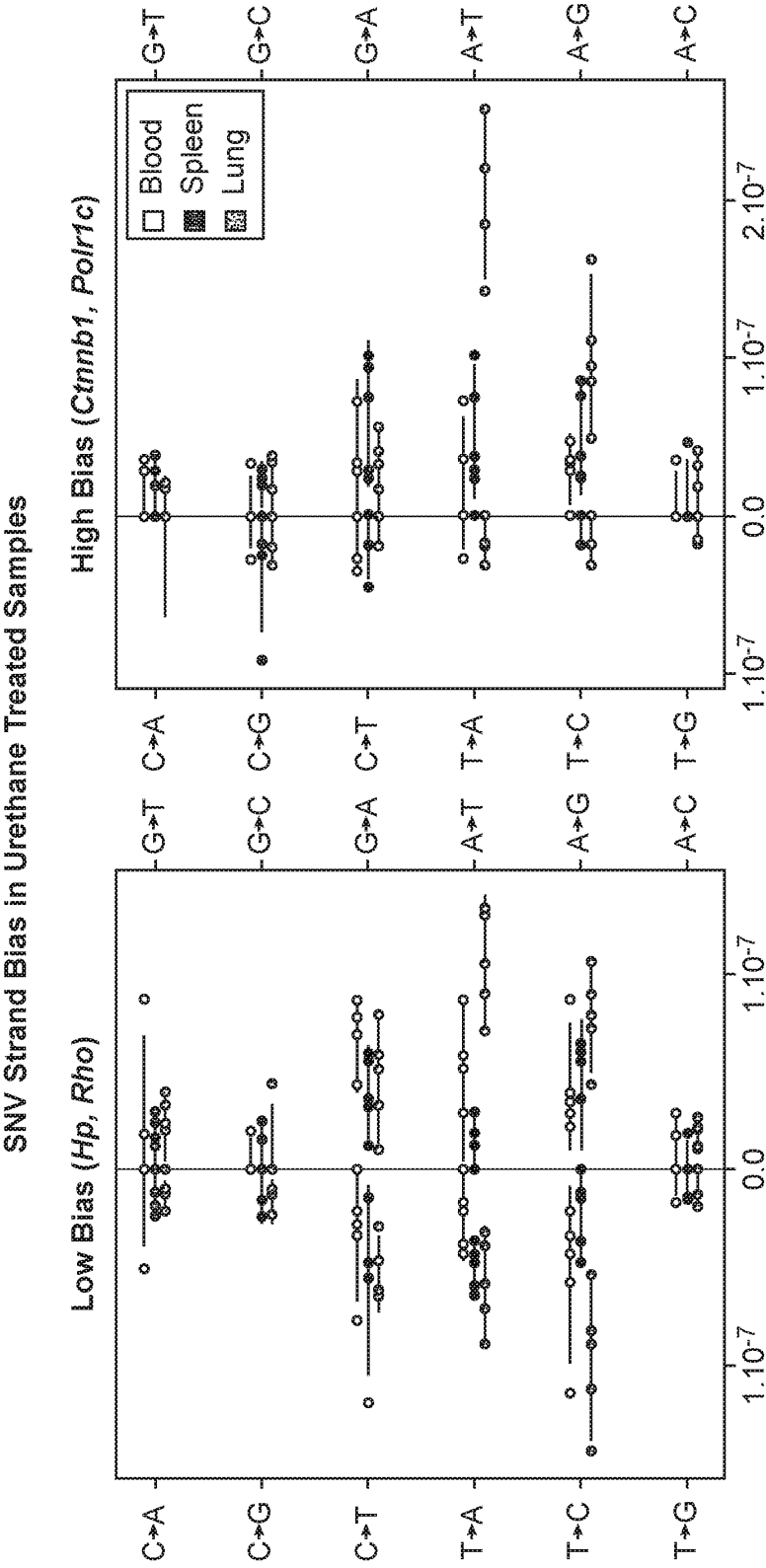


FIG. 13

Frequency of Reciprocal Mutations on Transcribed Strand

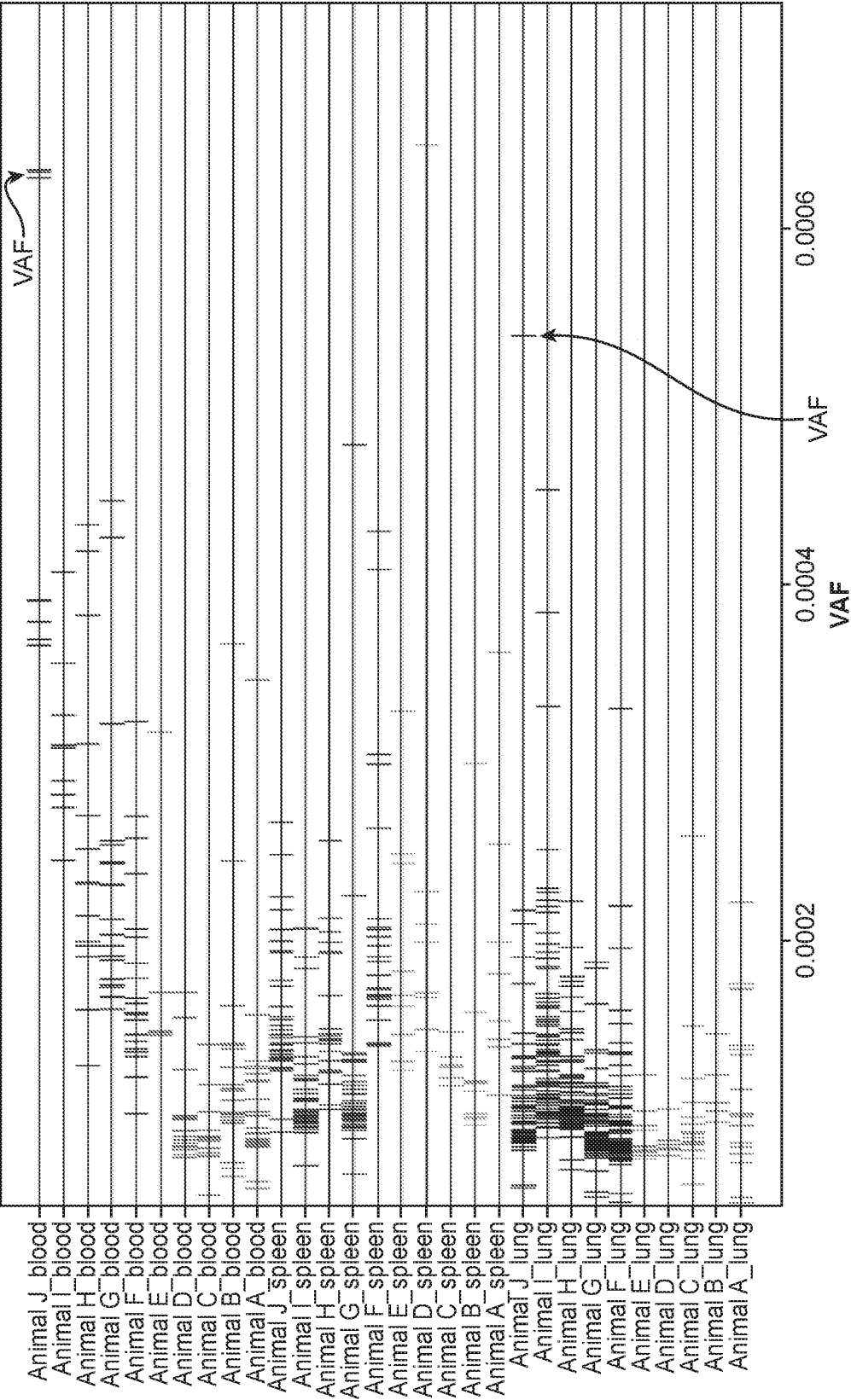


FIG. 14

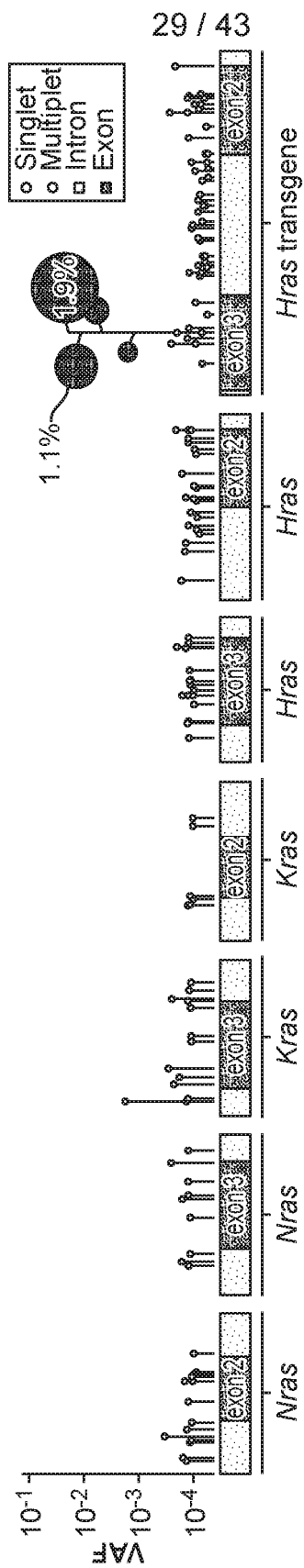


FIG. 15A

Human HRAS Exon 3

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Sample	Tissue	Treatment	Subtype	VD	Depth	Context	VAF											
F	Lung	Urethane	T>A	300	16,425	CTG	1.82%											
G	Lung	Urethane	T>A	181	16,319	CTG	1.10%											
H	Lung	Urethane	T>A	58	13,692	CTG	0.42%											
J	Lung	Urethane	T>A	17	14,706	CTG	0.11%											
Animal A-blood																		
Animal A-lung																		
Animal A-spleen																		
Animal B-blood																		
Animal B-lung																		
Animal B-spleen																		
Animal C-blood																		
Animal C-lung																		
Animal C-spleen																		
Animal D-blood																		
Animal D-lung																		
Animal D-spleen																		
Animal E-blood																		
Animal E-lung																		
Animal E-spleen																		
Animal F-blood																		
Animal F-lung																		
Animal F-spleen																		
Animal G-blood																		
Animal G-lung																		
Animal G-spleen																		
Animal H-blood																		
Animal H-lung																		
Animal H-spleen																		
Animal I-blood																		
Animal I-lung																		
Animal I-spleen																		
Animal J-blood																		
Animal J-lung																		
Animal J-spleen																		
Sequence	G	C	T	G	T	A	C	T	C	C	T	C	C	T	G	G	C	C

