

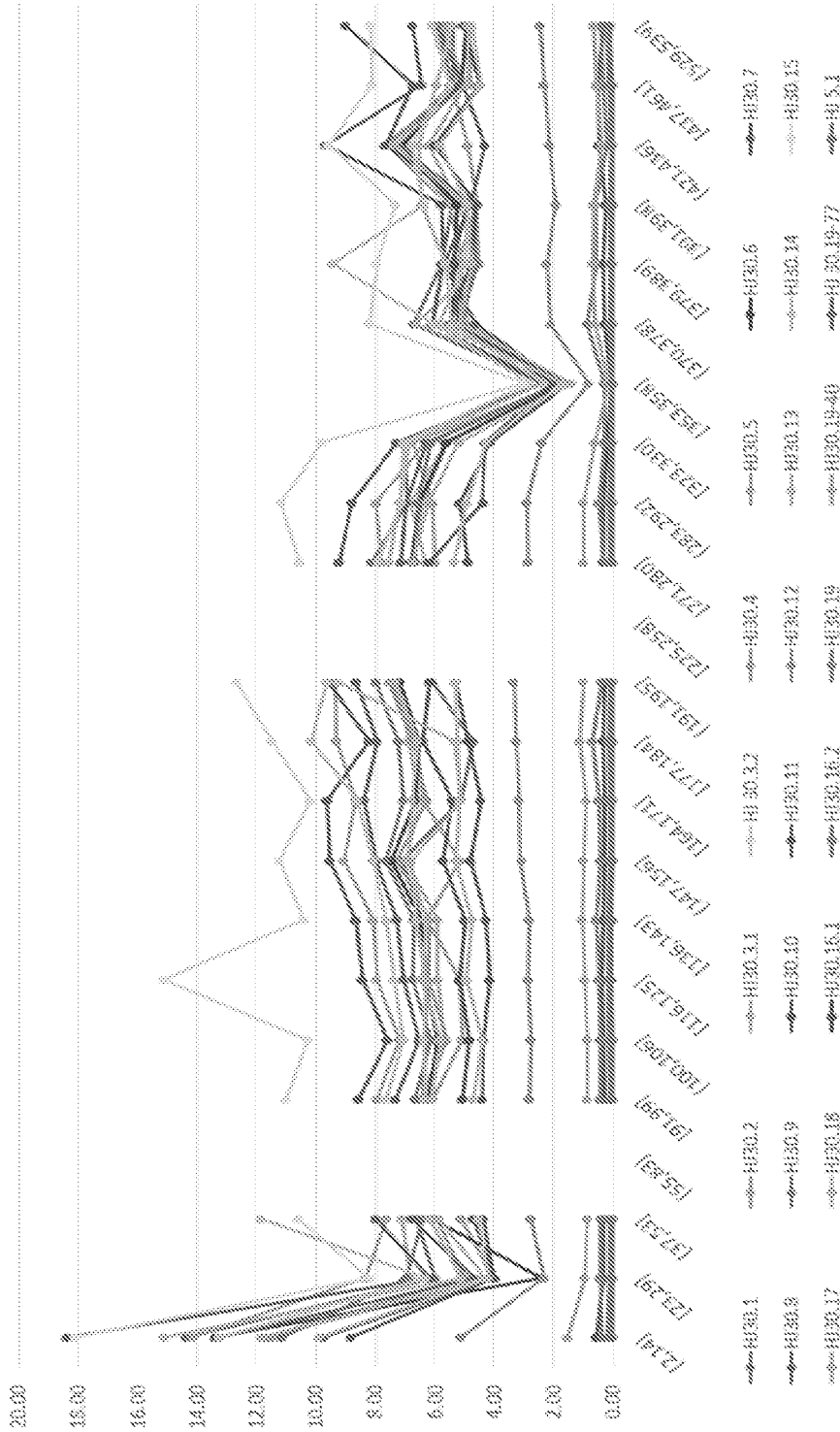


FIG. 1

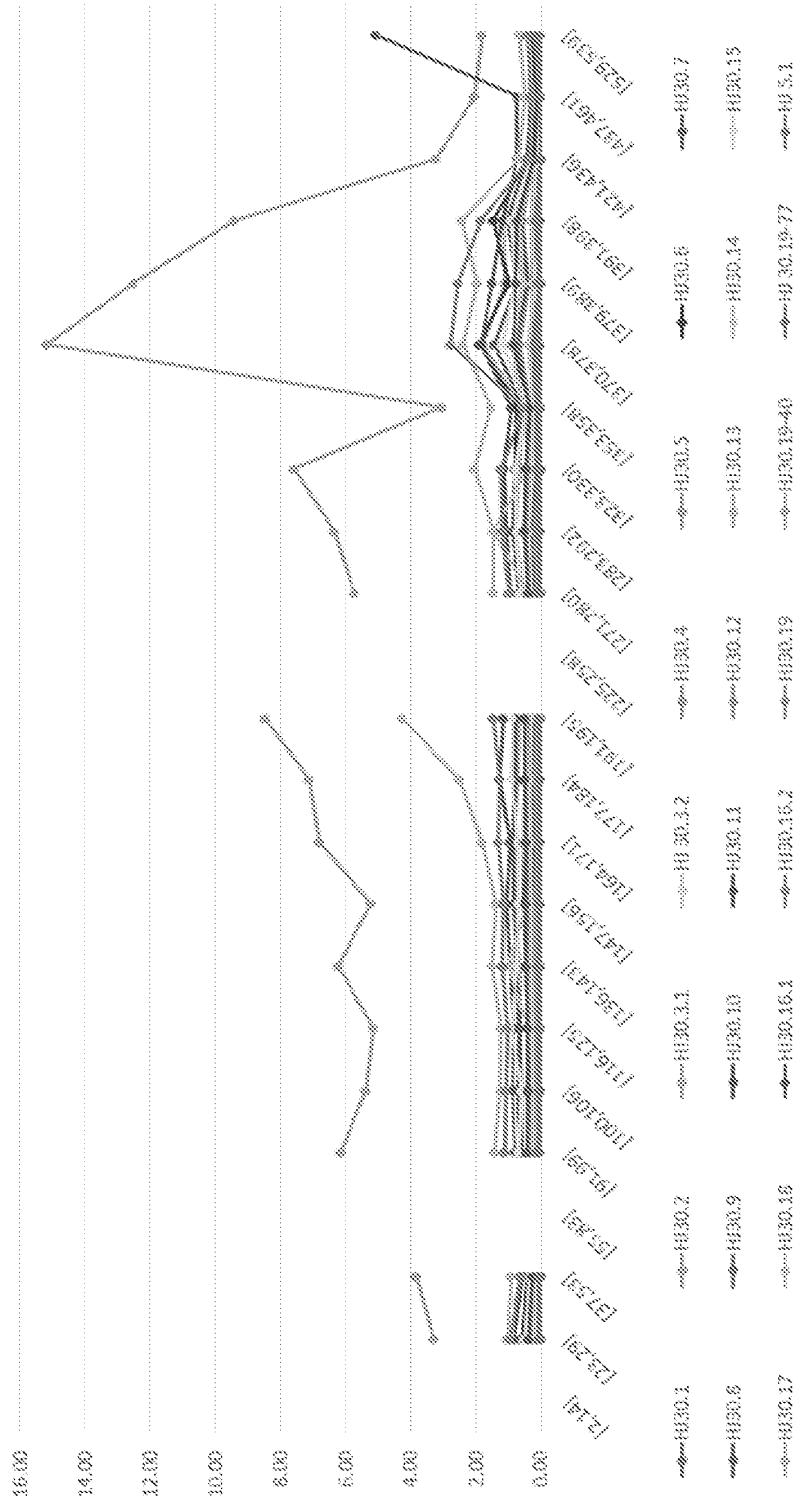


FIG. 2A

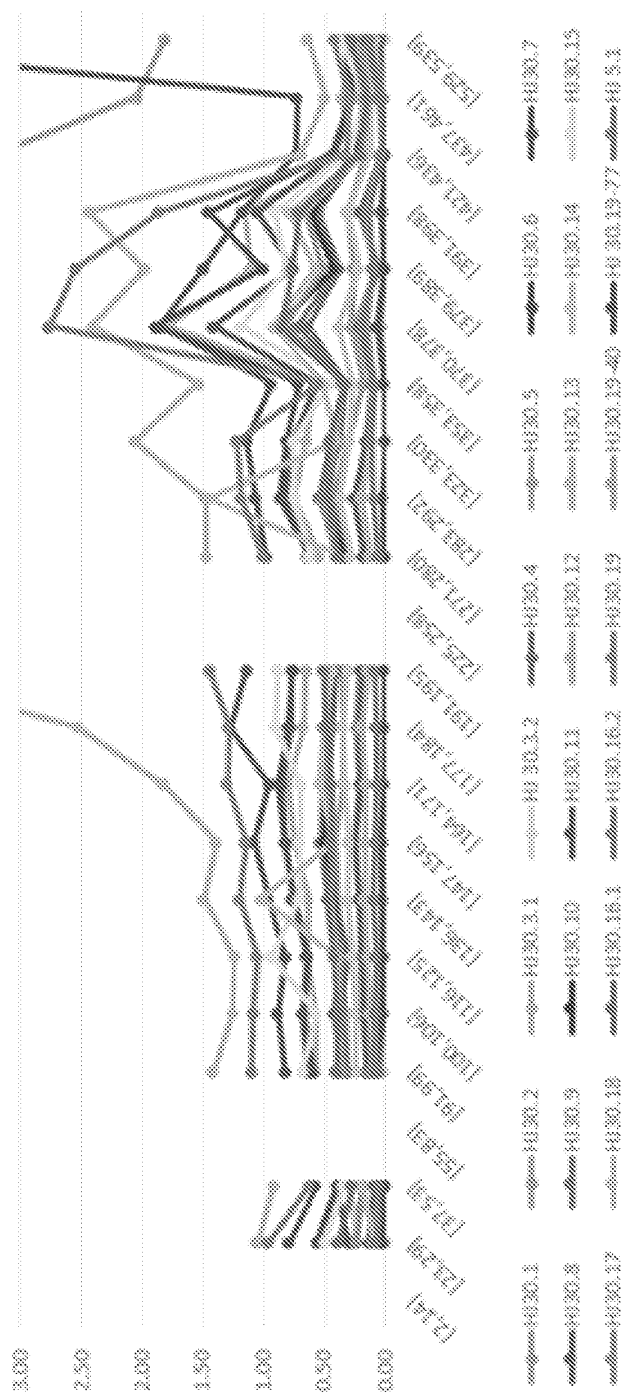


FIG. 2B

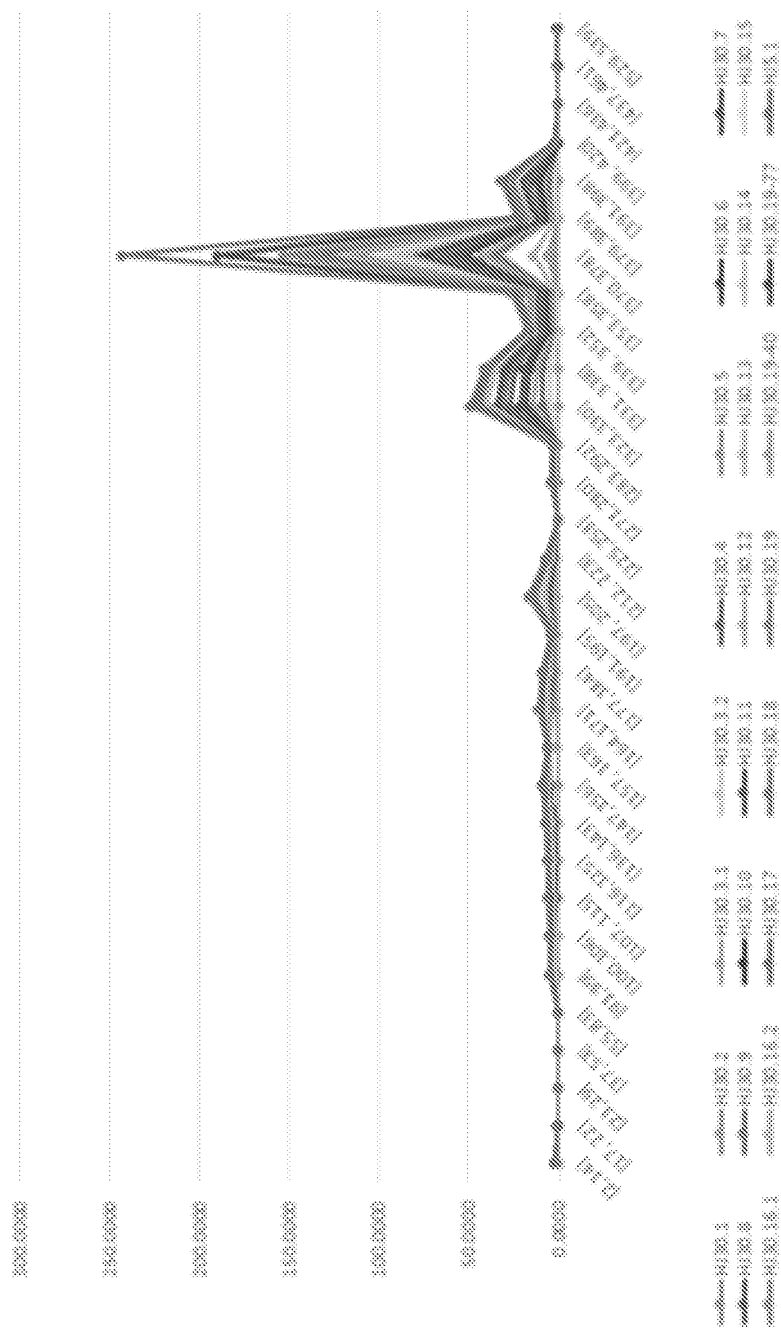


FIG. 3

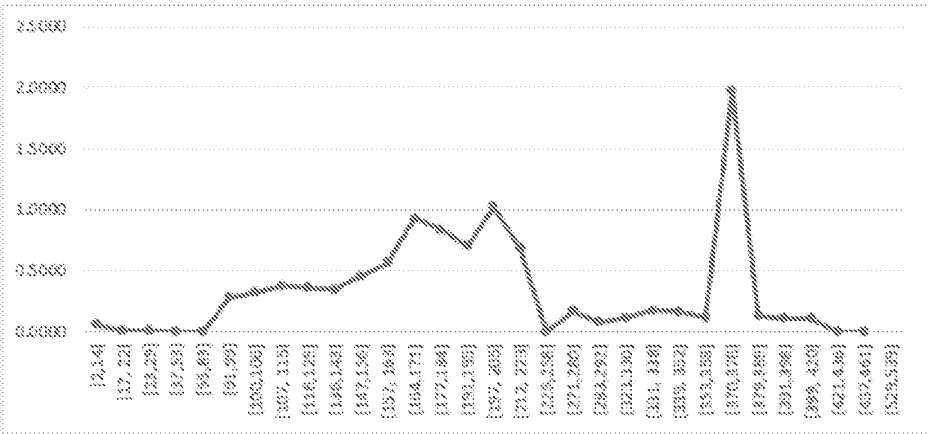


FIG. 4A

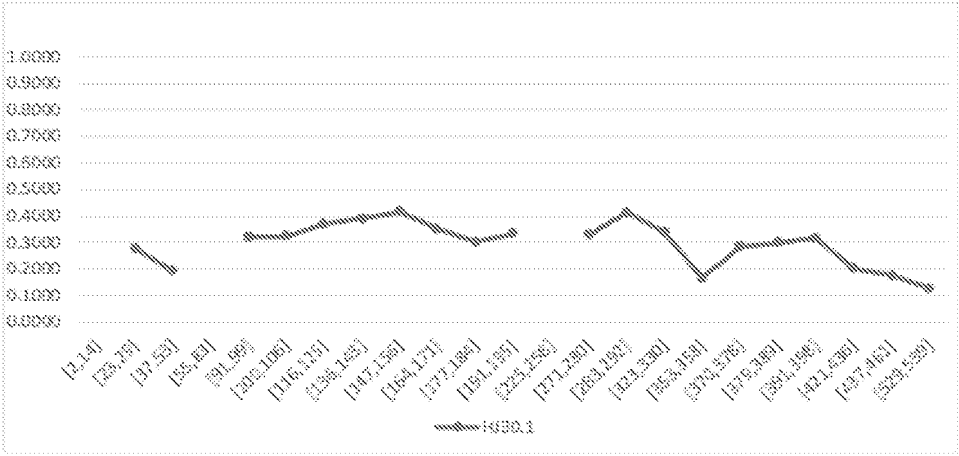


FIG. 4B

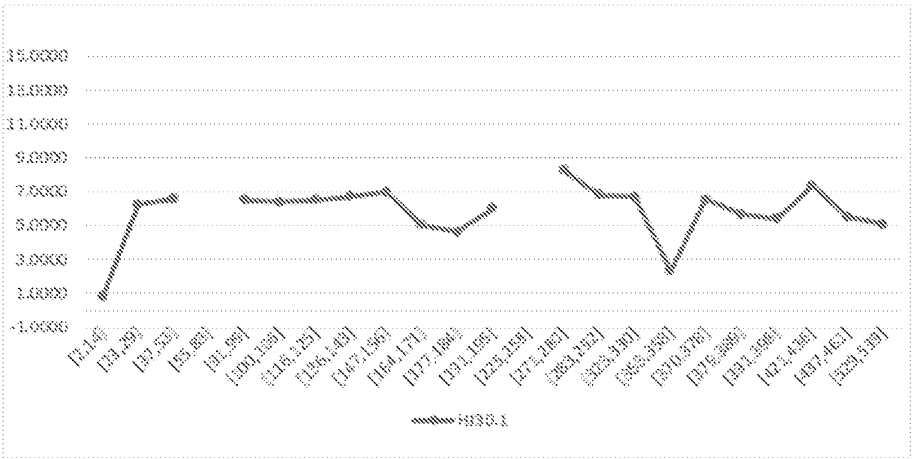


FIG. 4C

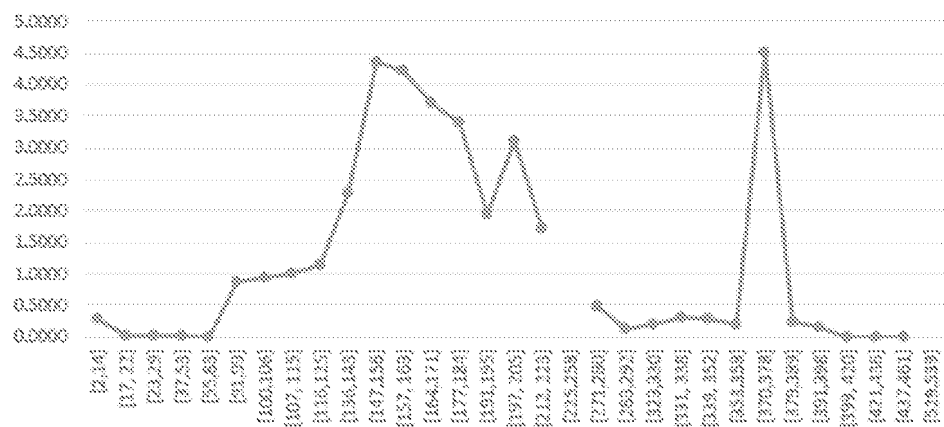


FIG. 5A

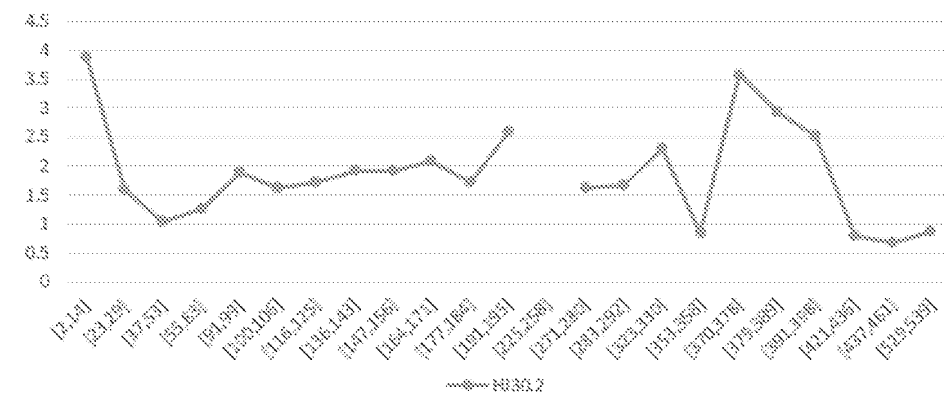


FIG. 5B

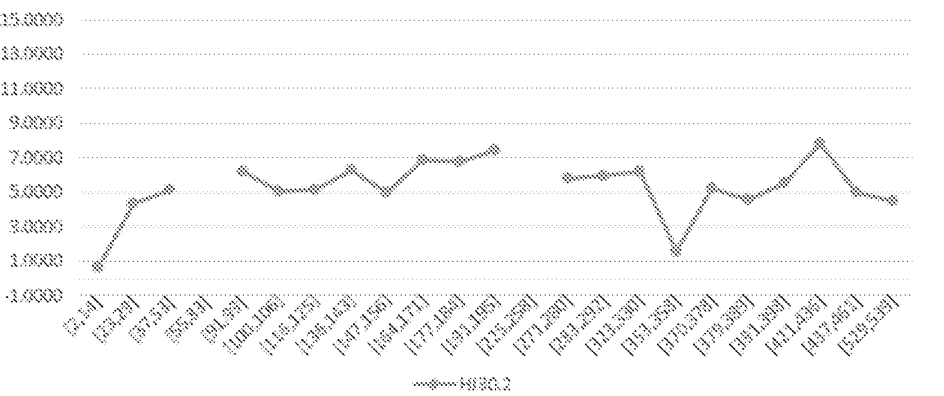


FIG. 5C

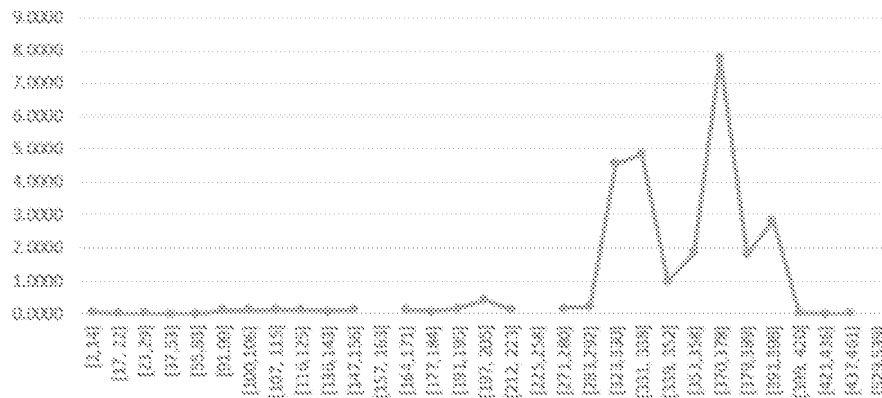


FIG. 6A

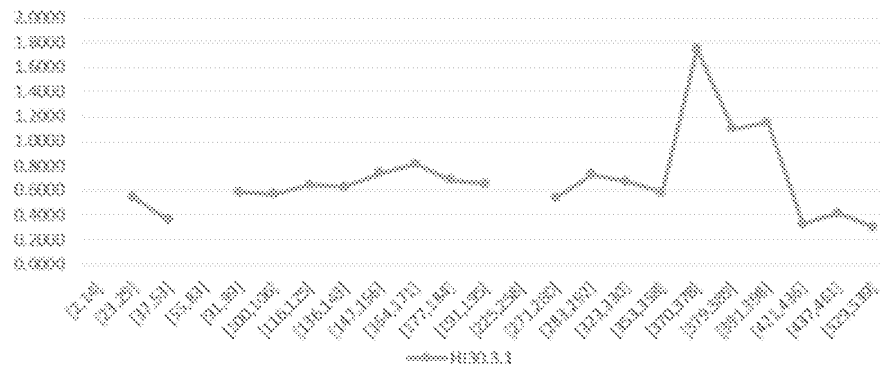


FIG. 6B

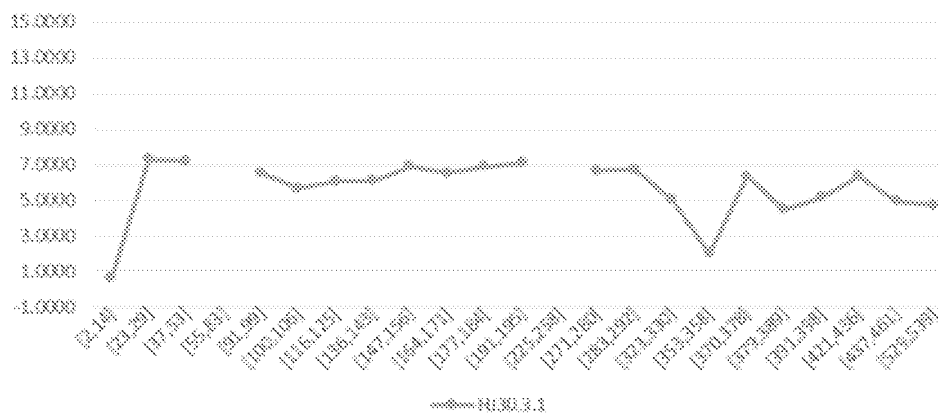


FIG. 6C

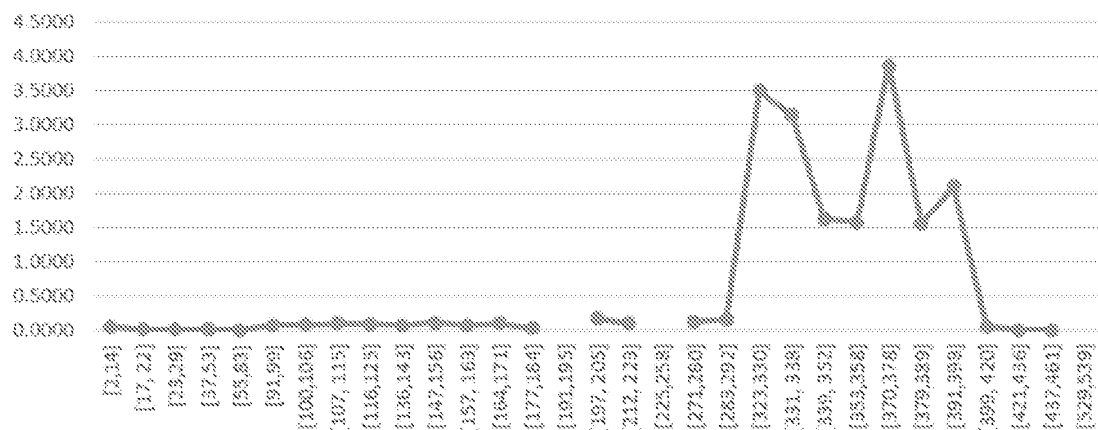


FIG. 7A

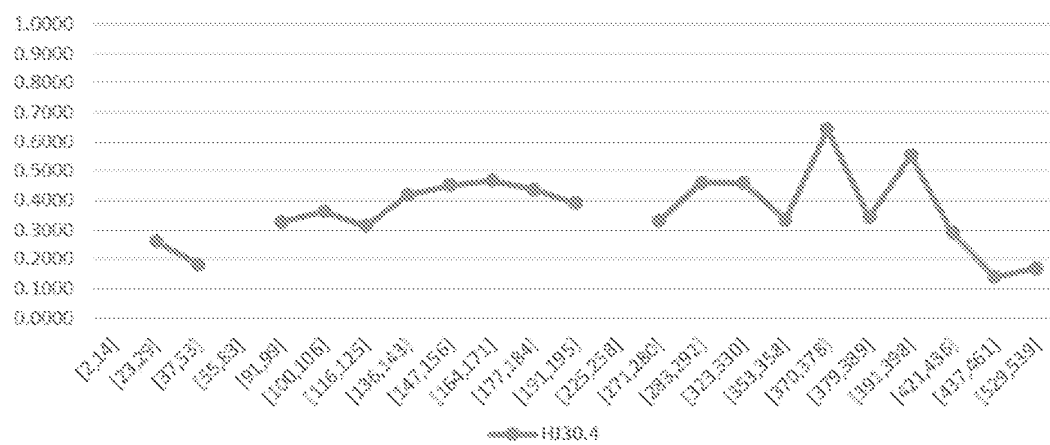


FIG. 7B

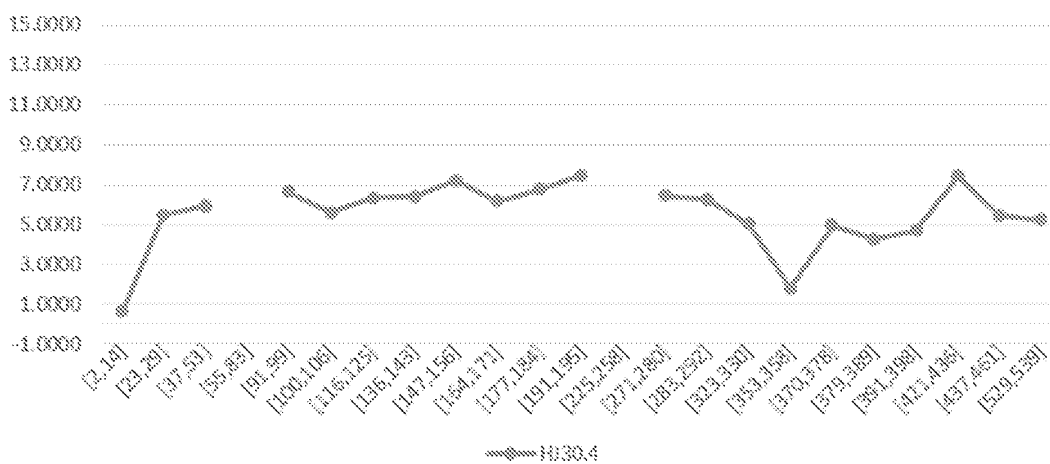


FIG. 7C

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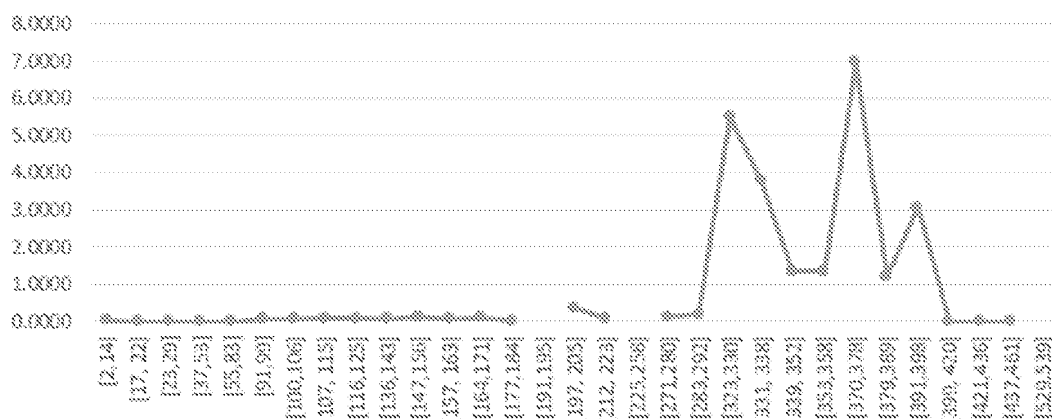


FIG. 8A



FIG. 8B

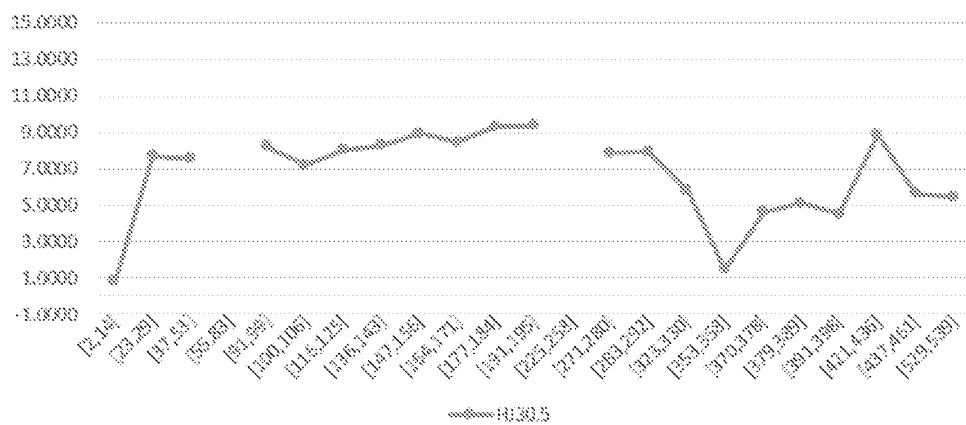


FIG. 8C

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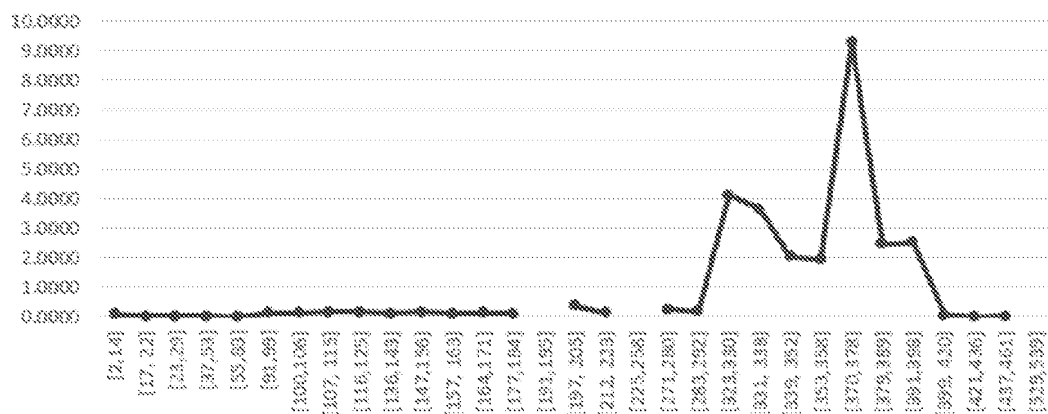