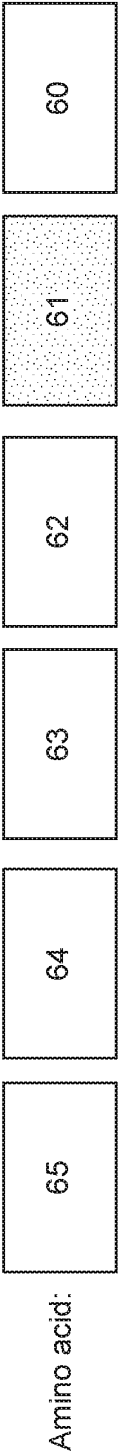


FIG. 15B

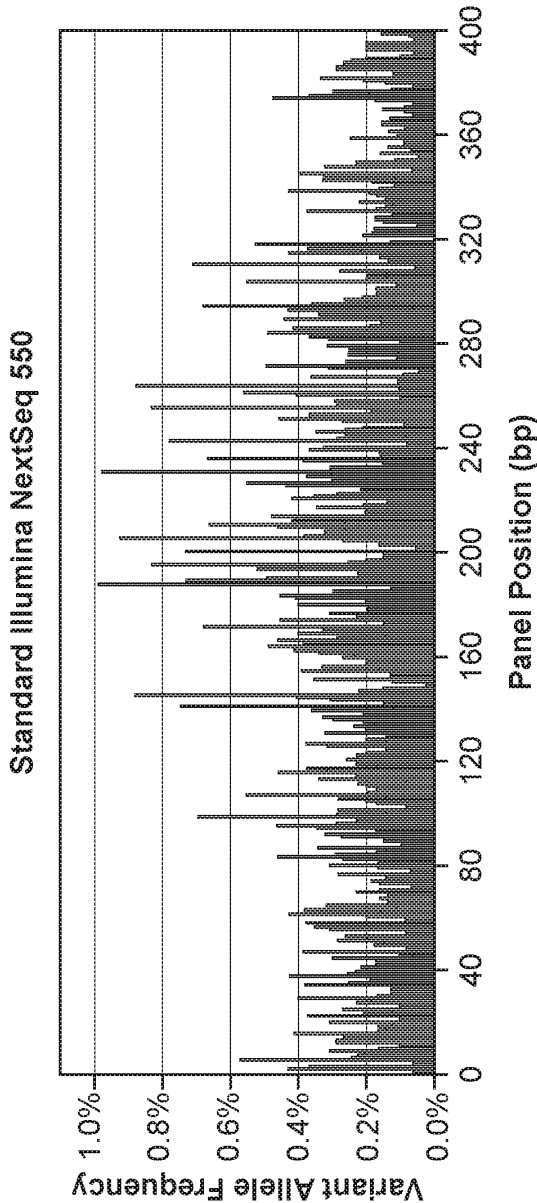


FIG. 16A

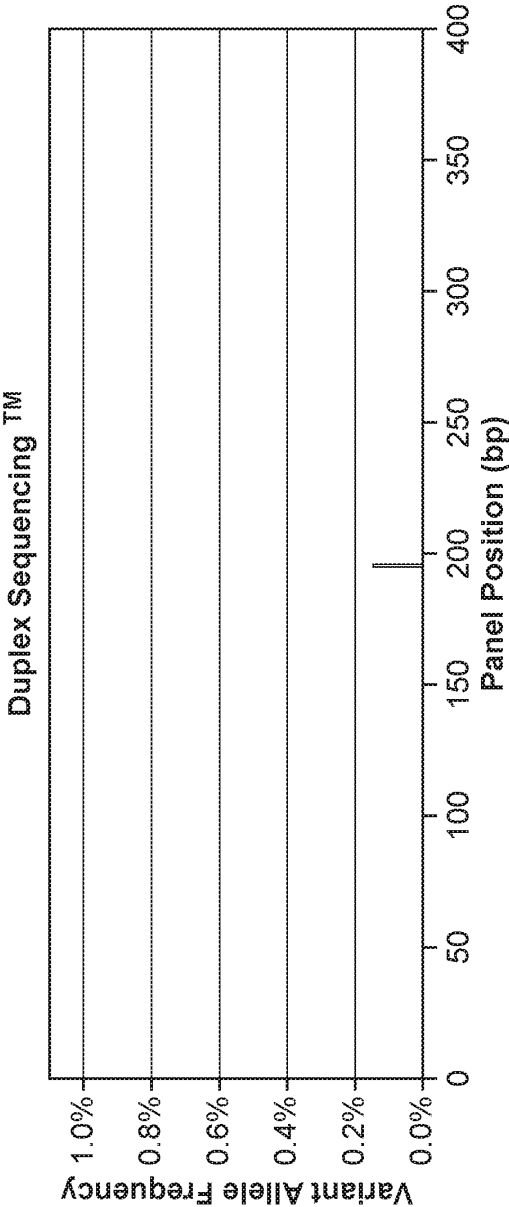