FIG. 9A

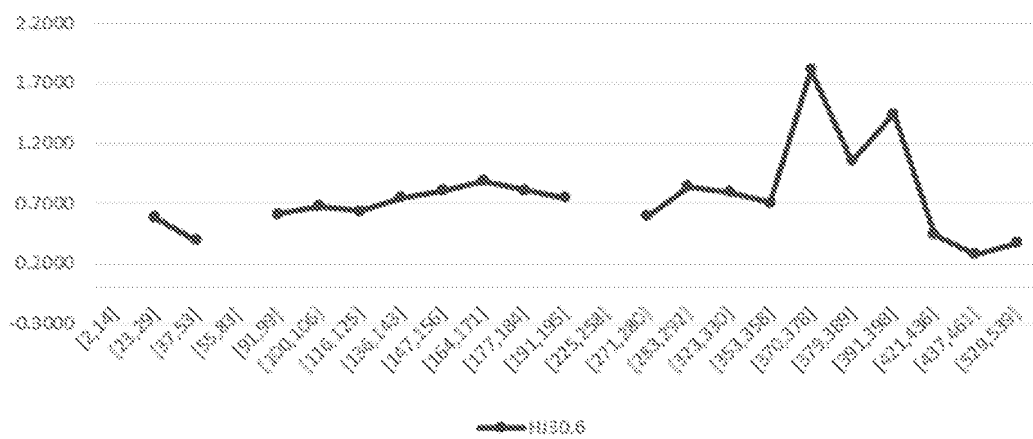


FIG. 9B

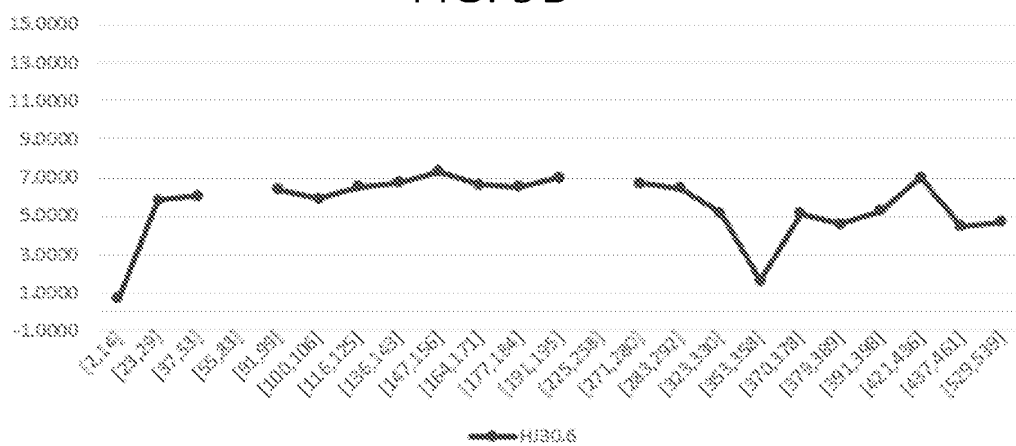


FIG. 9C

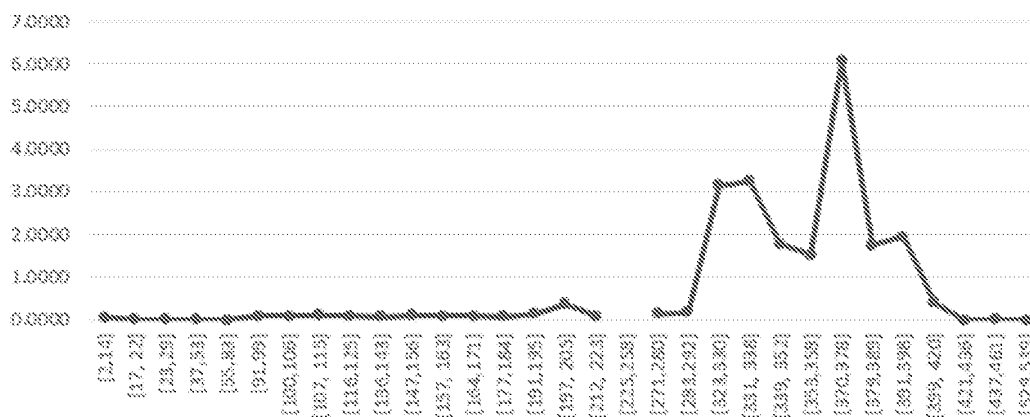


FIG. 10A

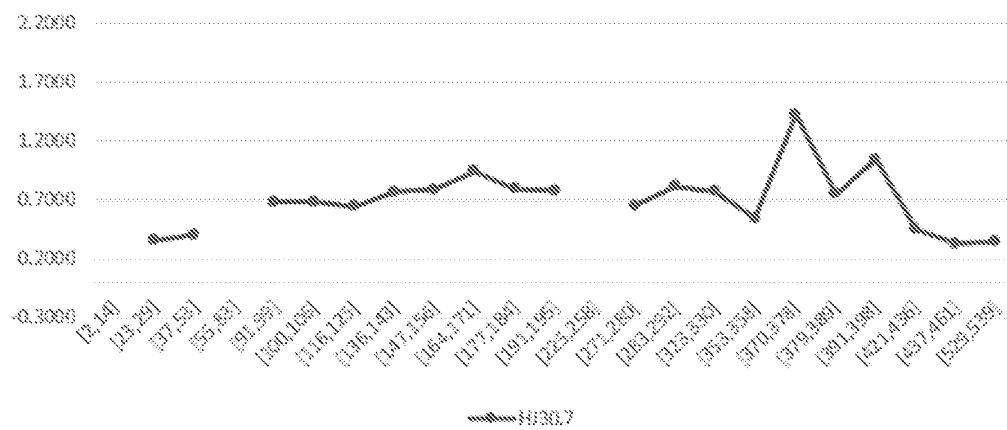


FIG. 10B

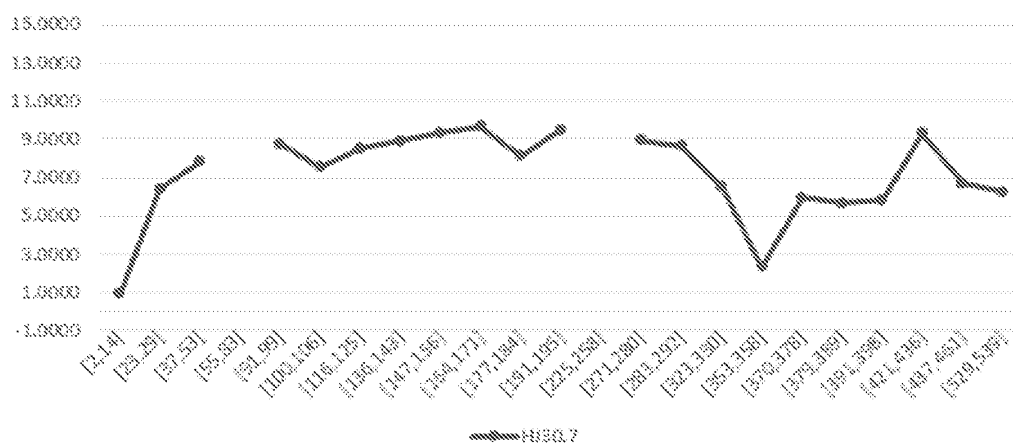


FIG. 10C

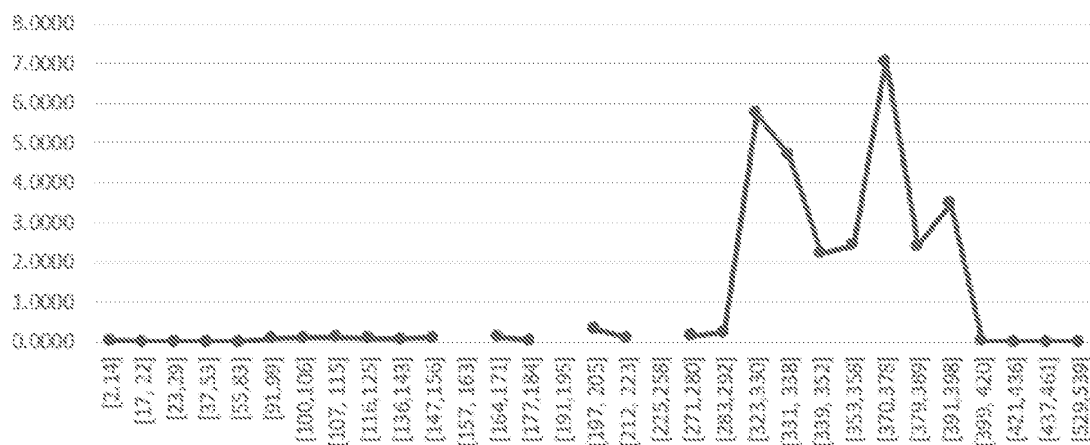


FIG. 11A

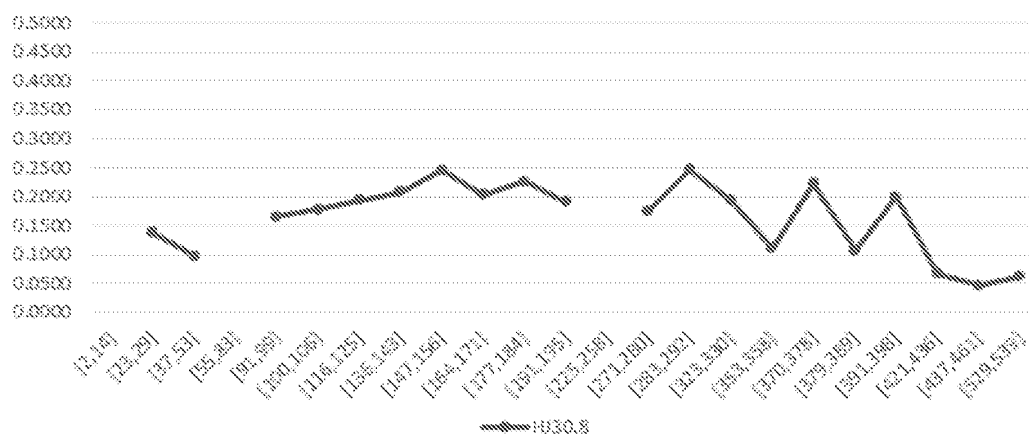


FIG. 11B

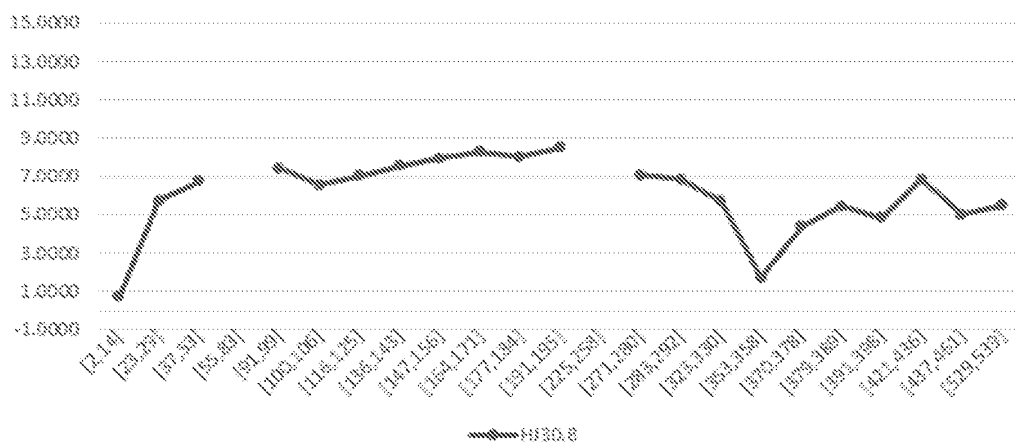


FIG. 11C

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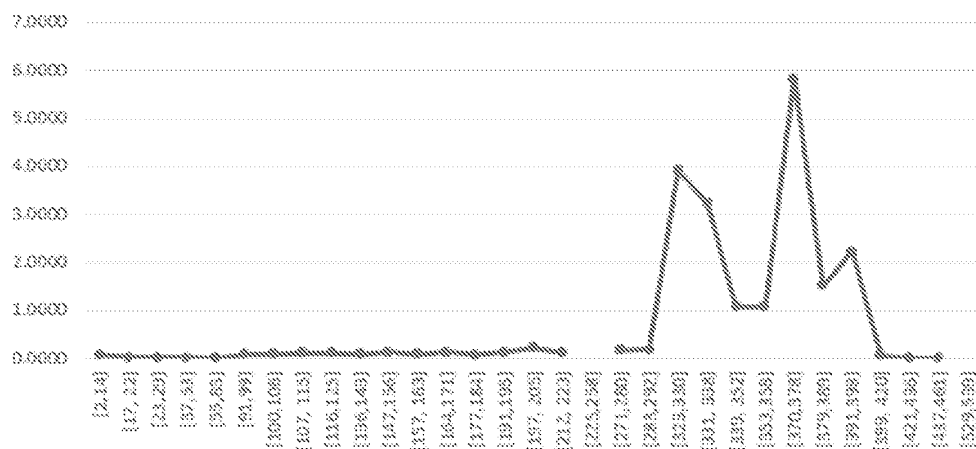


FIG. 12A

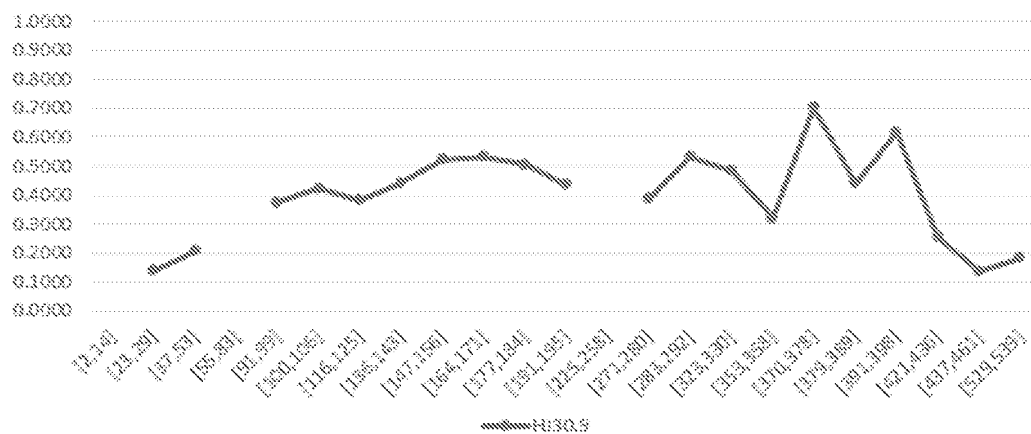


FIG. 12B

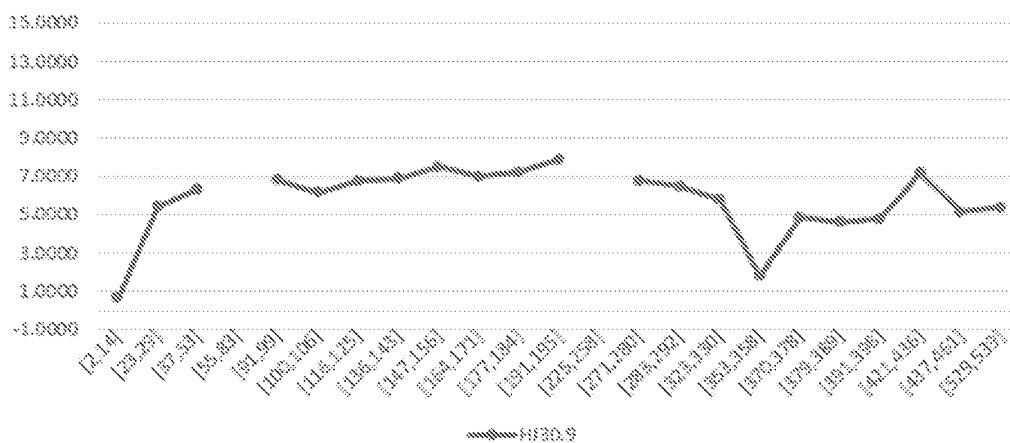


FIG. 12C

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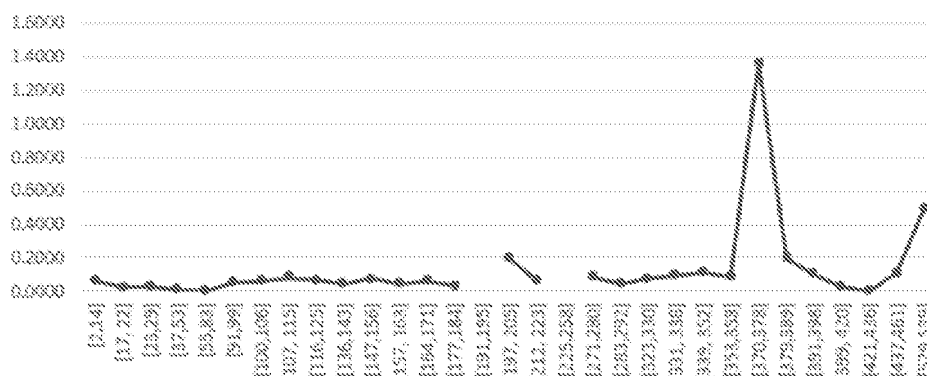


FIG. 13A

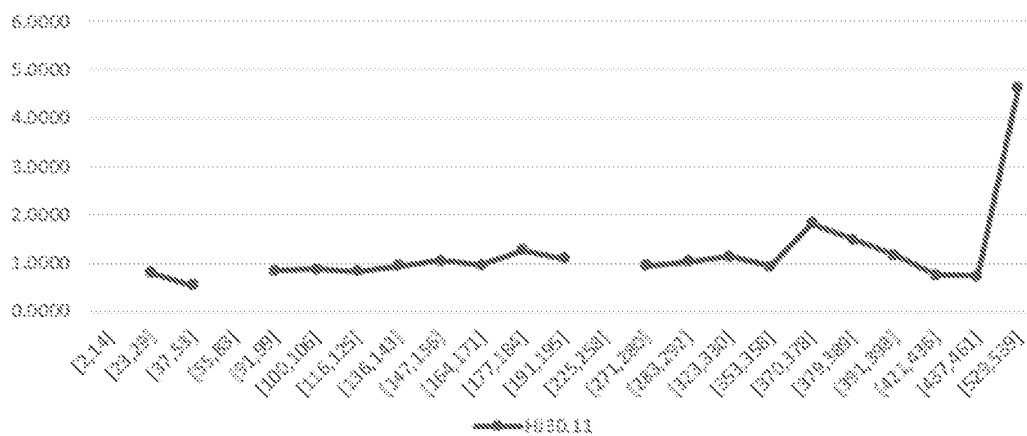


FIG. 13B

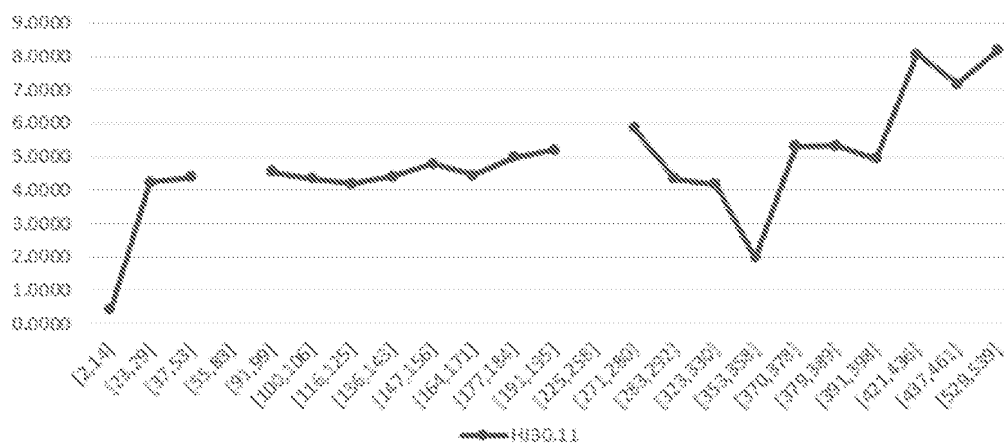


FIG. 13C

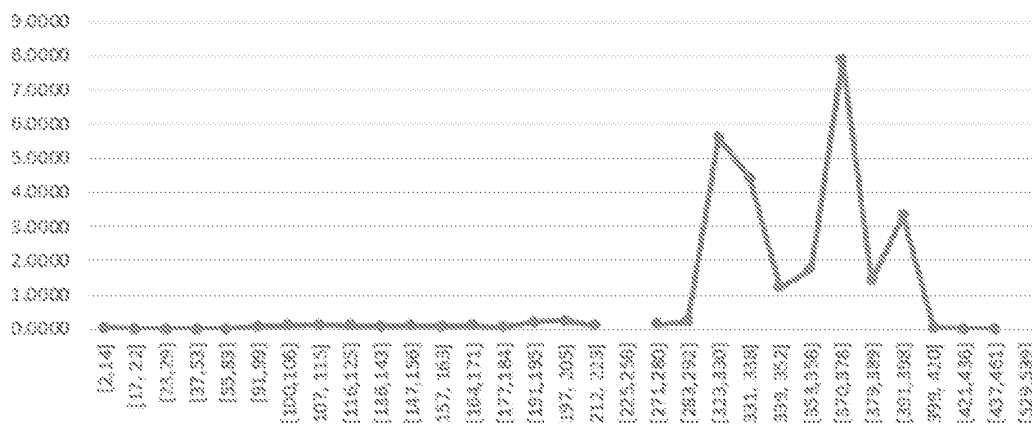


FIG. 14A

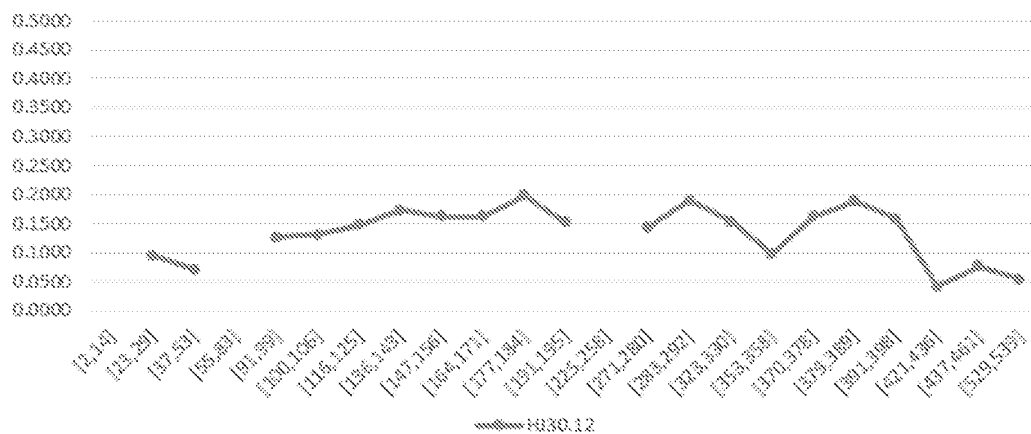


FIG. 14B

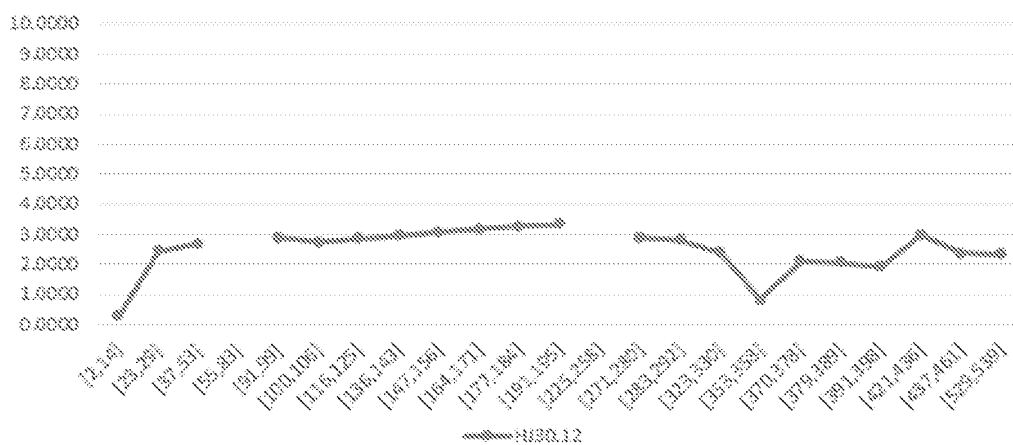


FIG. 14C

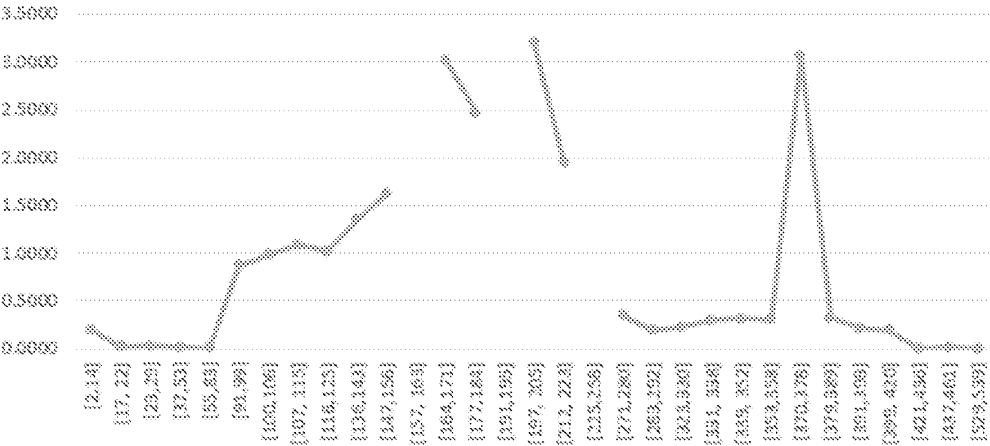


FIG. 15A

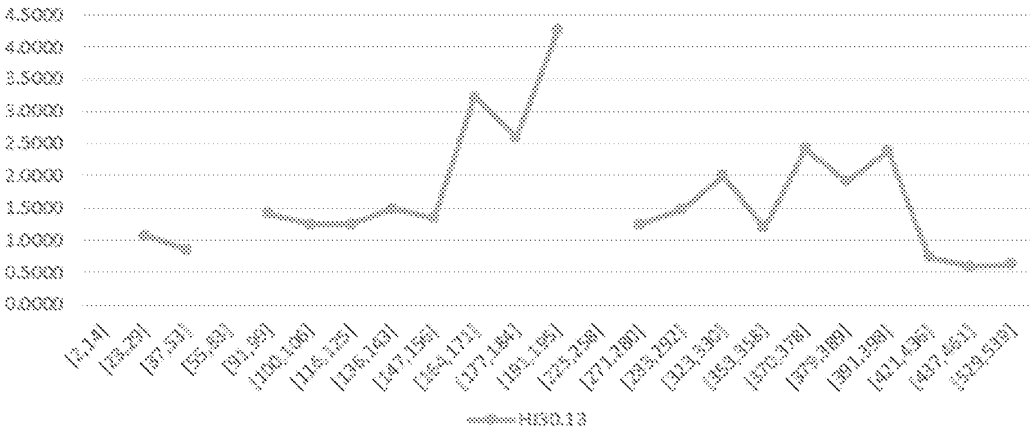


FIG. 15B

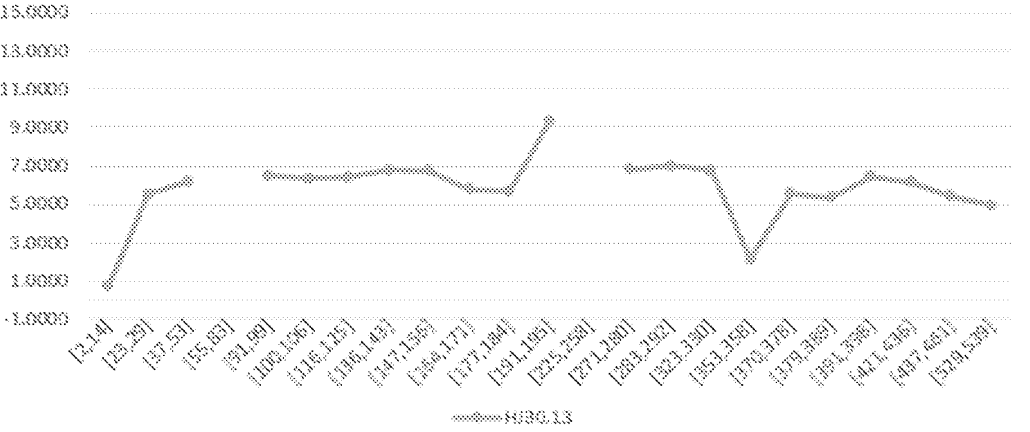


FIG. 15C

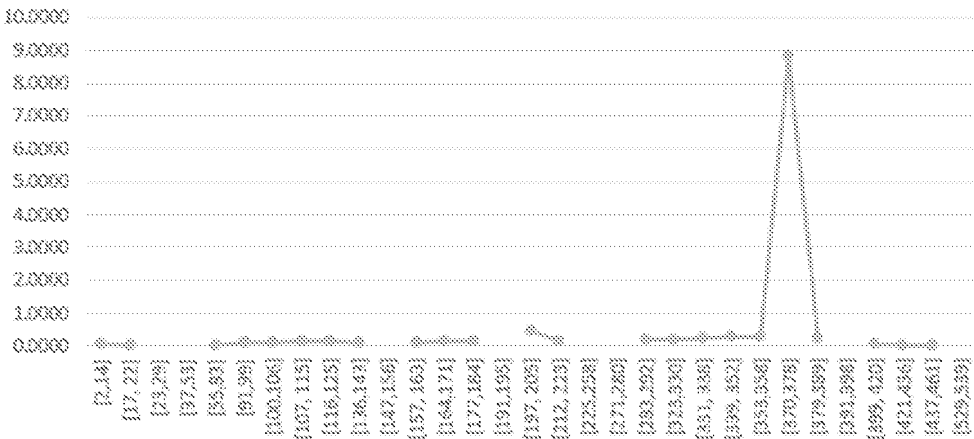


FIG. 16A

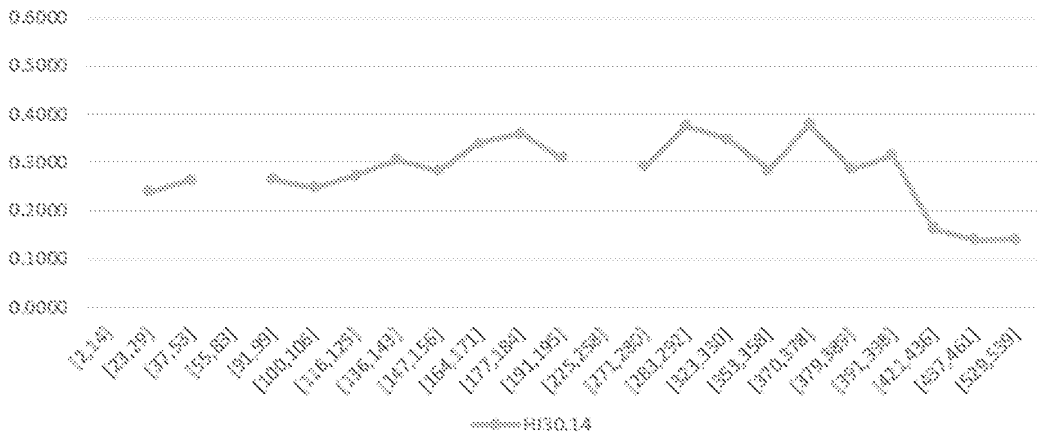


FIG. 16B

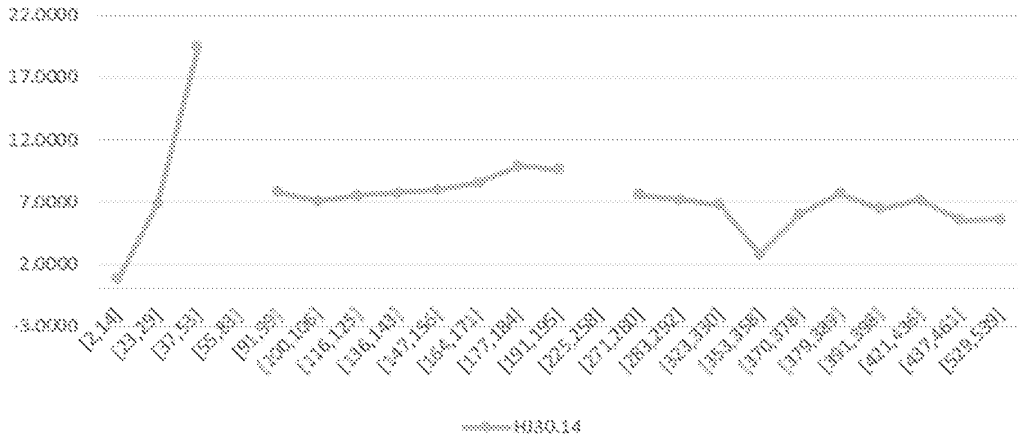


FIG. 16C

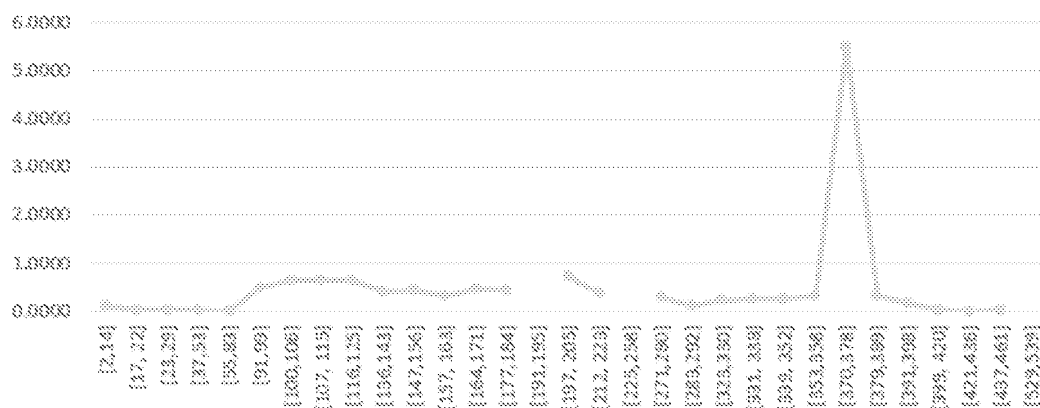


FIG. 17A

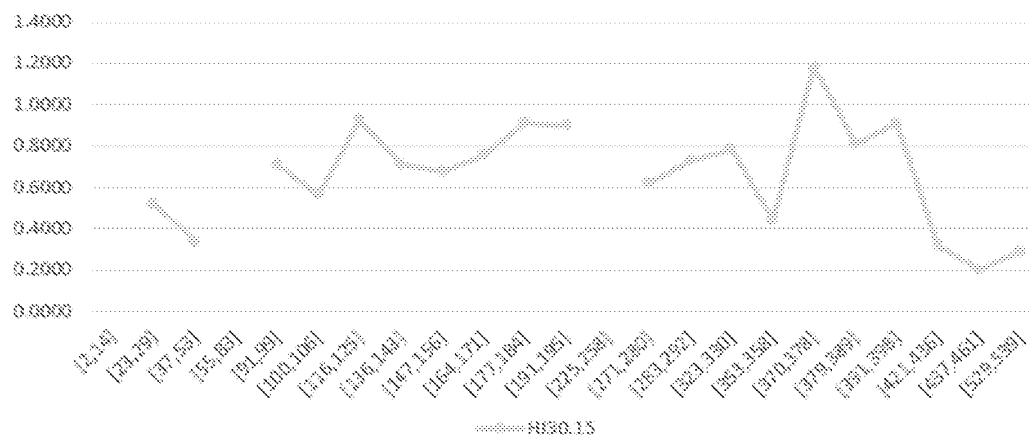


FIG. 17B