FIG. 16B

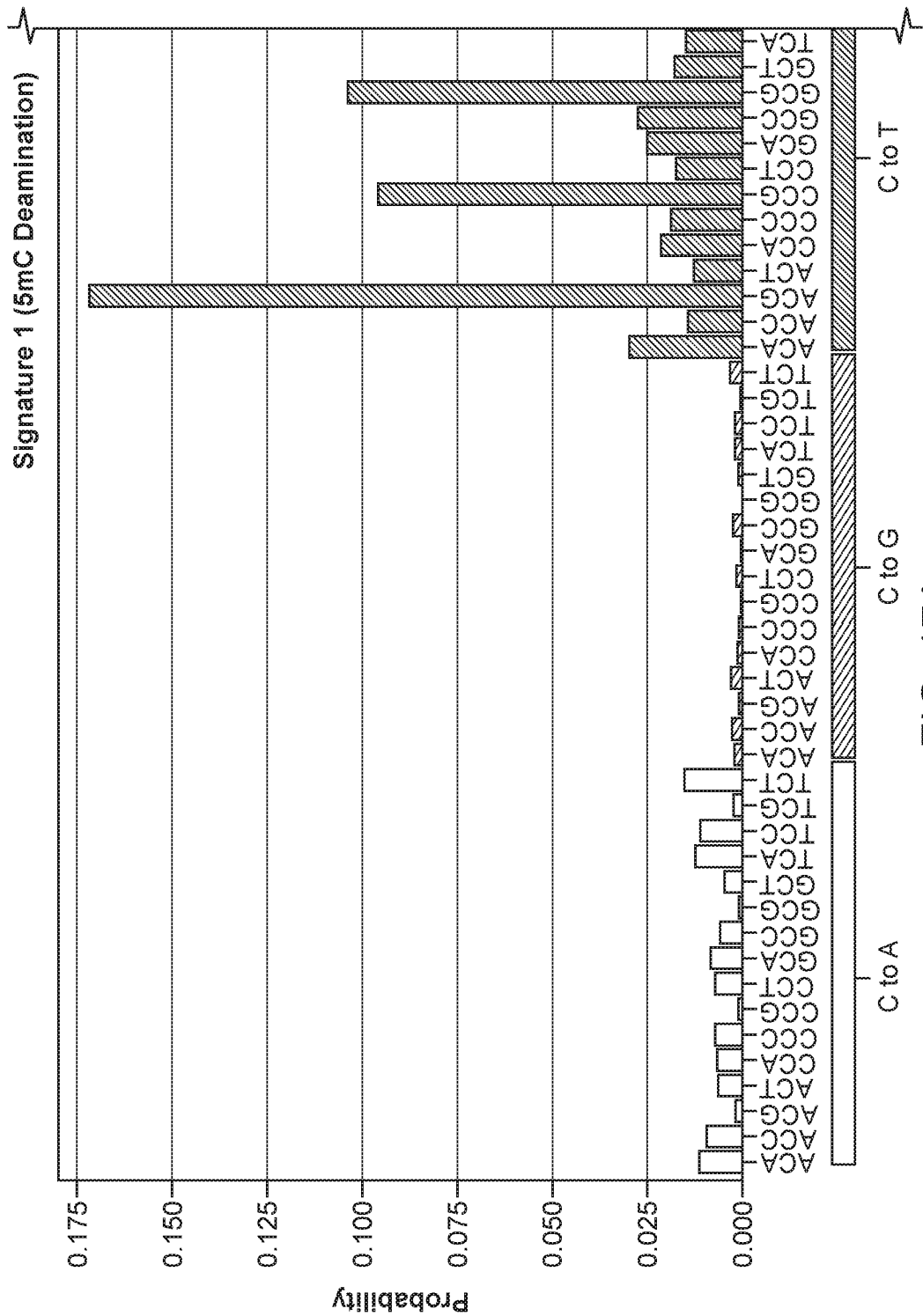


FIG. 17A

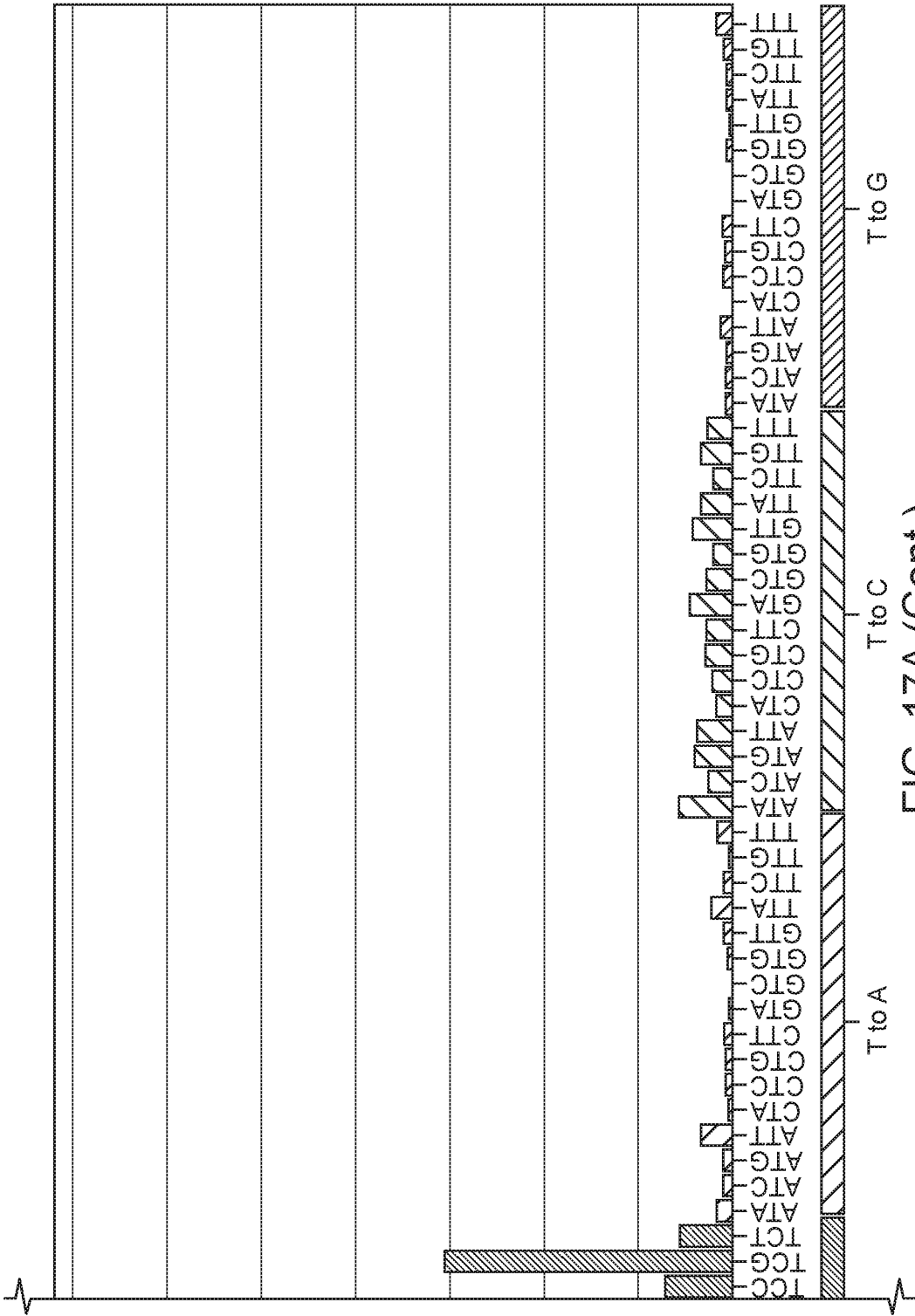


FIG. 17A (Cont.)