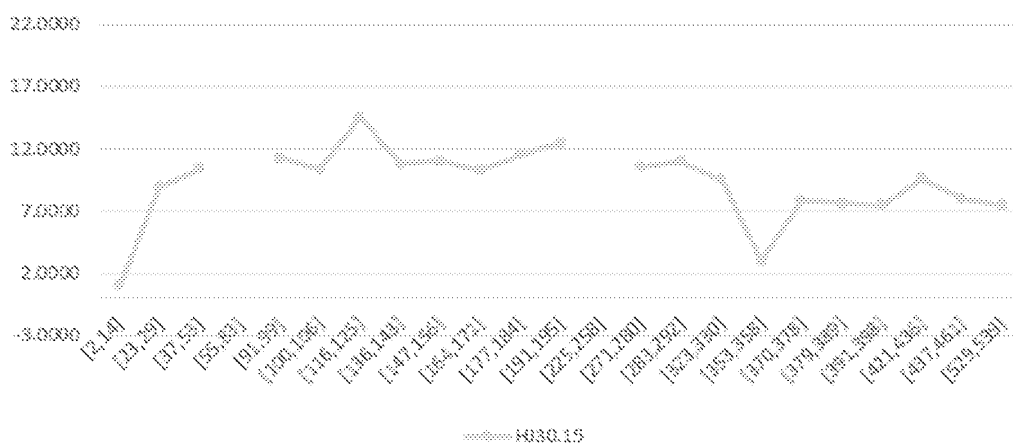


FIG. 17C

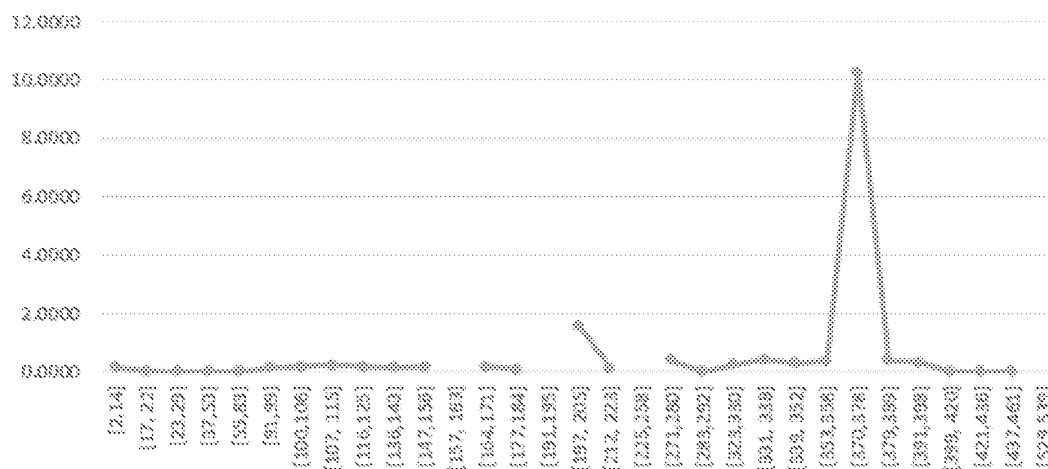


FIG. 18A

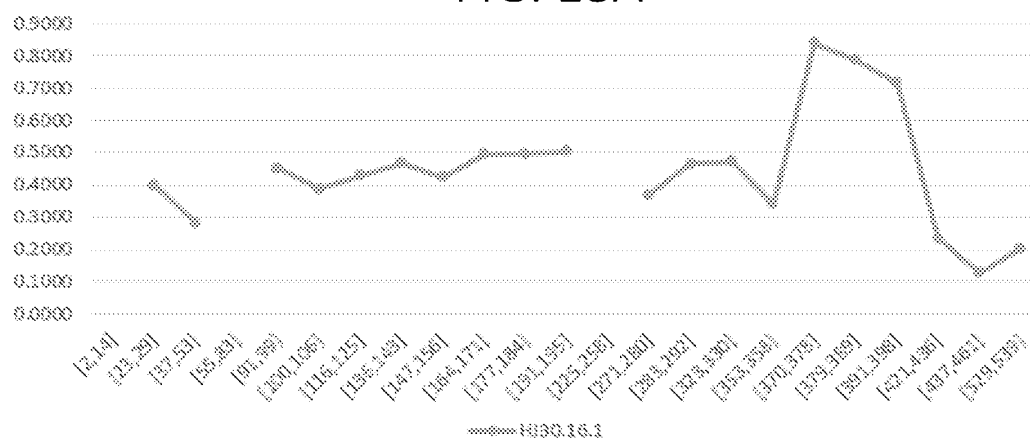


FIG. 18B

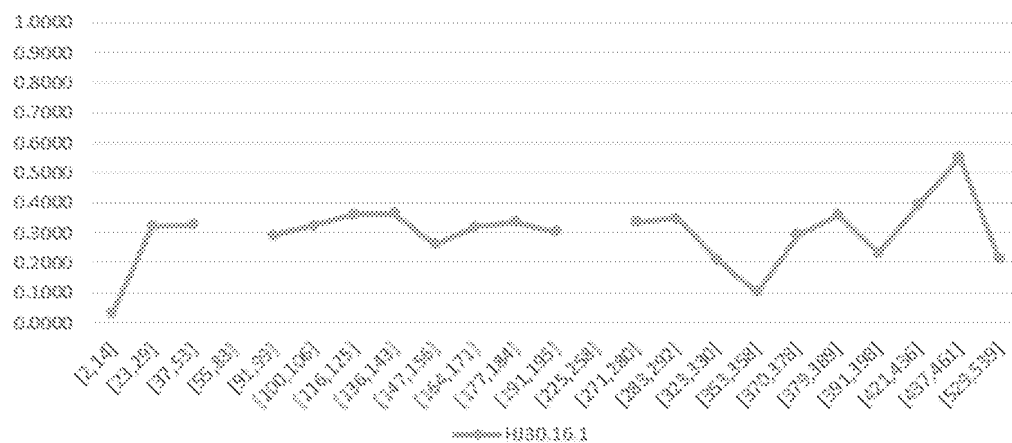


FIG. 18C

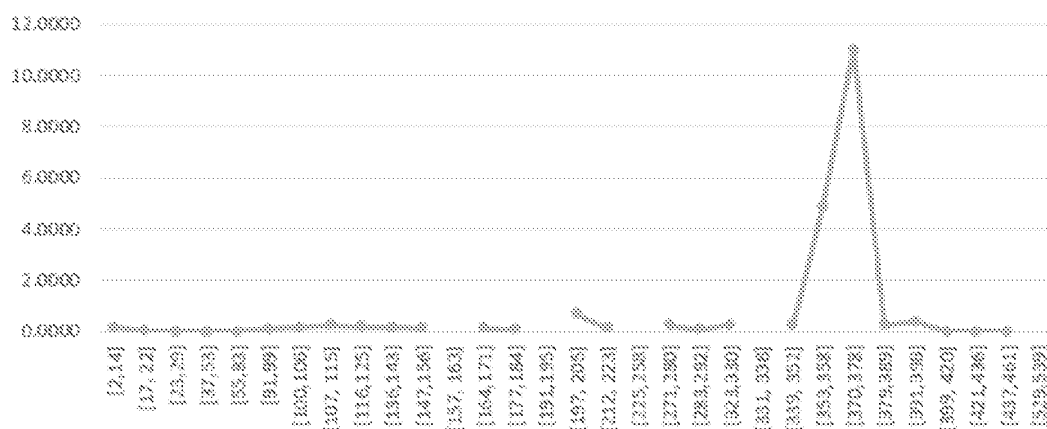


FIG. 19A

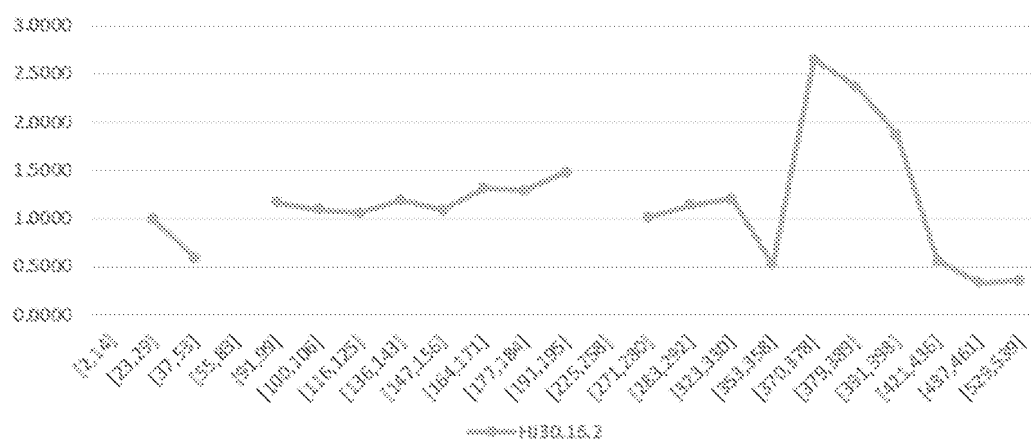


FIG. 19B

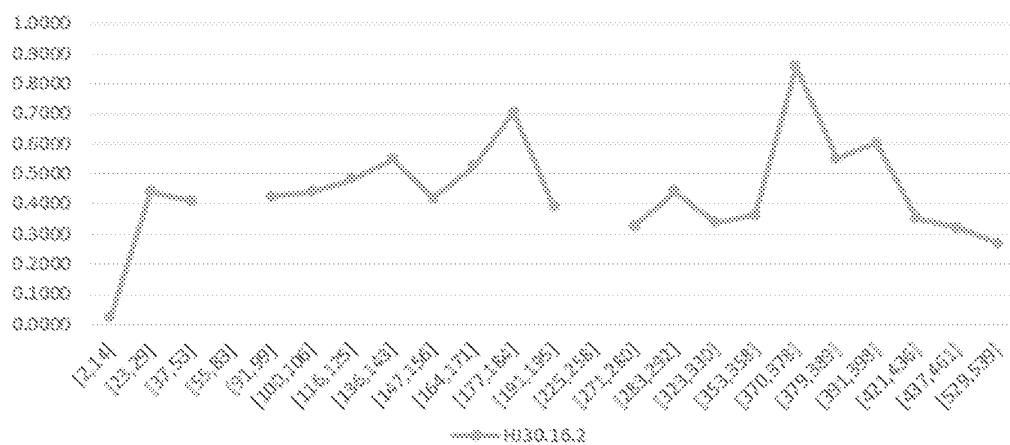


FIG. 19C

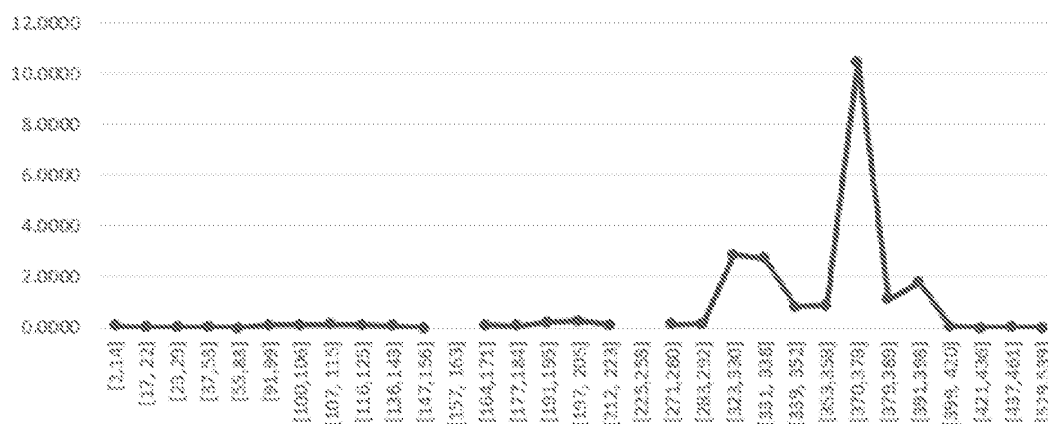


FIG. 20A

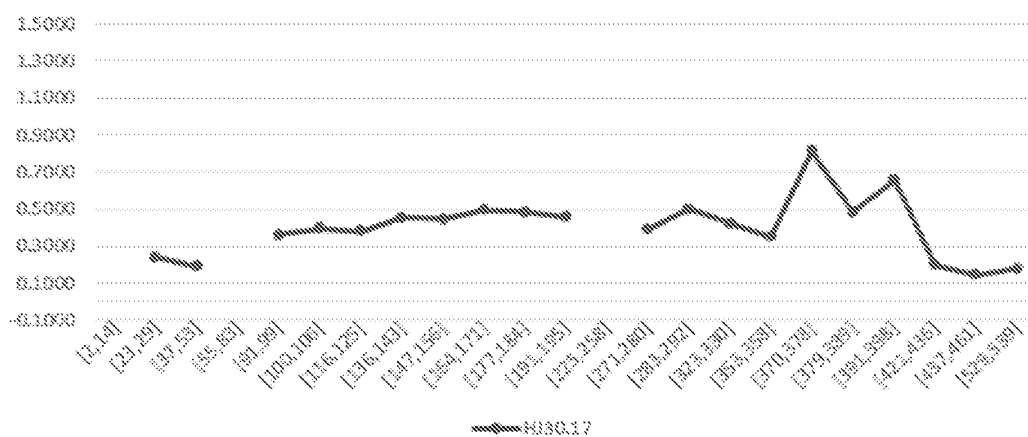


FIG. 20B

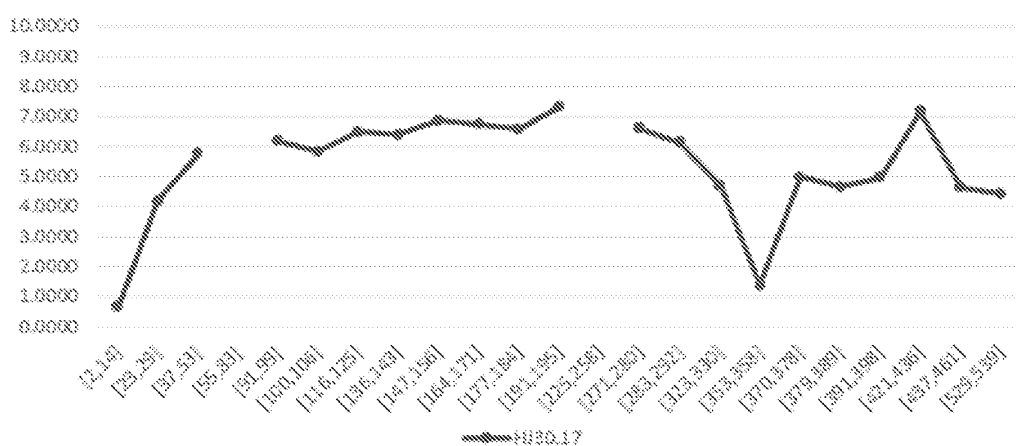


FIG. 20C

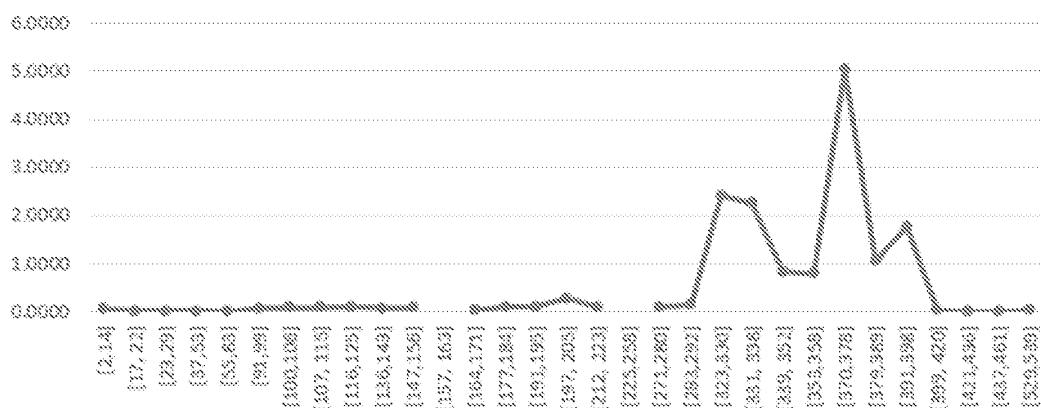


FIG. 21A

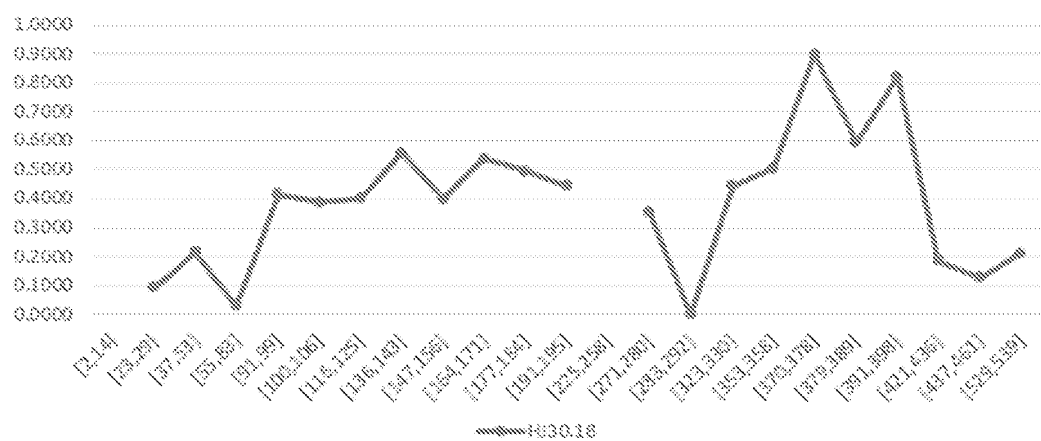


FIG. 21B

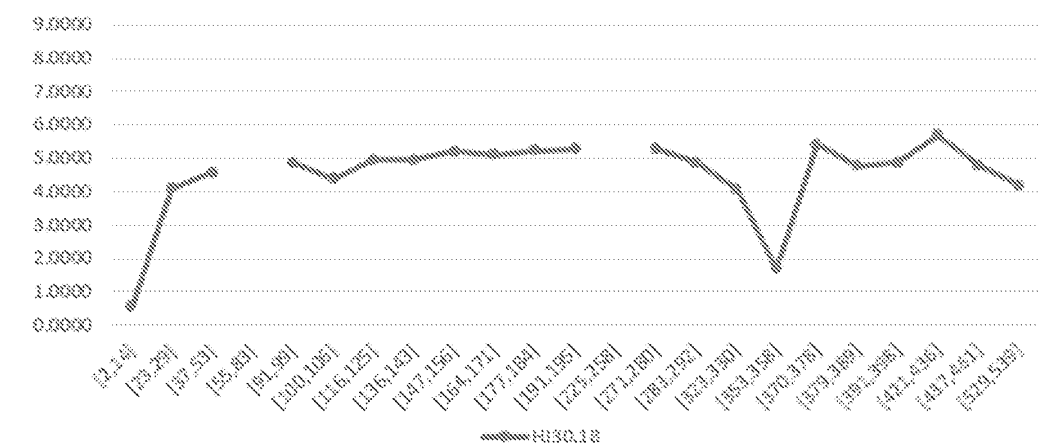
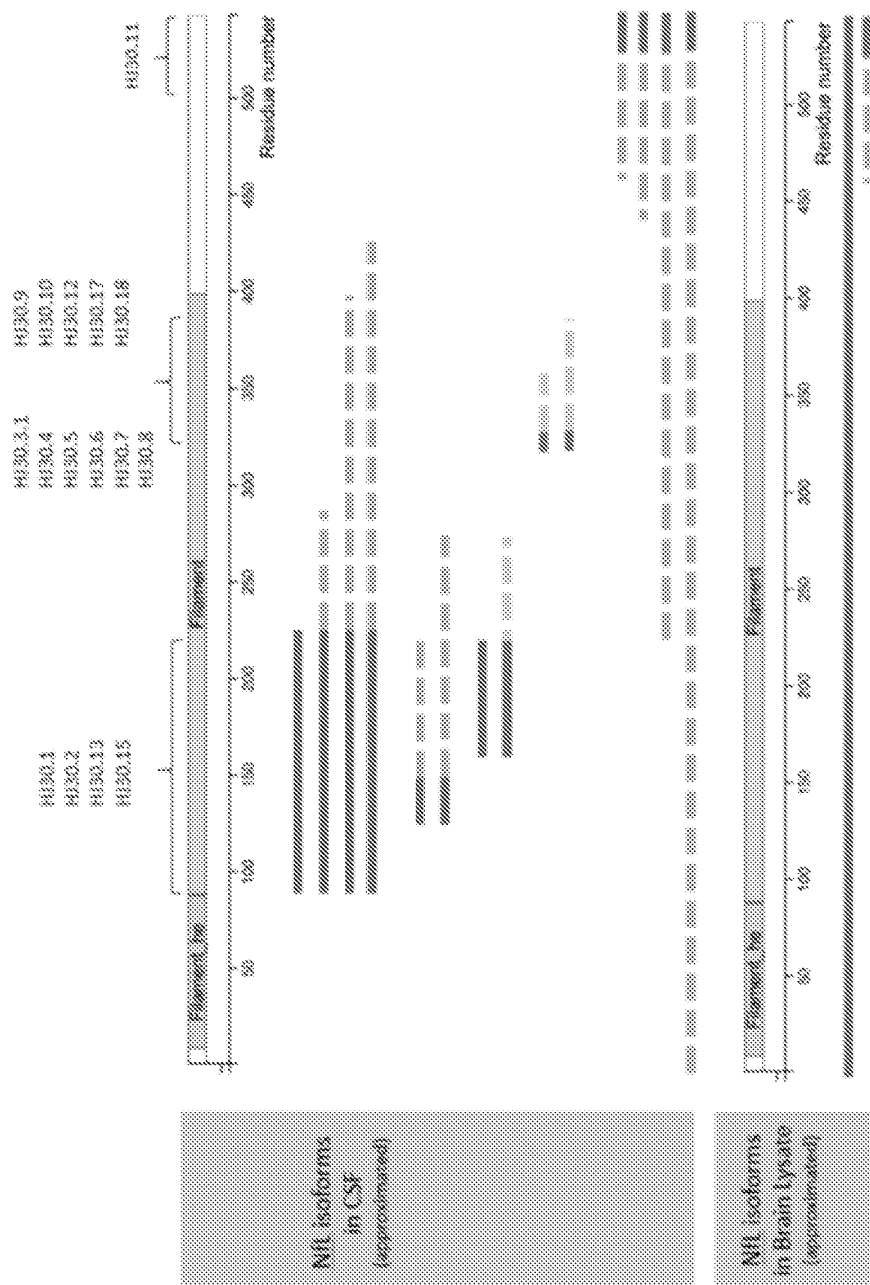