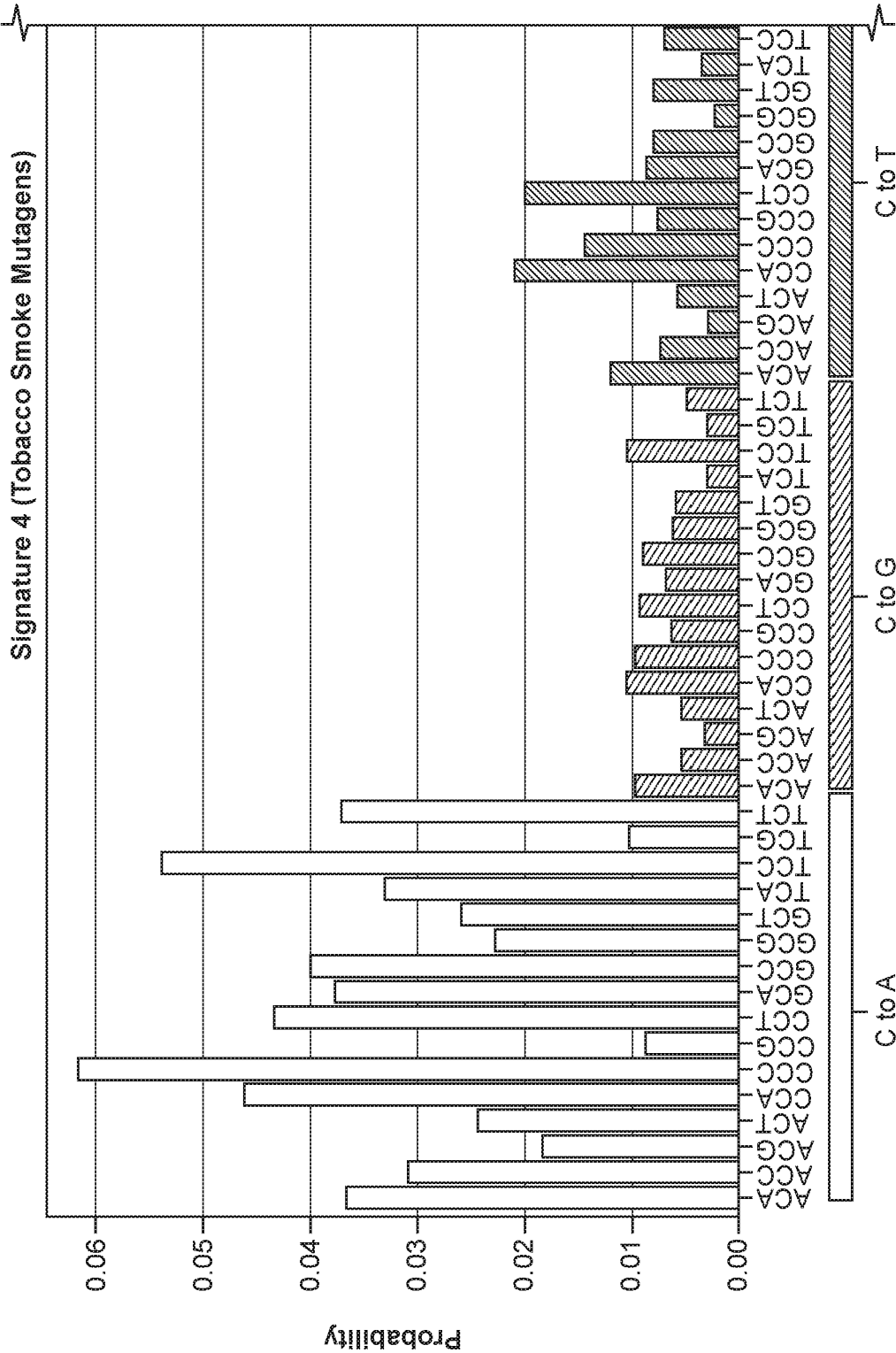


FIG. 17B

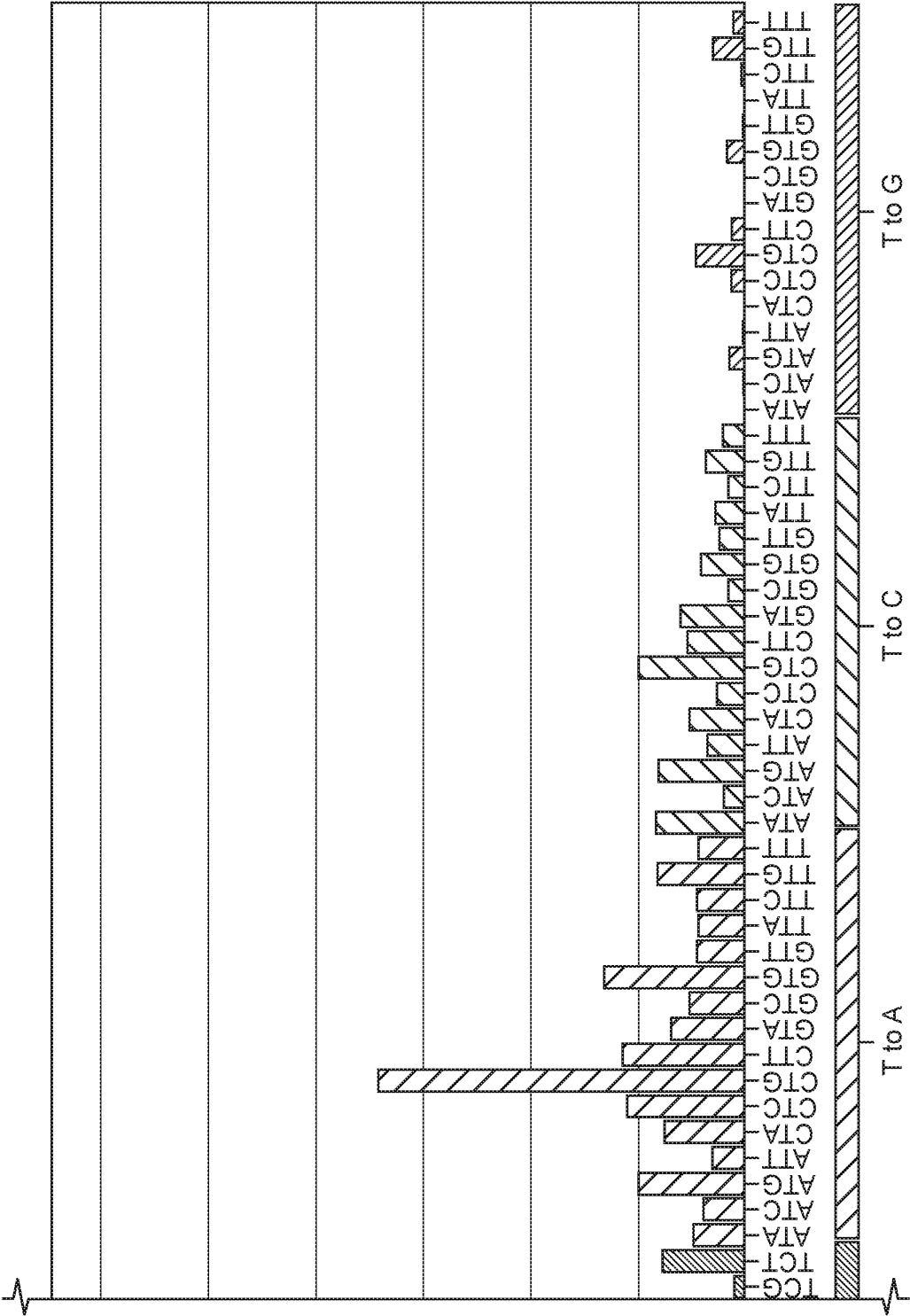


FIG. 17B (Cont.)

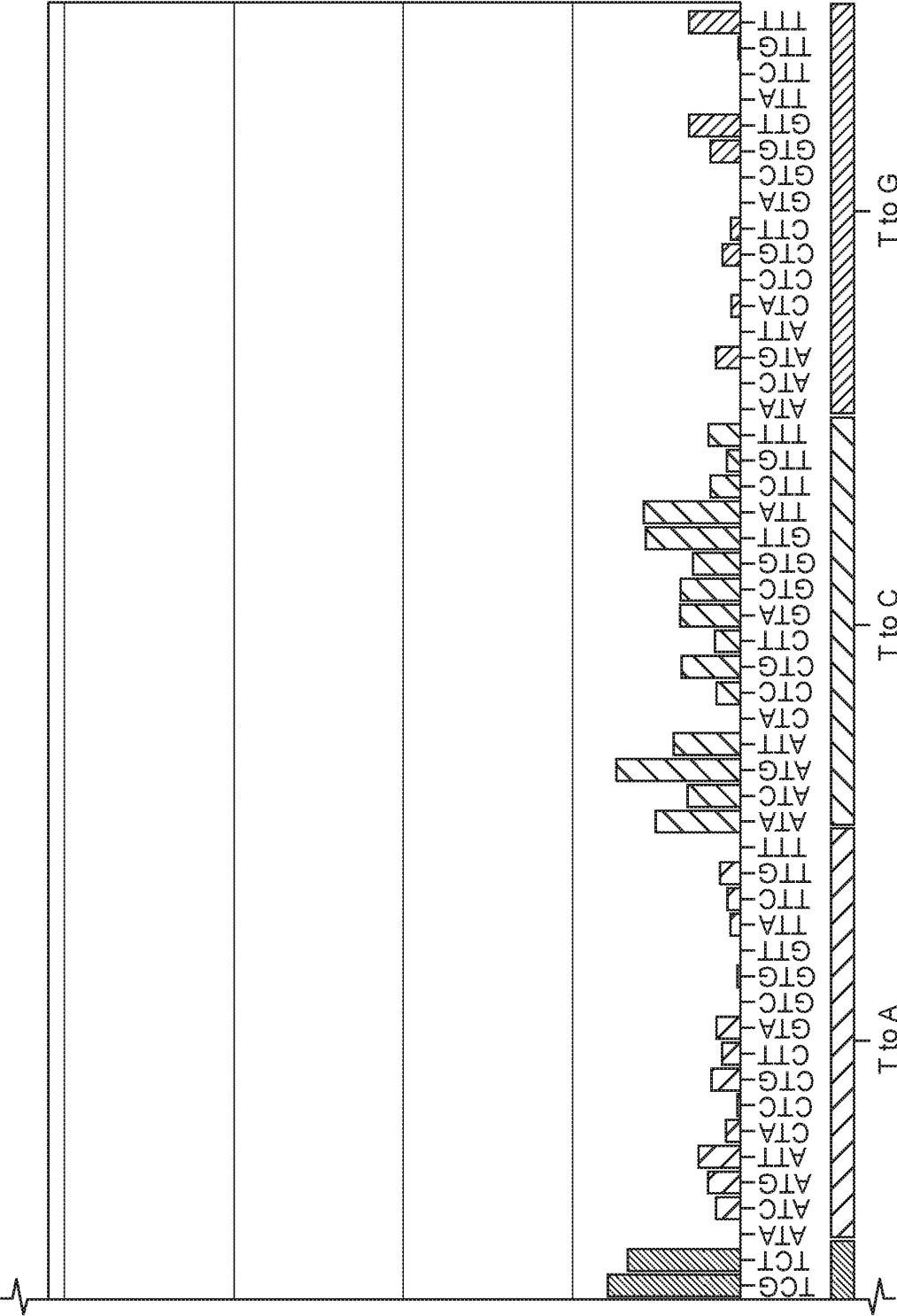
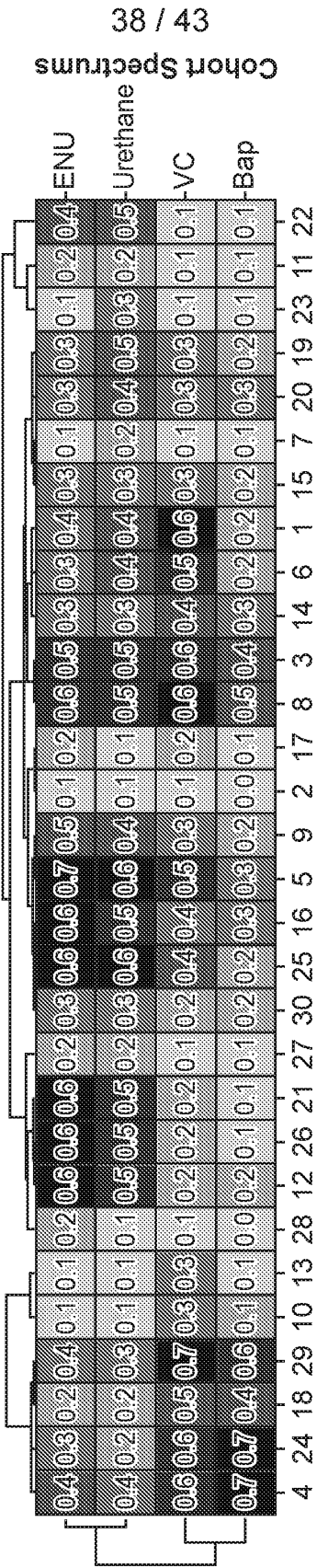