FIG. 21C



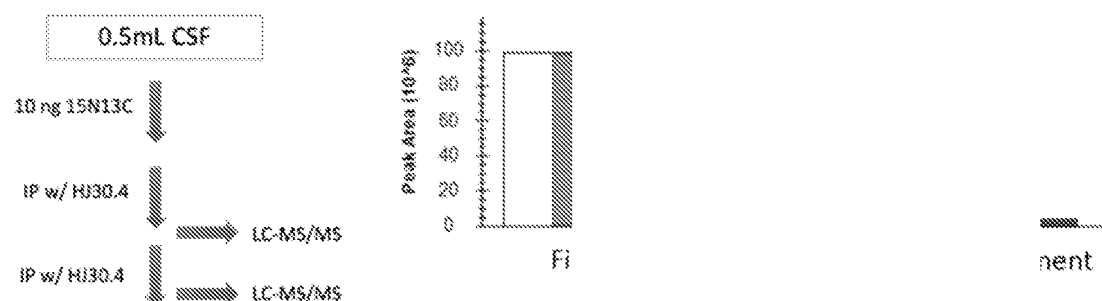


FIG. 23

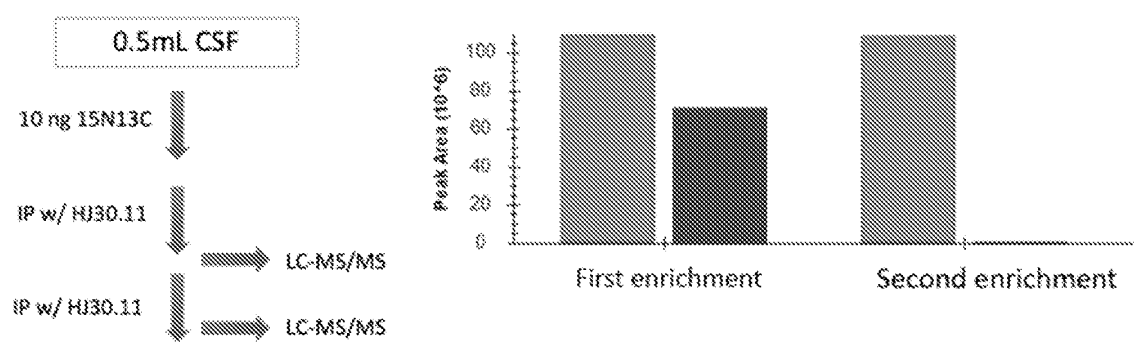


FIG. 24

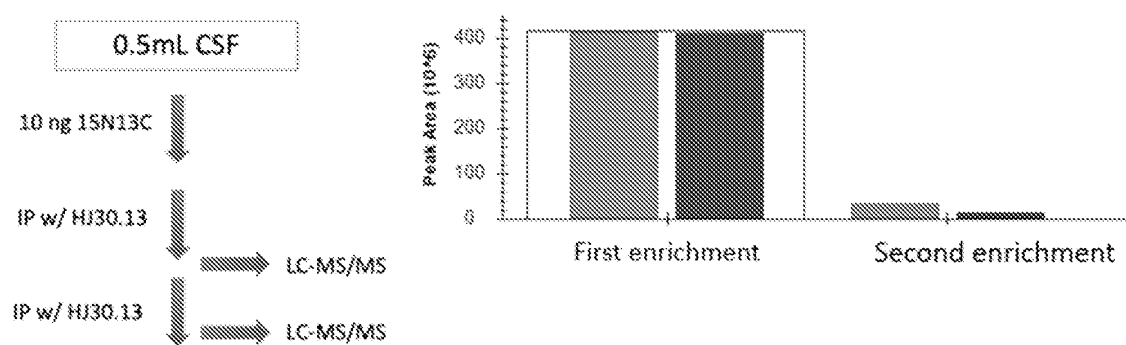


FIG. 25



FIG. 26

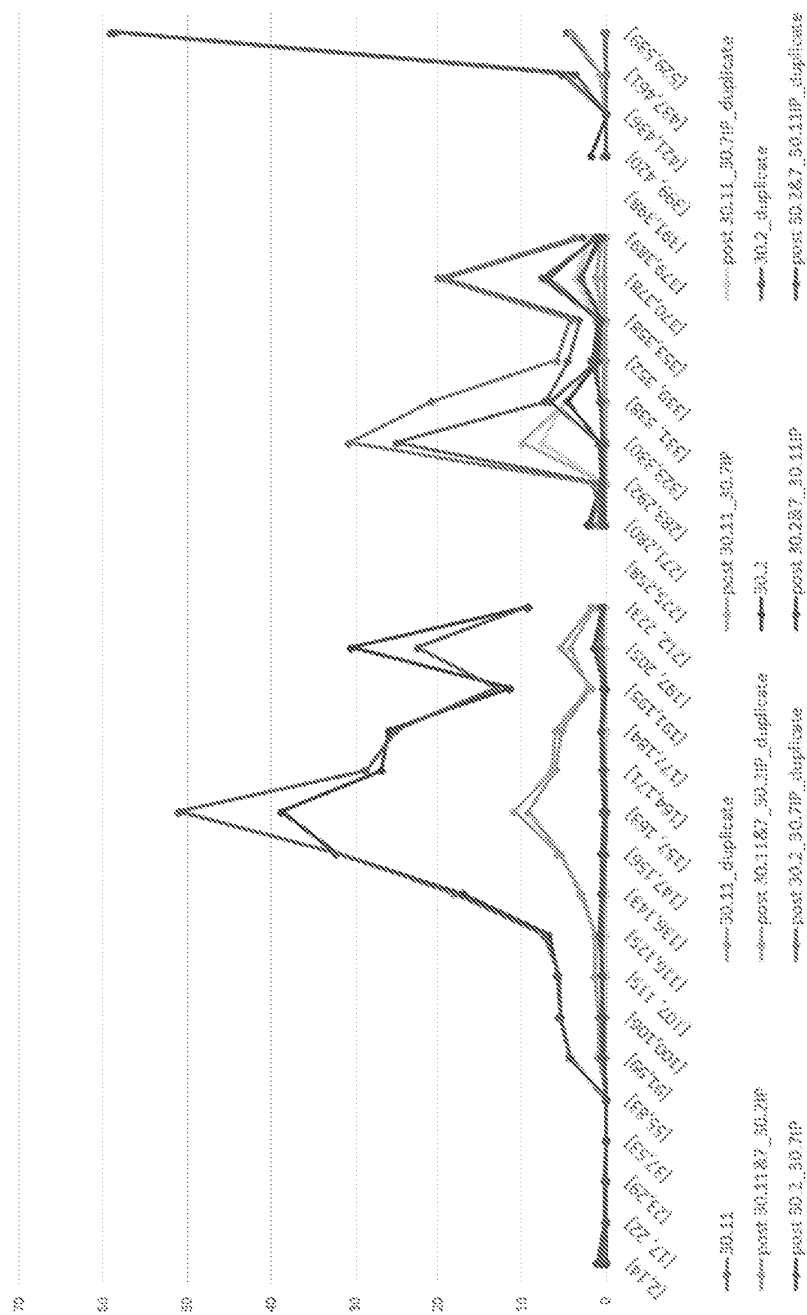


FIG. 27

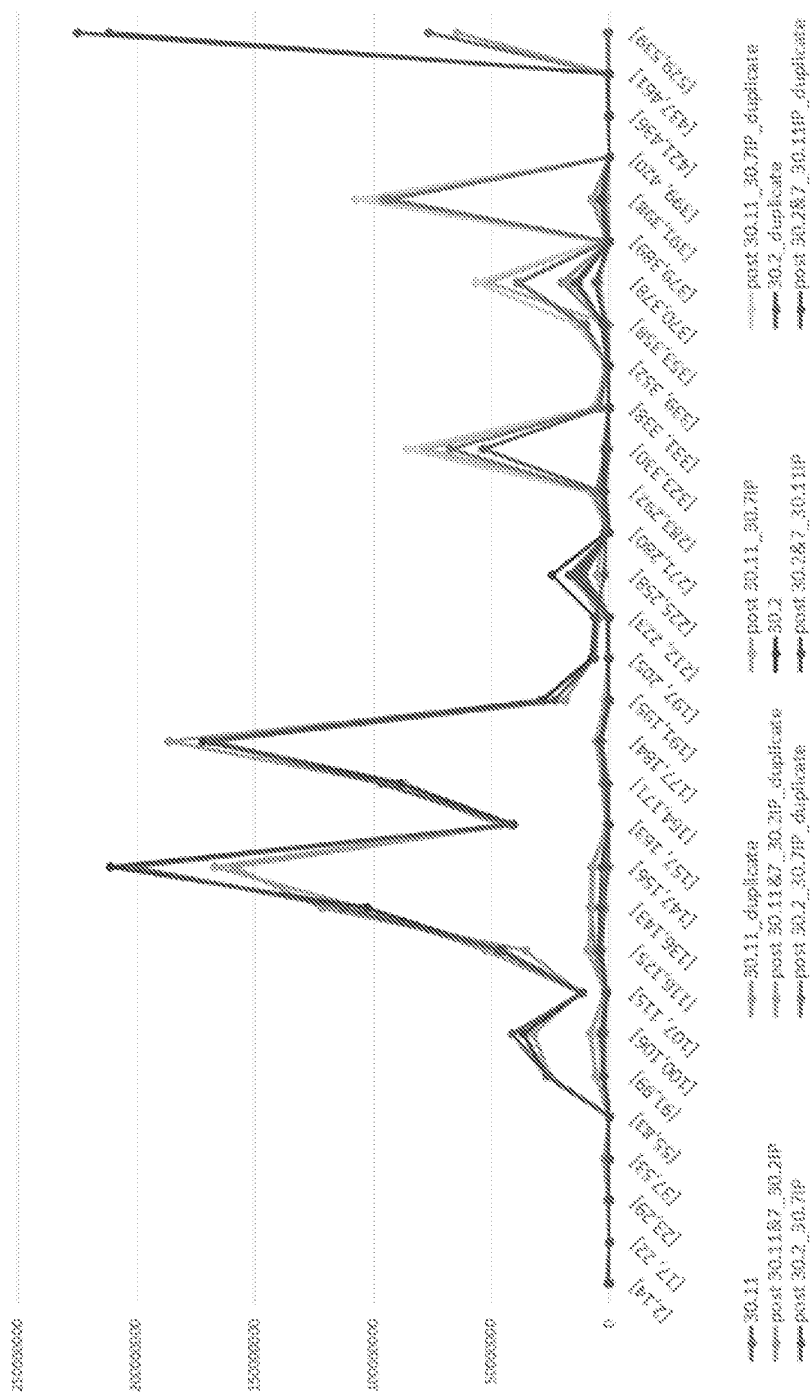


FIG. 28

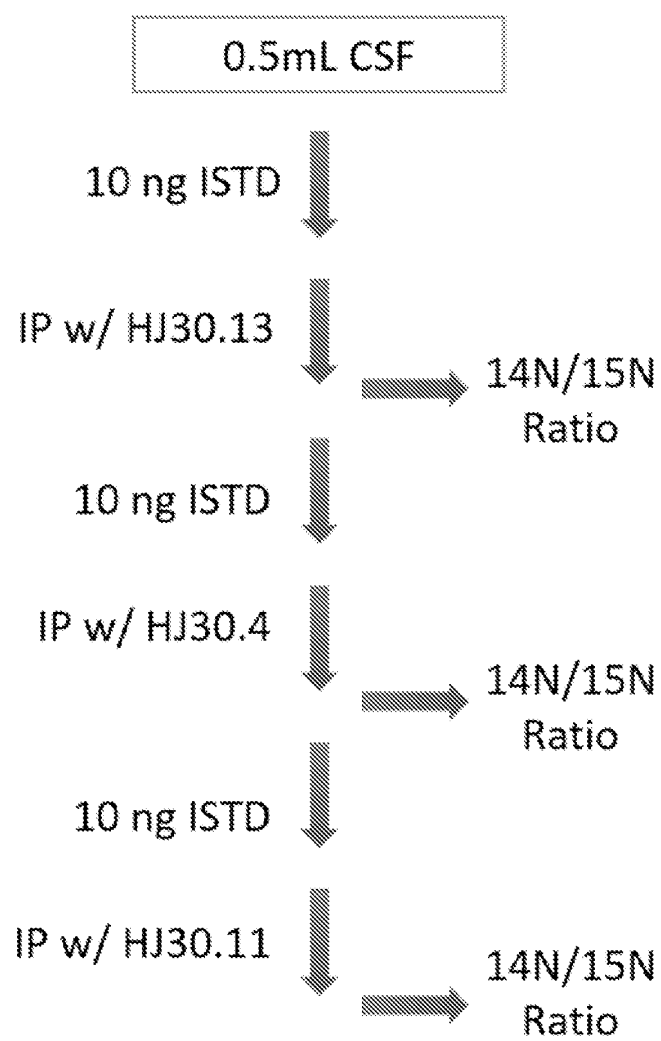


FIG. 29

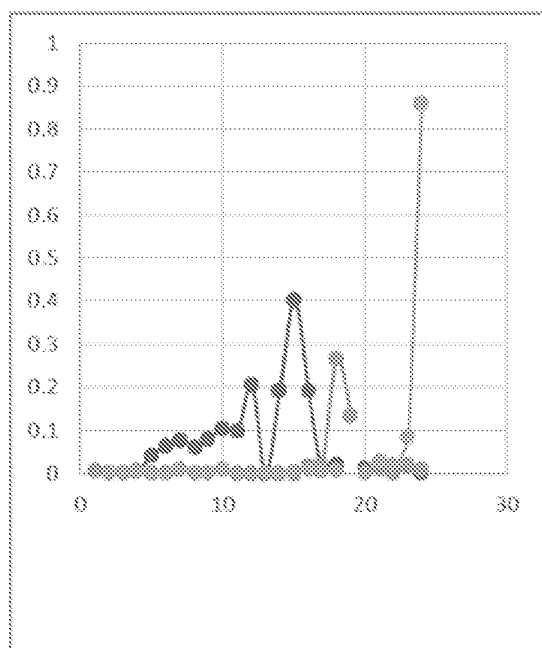


FIG. 30

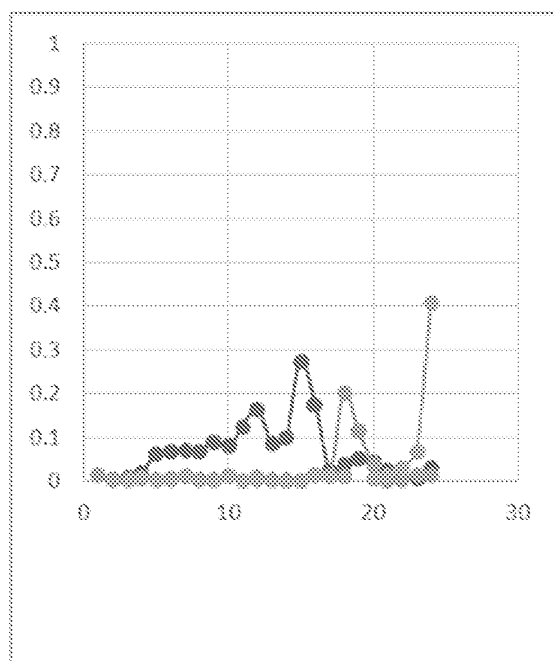


FIG. 31

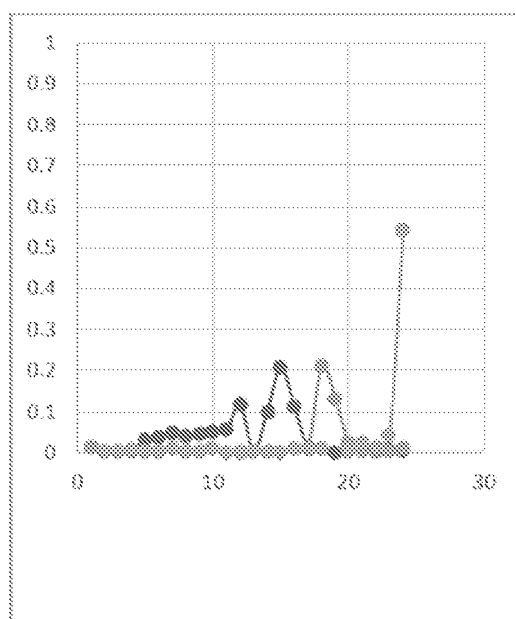


FIG. 32

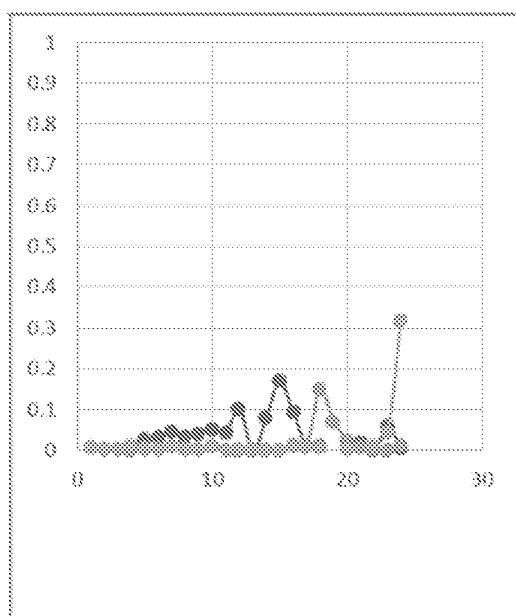


FIG. 33

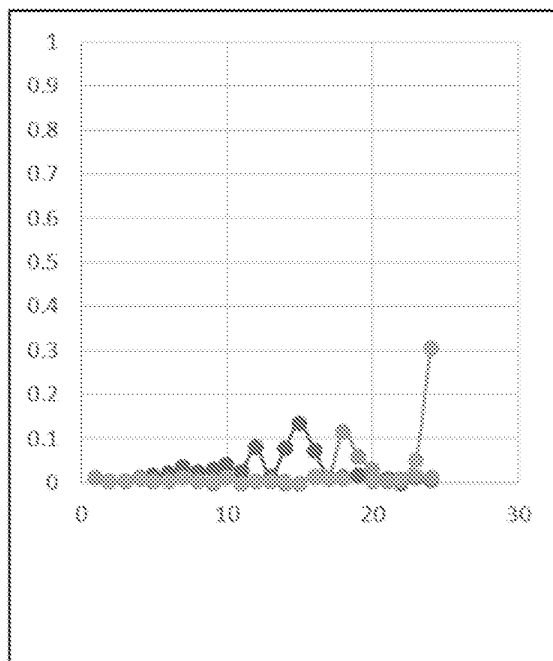


FIG. 34

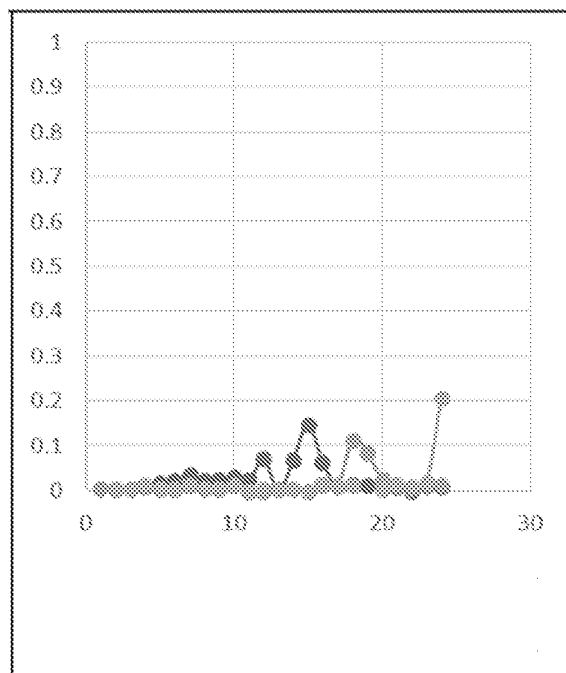