FIG. 17C (Cont.)



COSMIC Signatures

FIG. 18

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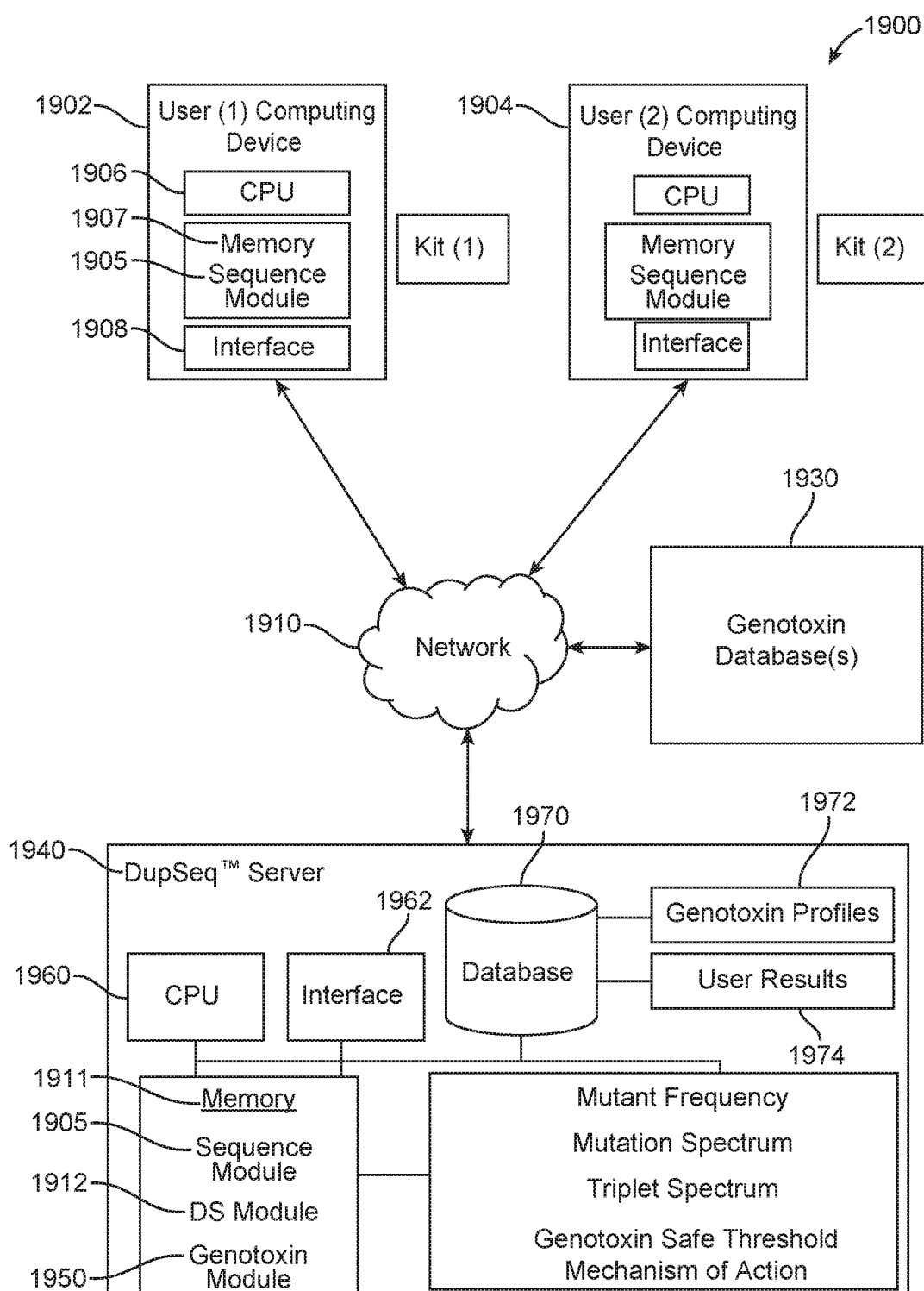