FIG. 35

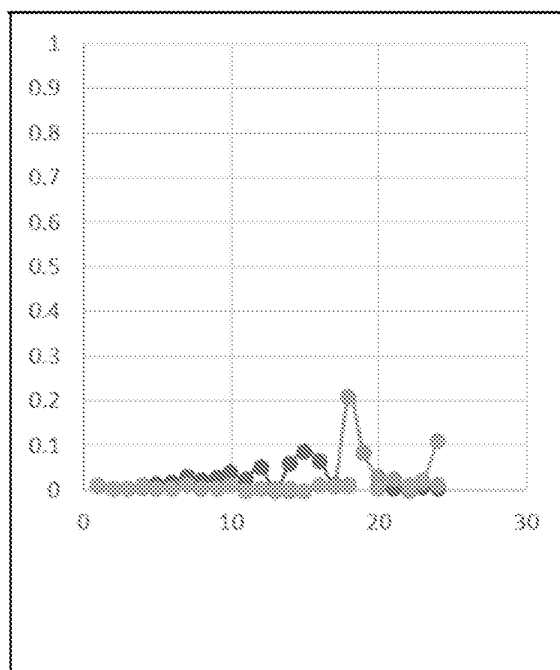


FIG. 36

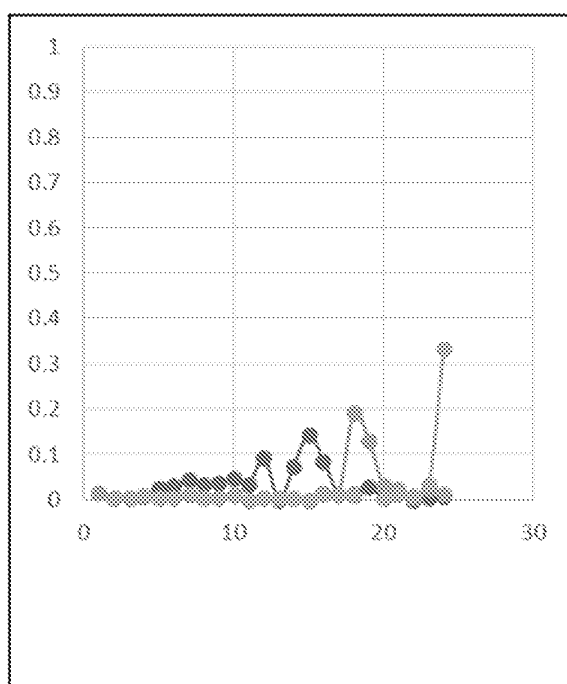


FIG. 37

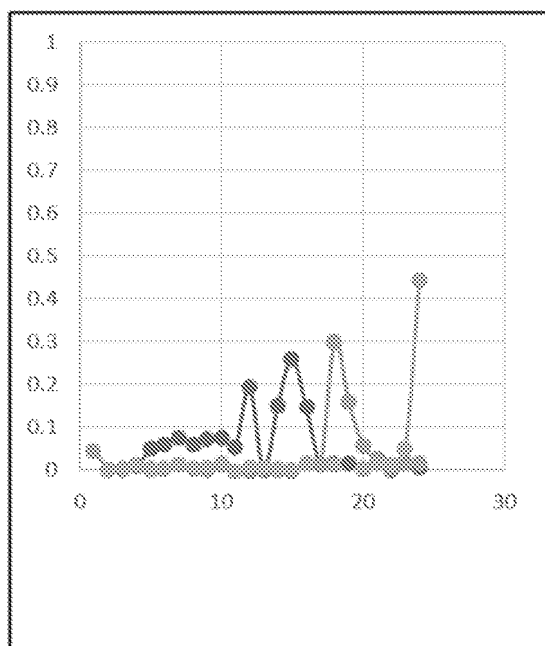


FIG. 38

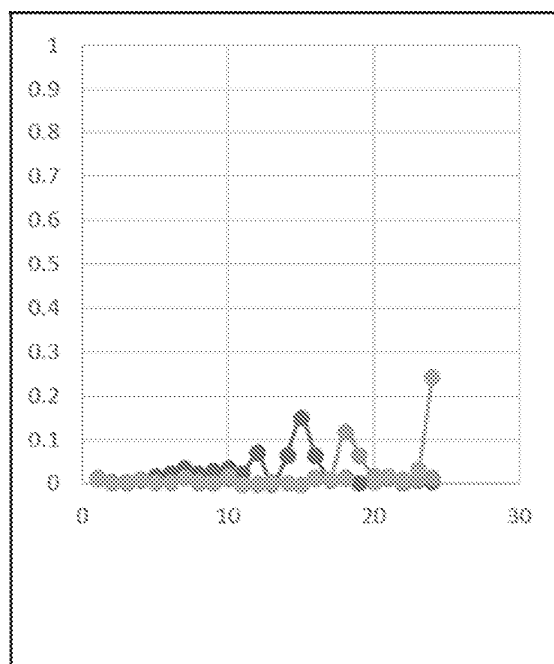


FIG. 39

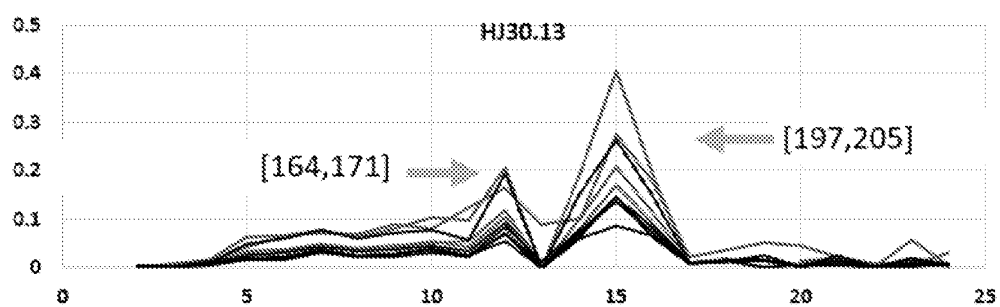


FIG. 40A

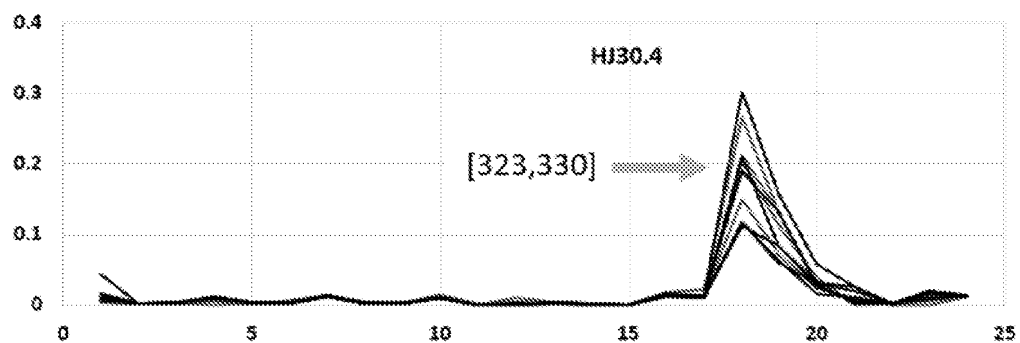


FIG. 40B

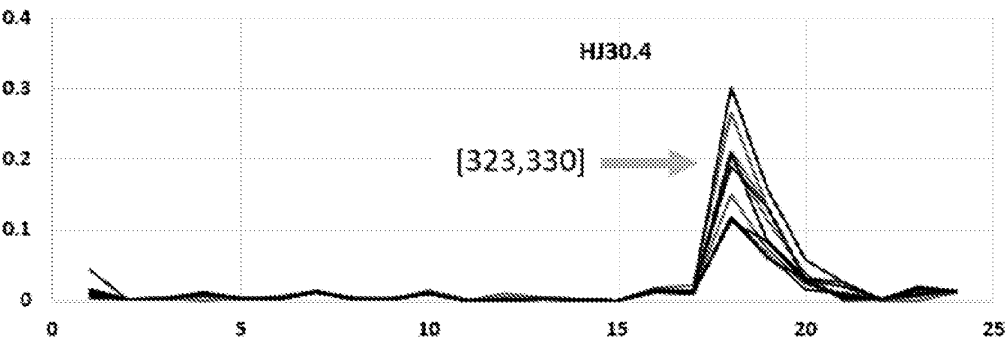


FIG. 40C

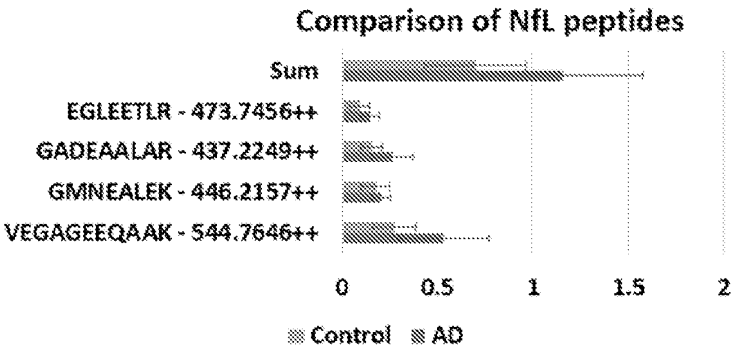


FIG. 40D

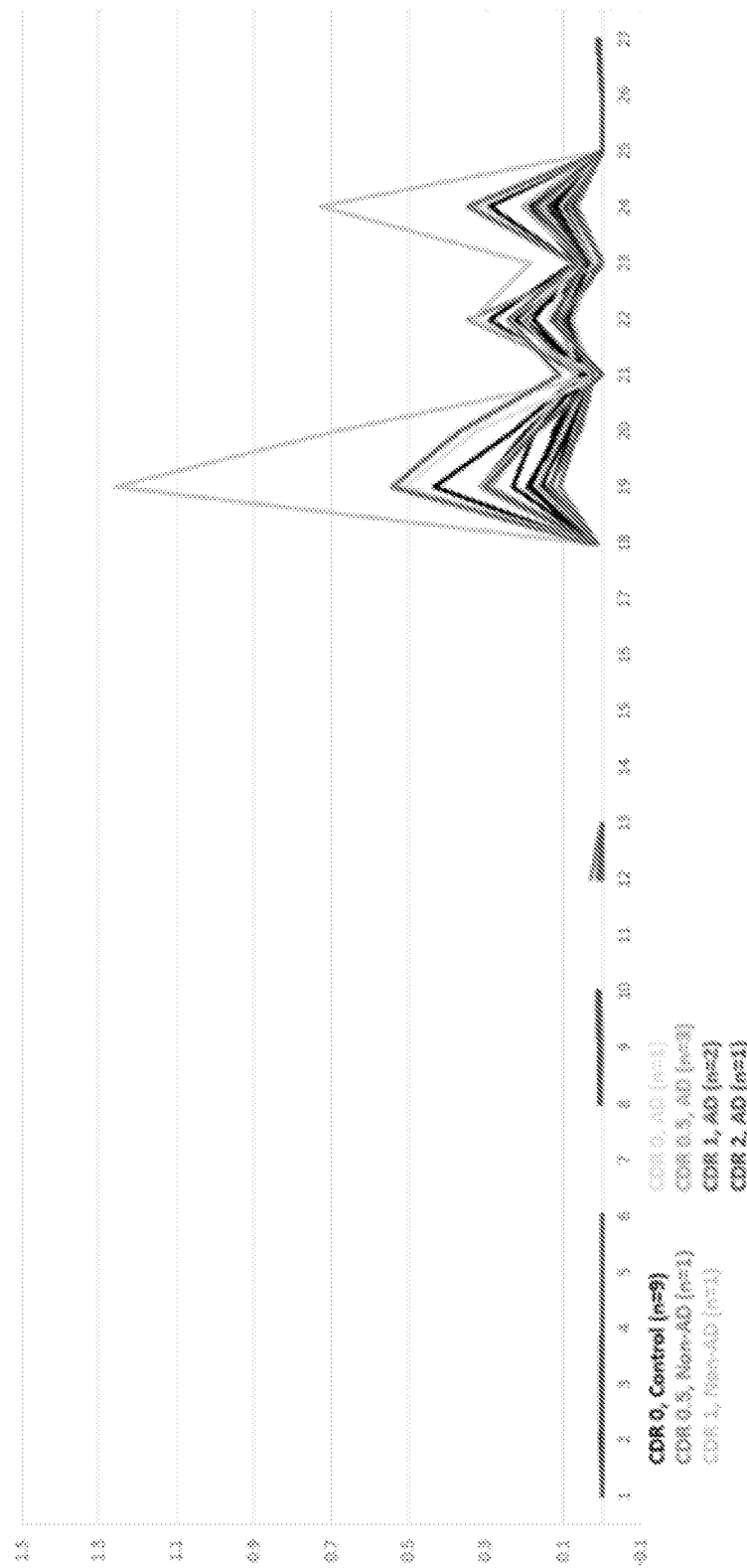


FIG. 41A

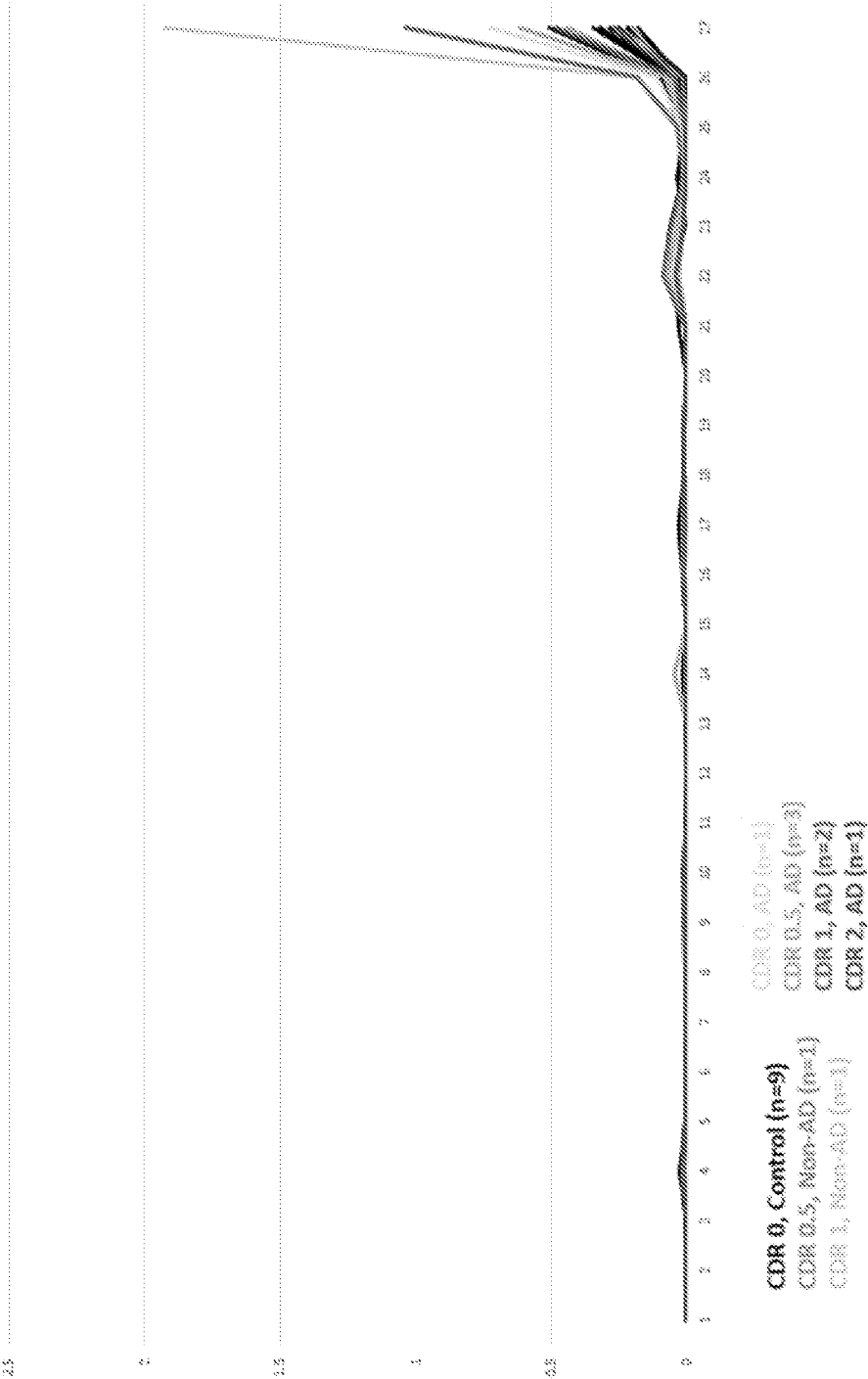


FIG. 41B

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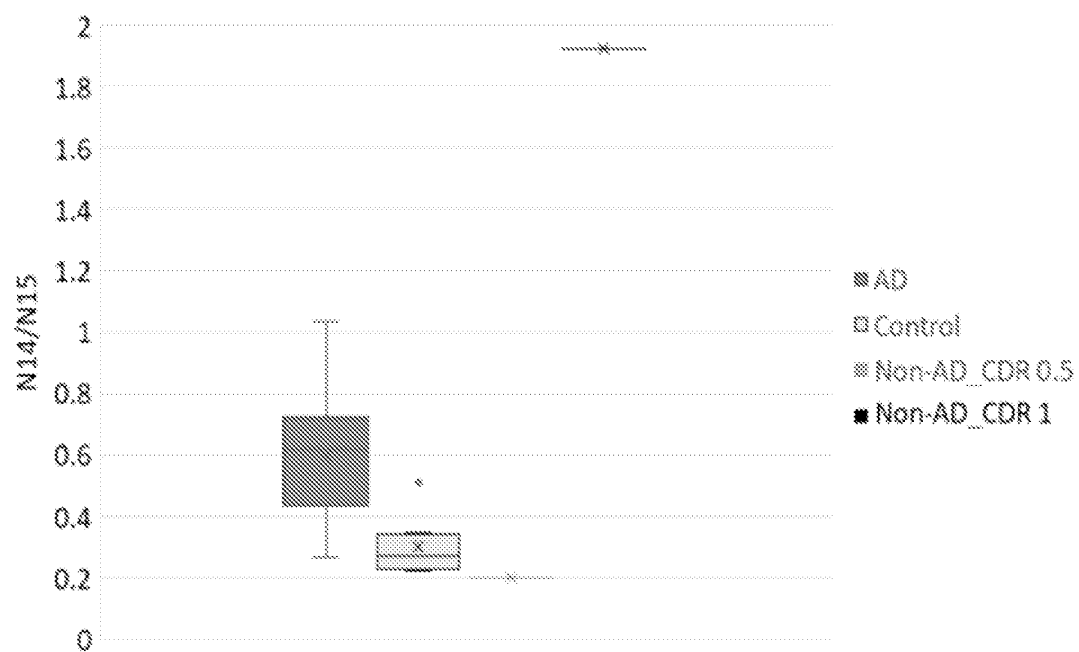


FIG. 41C

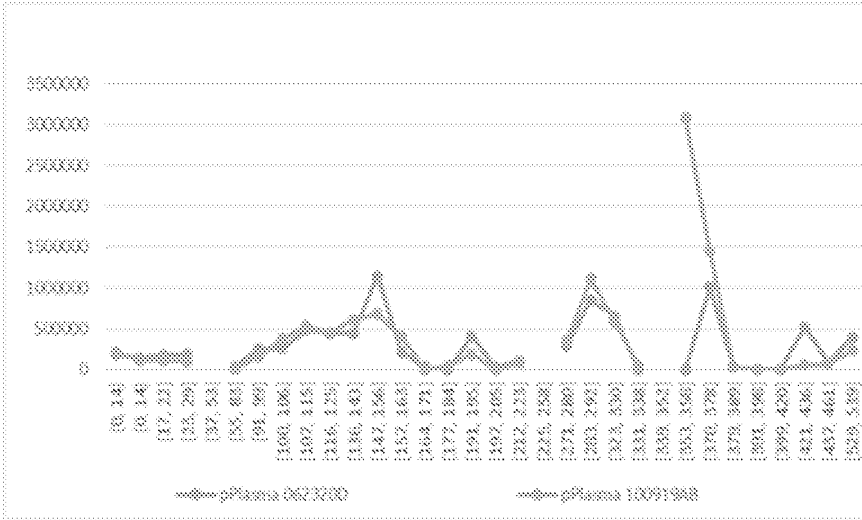


FIG. 42A

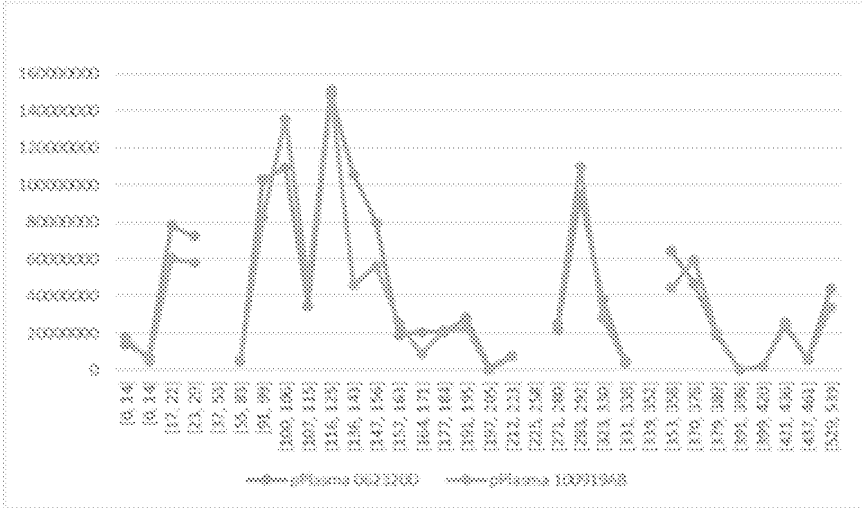


FIG. 42B

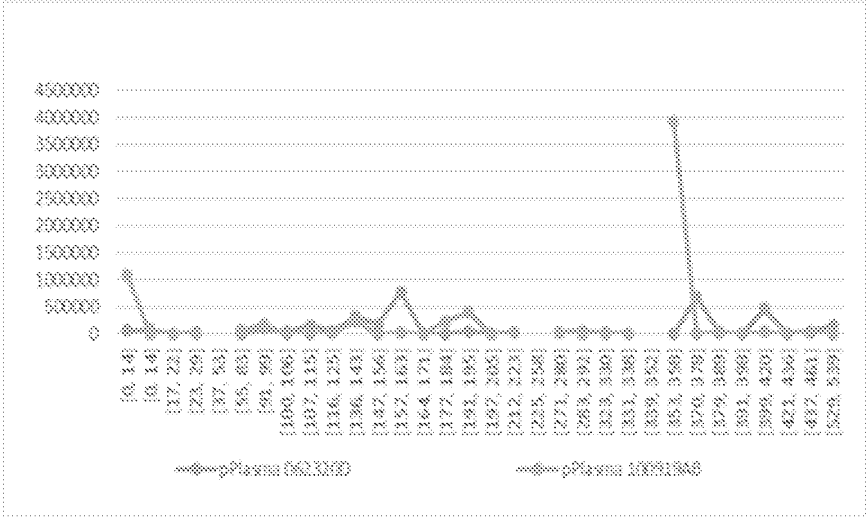


FIG. 43A

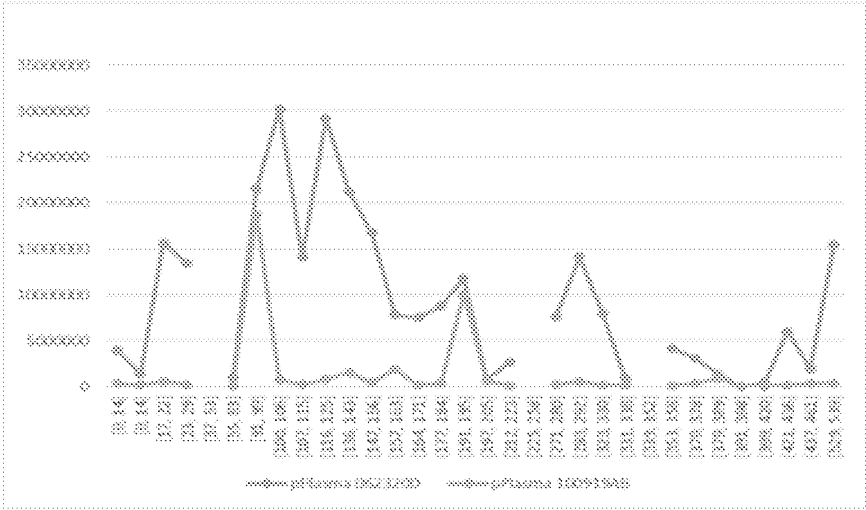


FIG. 43B

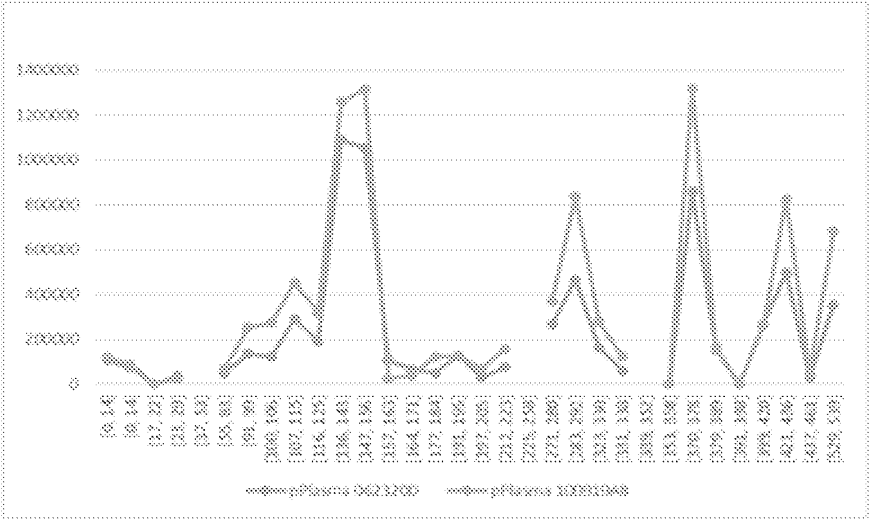


FIG. 44A

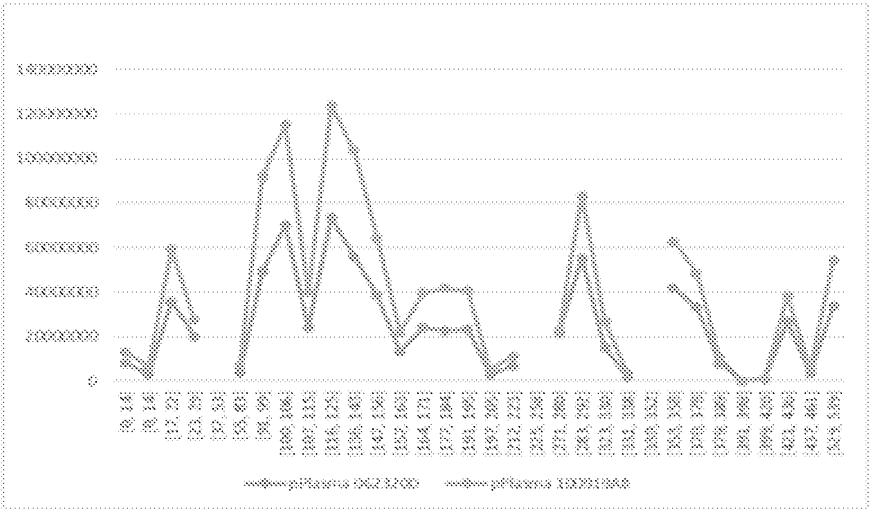


FIG. 44B

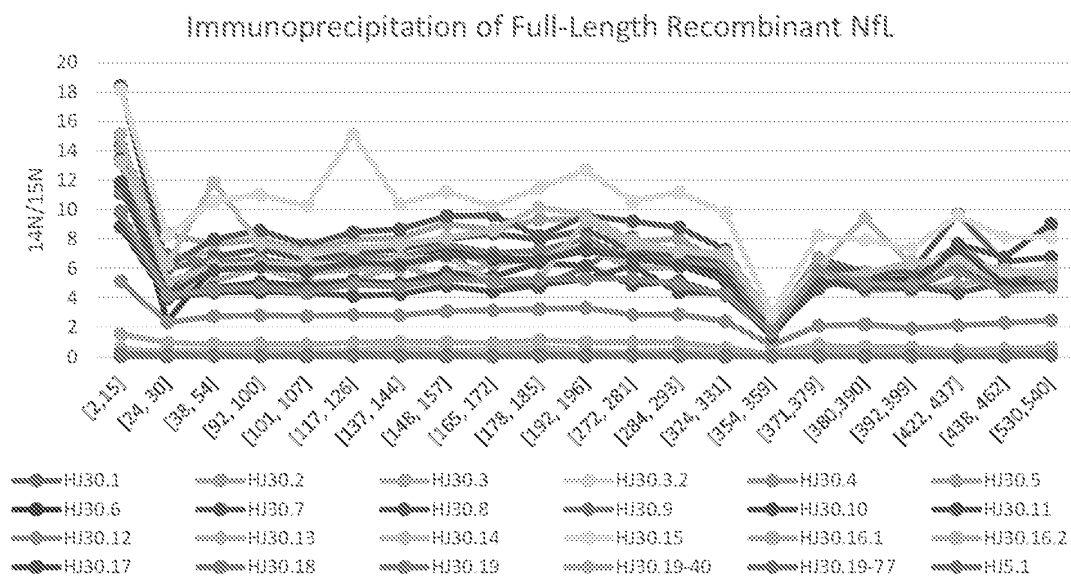


FIG. 45

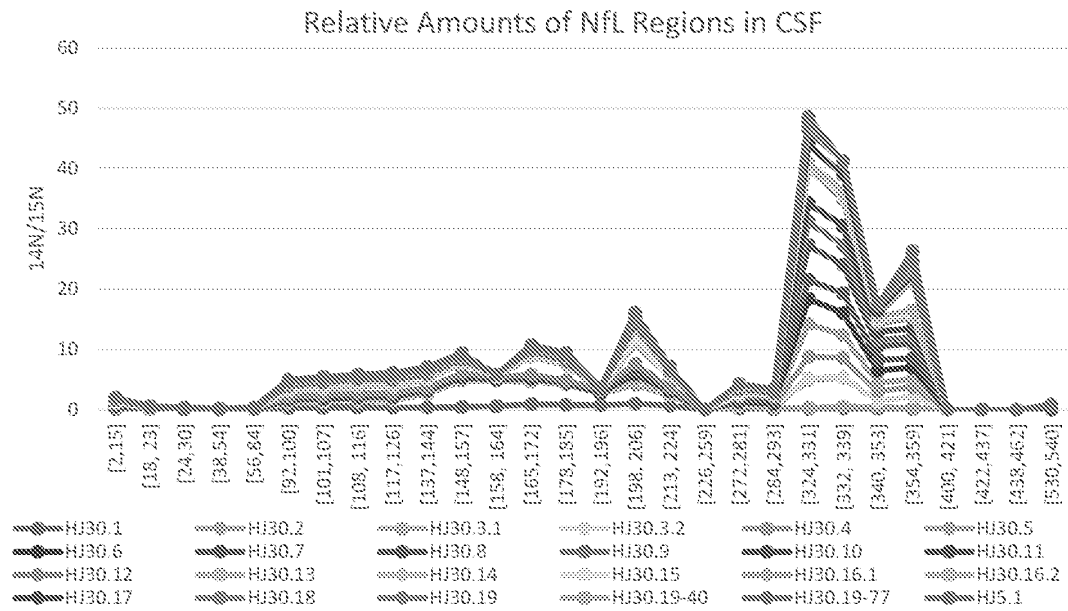


FIG. 46

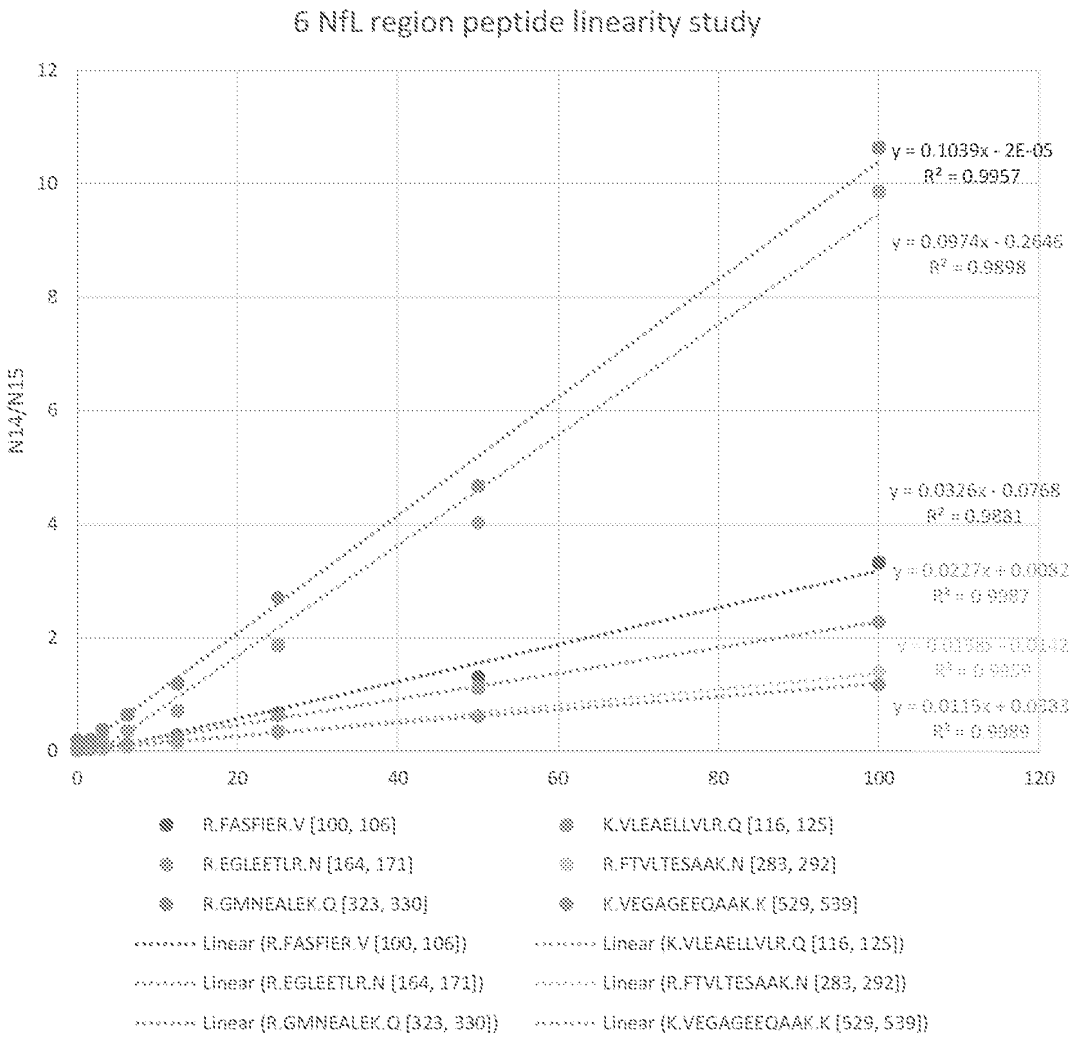


FIG. 47

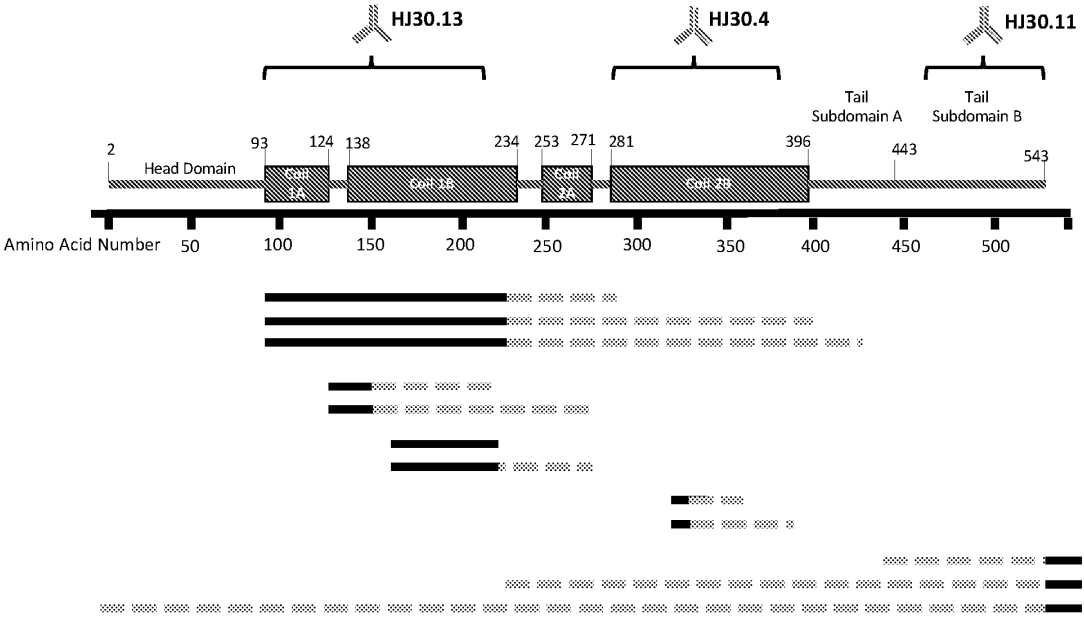


FIG. 48

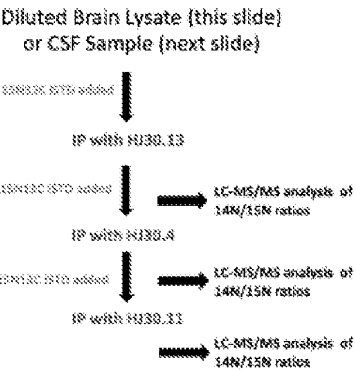


FIG. 49A

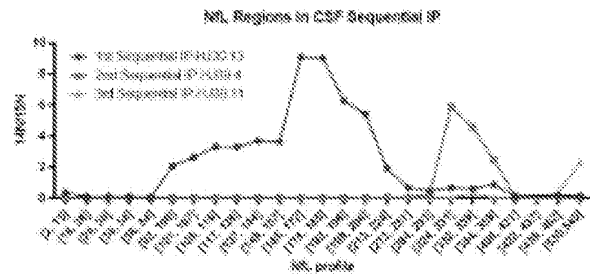


FIG. 49B

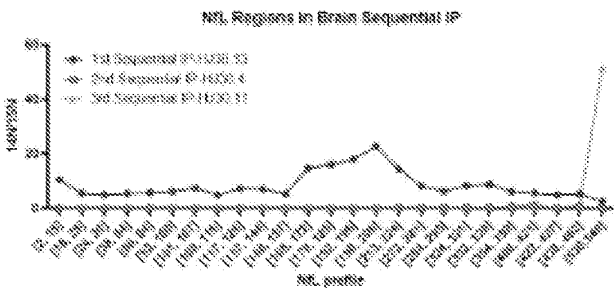


FIG. 49C

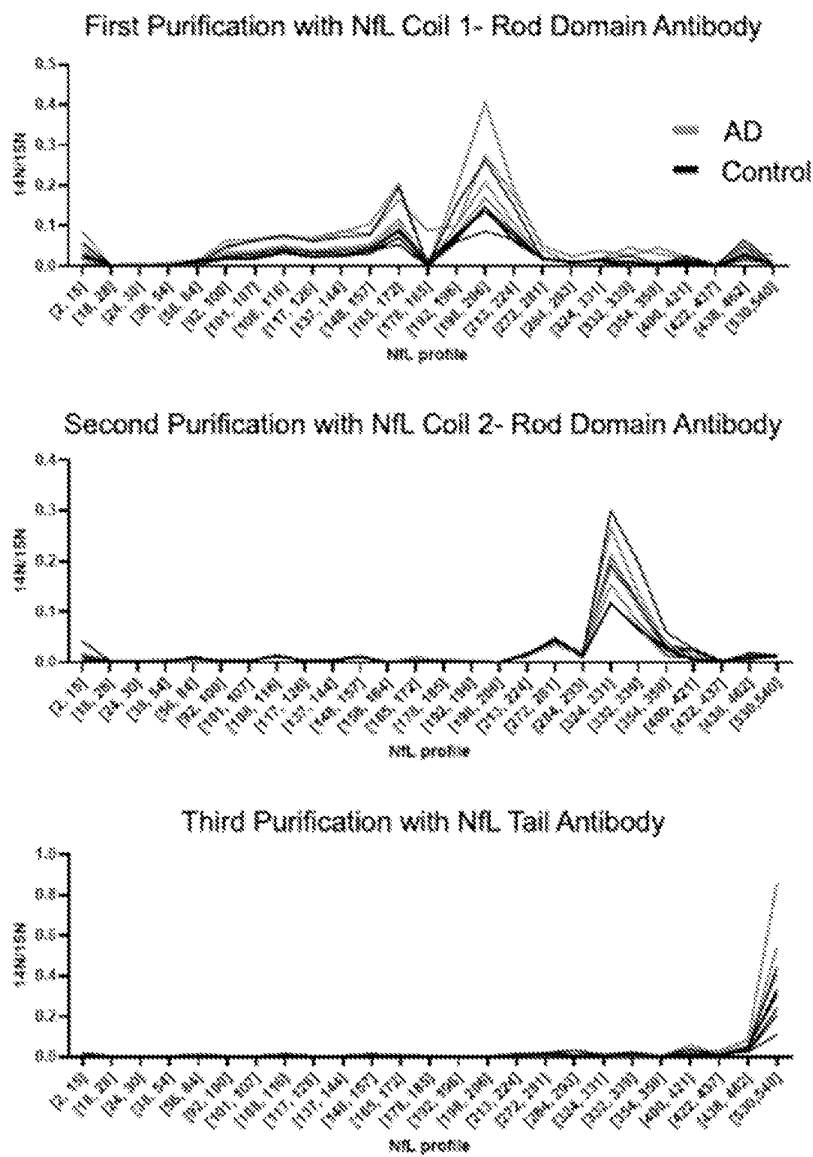


FIG. 50

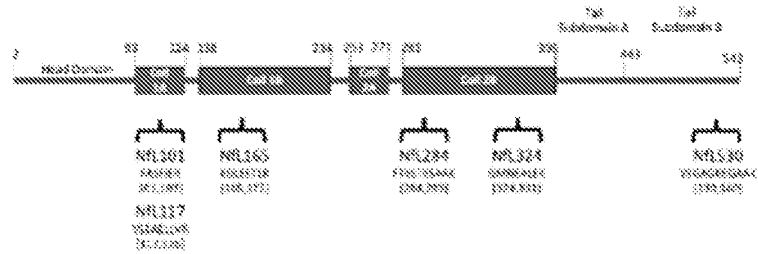


FIG. 51A

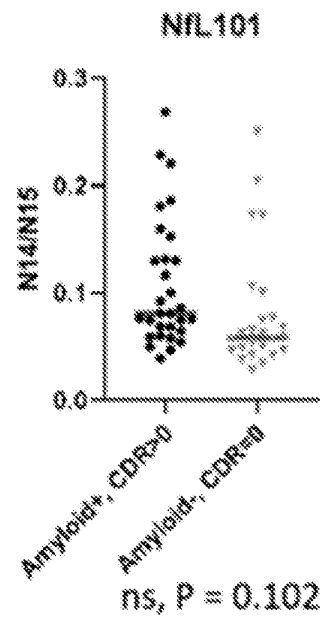


FIG. 51B

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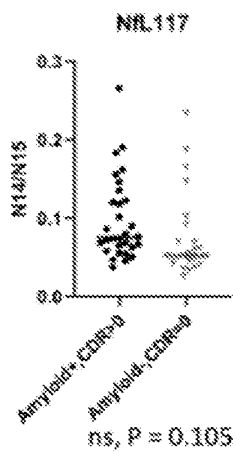


FIG. 51C

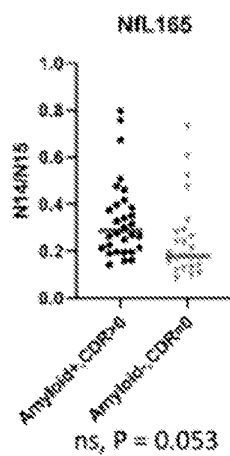


FIG. 51D

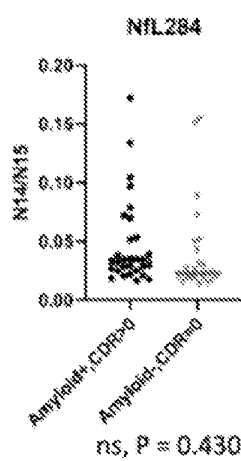


FIG. 51E



FIG. 51F

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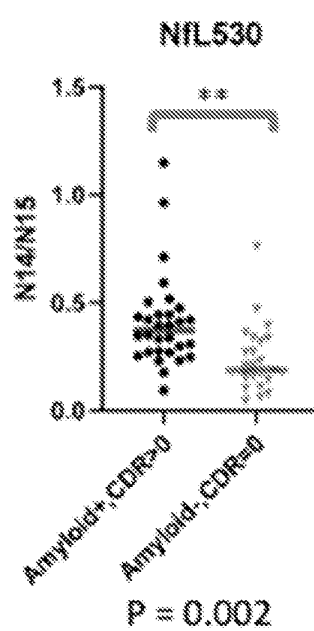


FIG. 51G

FIG. 52A

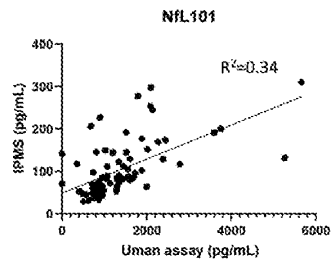