FIG. 19

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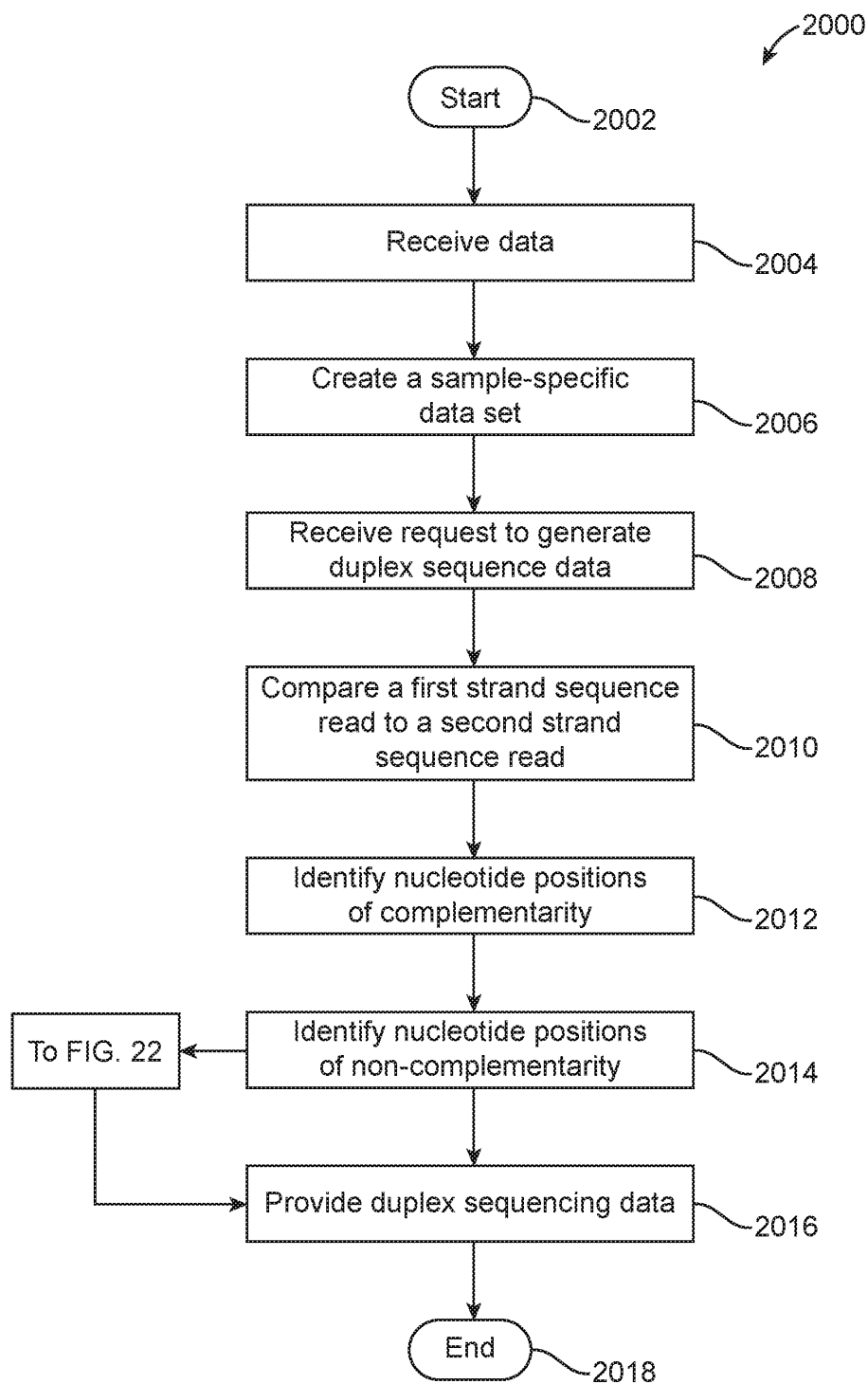


FIG. 20

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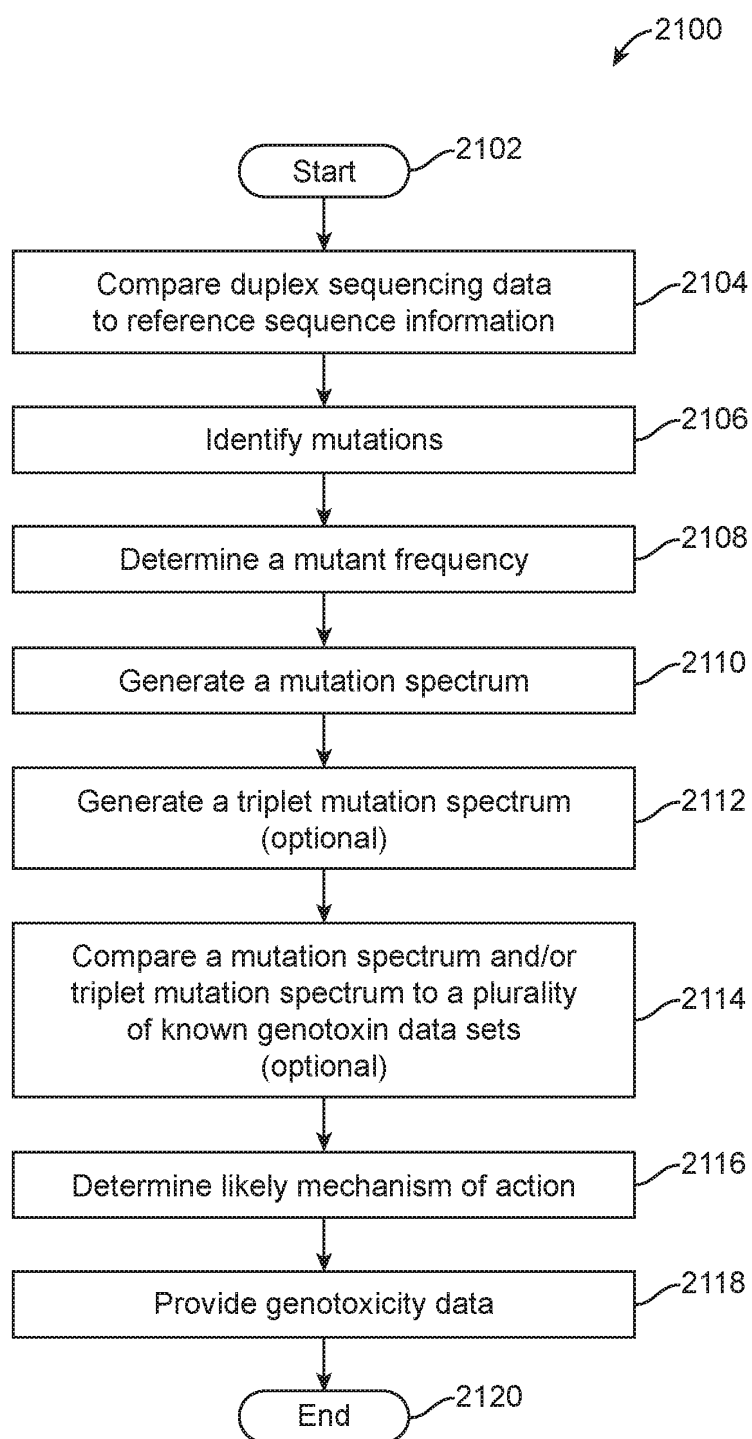


FIG. 21

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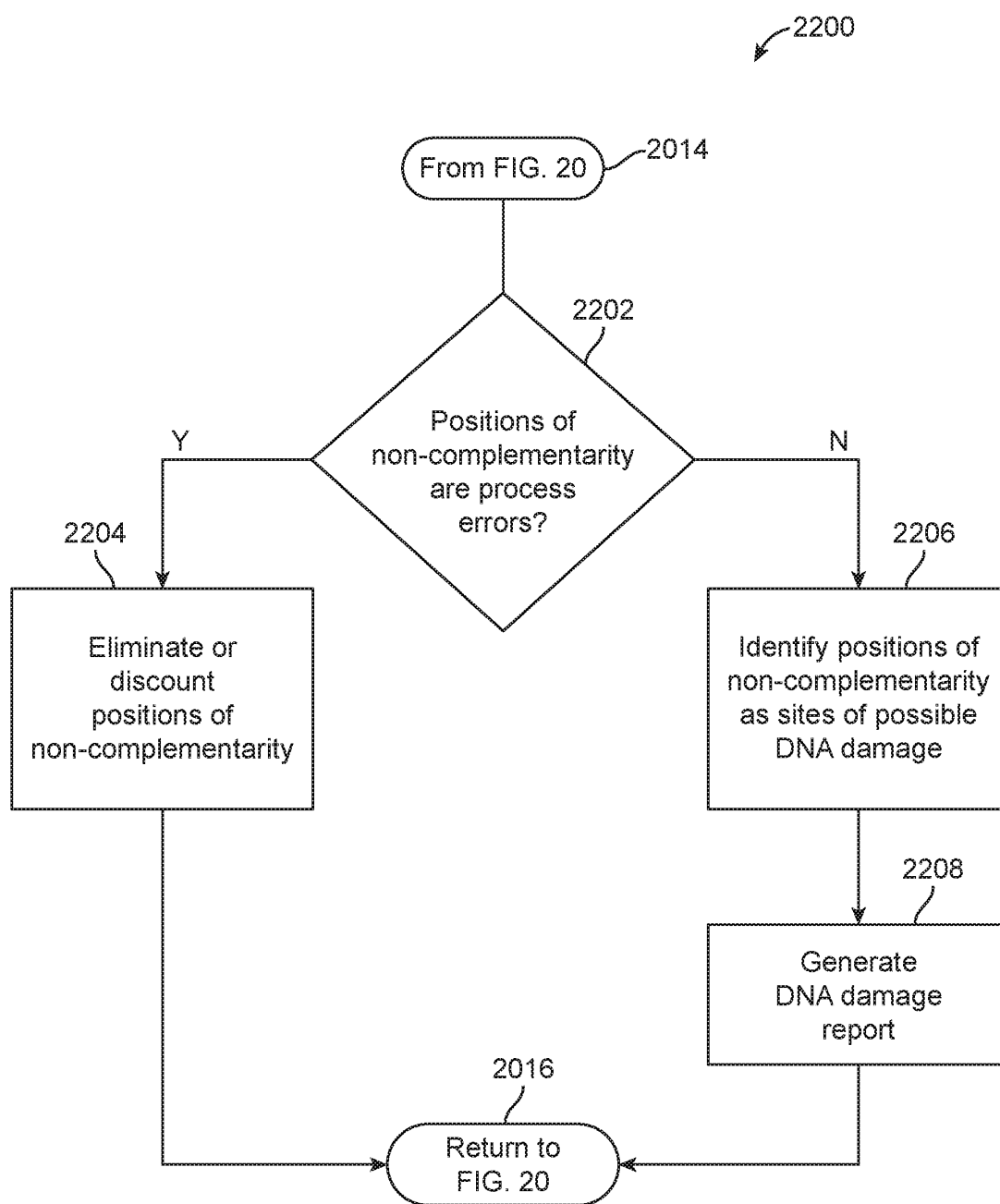


FIG. 22

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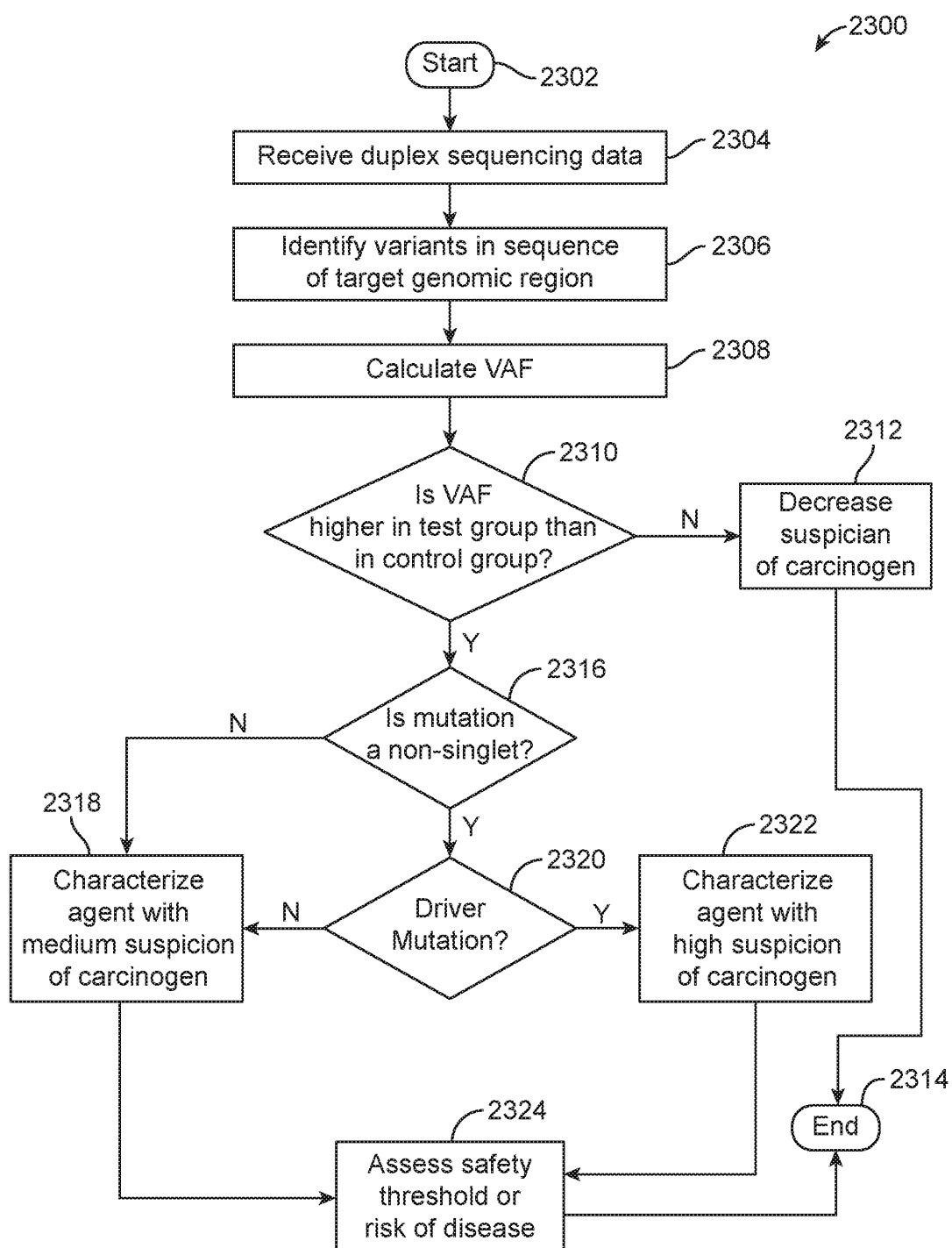


FIG. 23