FIG. 52B

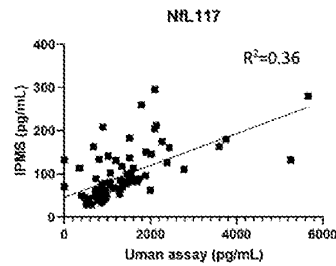


FIG. 52C

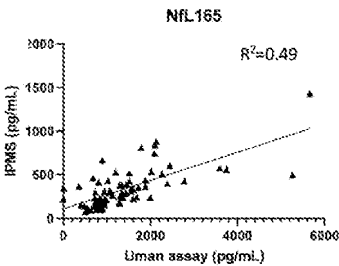


FIG. 52D

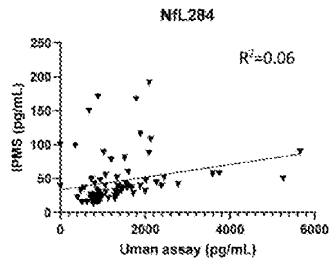


FIG. 52E

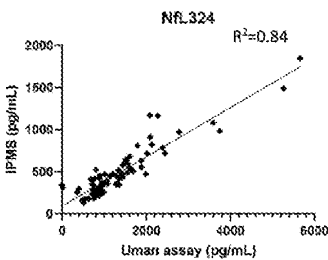
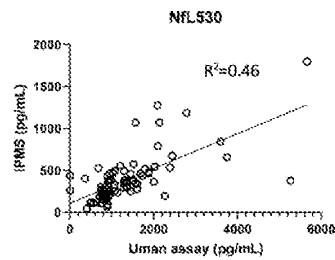
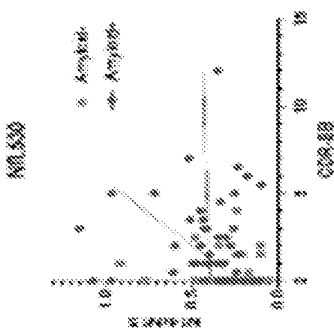
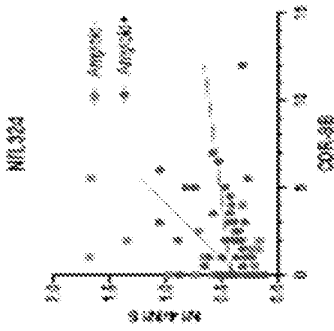
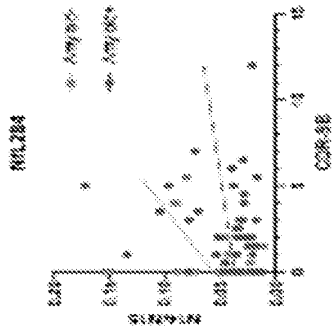
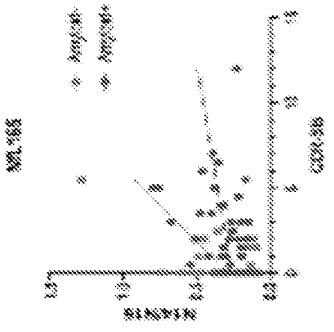
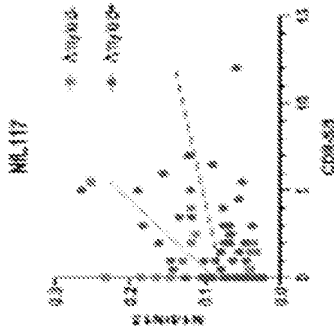
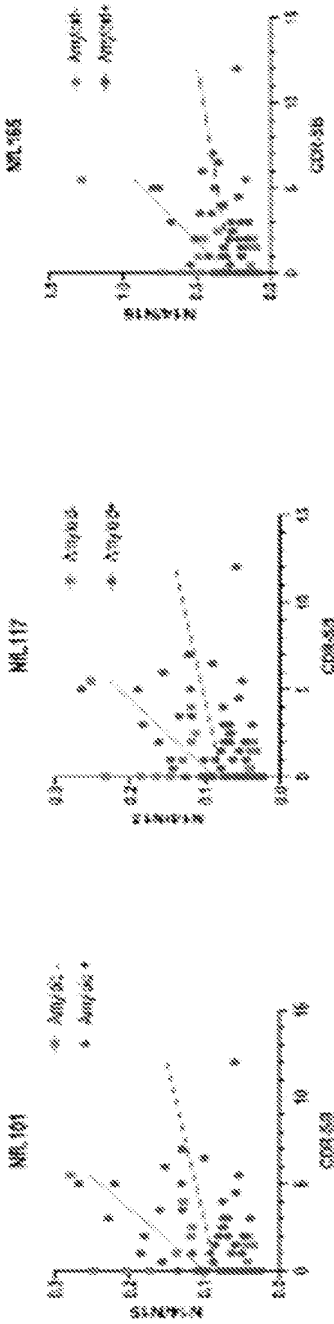


FIG. 52F





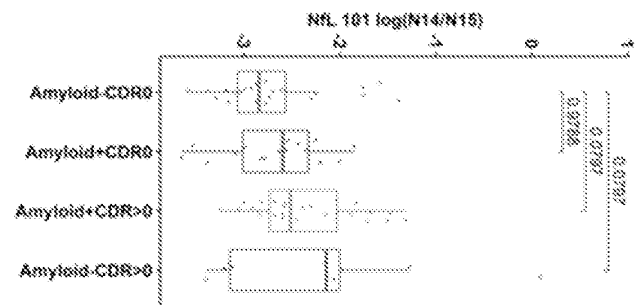


FIG. 54A

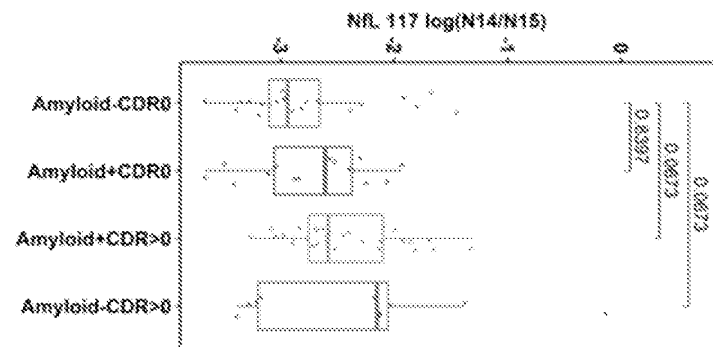


FIG. 54B

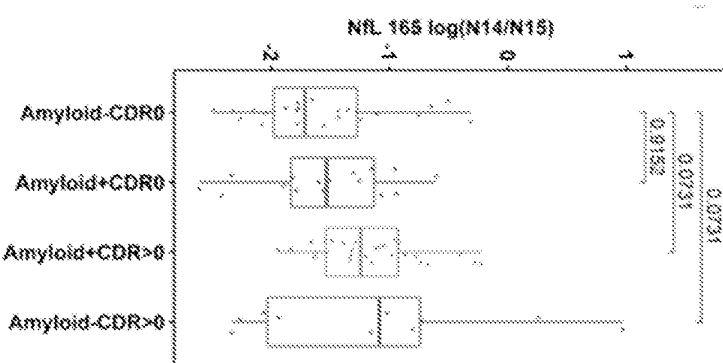


FIG. 54C

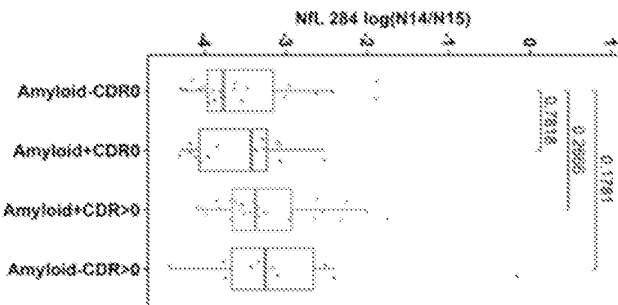


FIG. 54D

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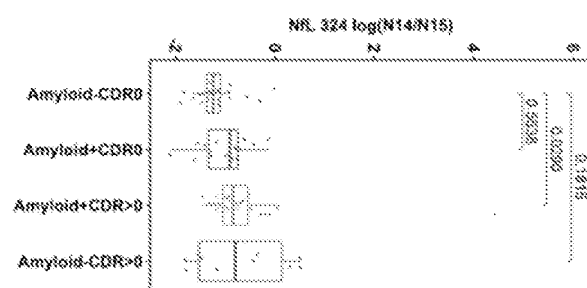


FIG. 54E

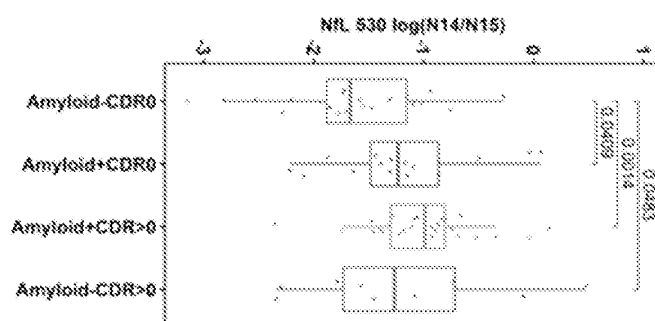


FIG. 54F

FIG. 55A

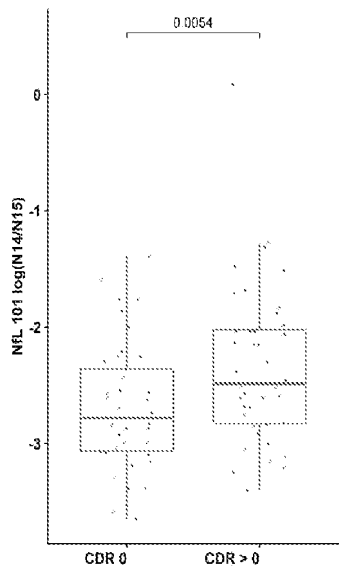


FIG. 55B

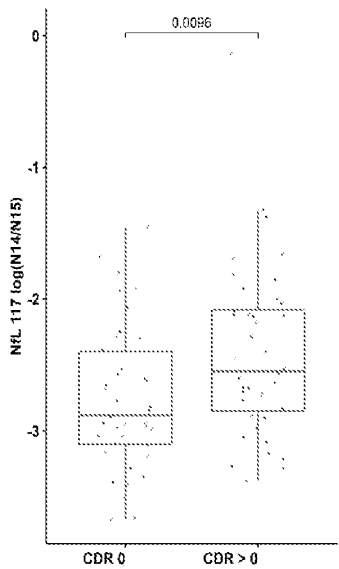


FIG. 55C

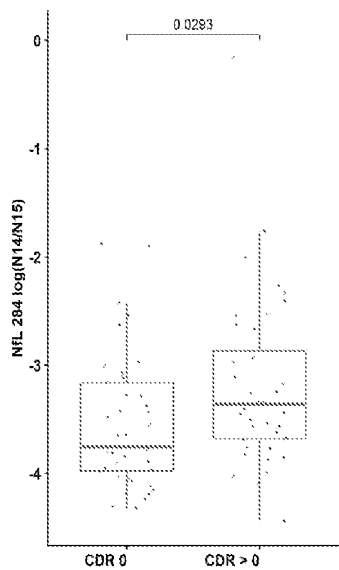
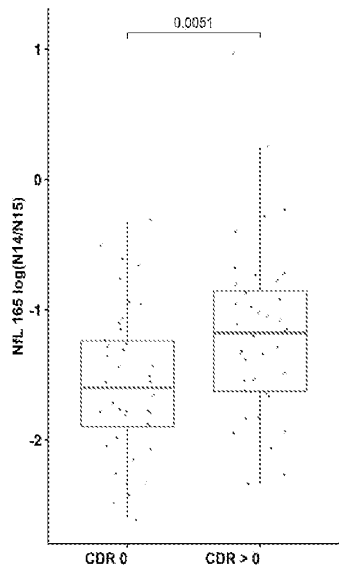


FIG. 55D

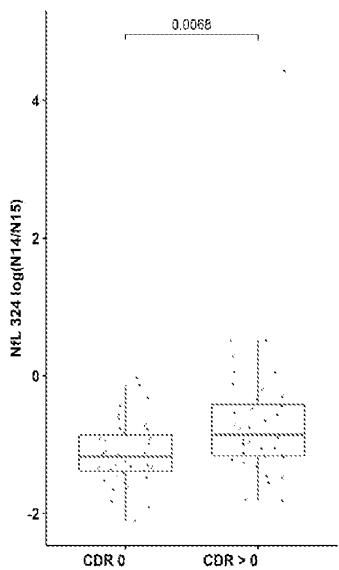


FIG. 55E

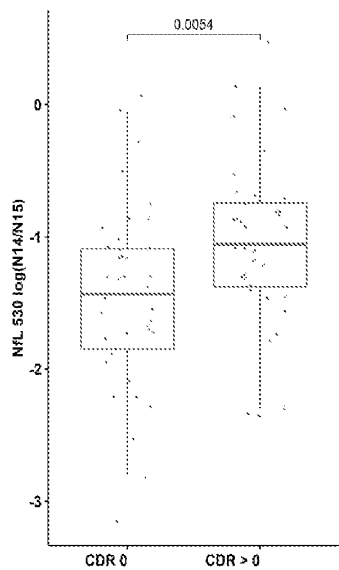


FIG. 55F

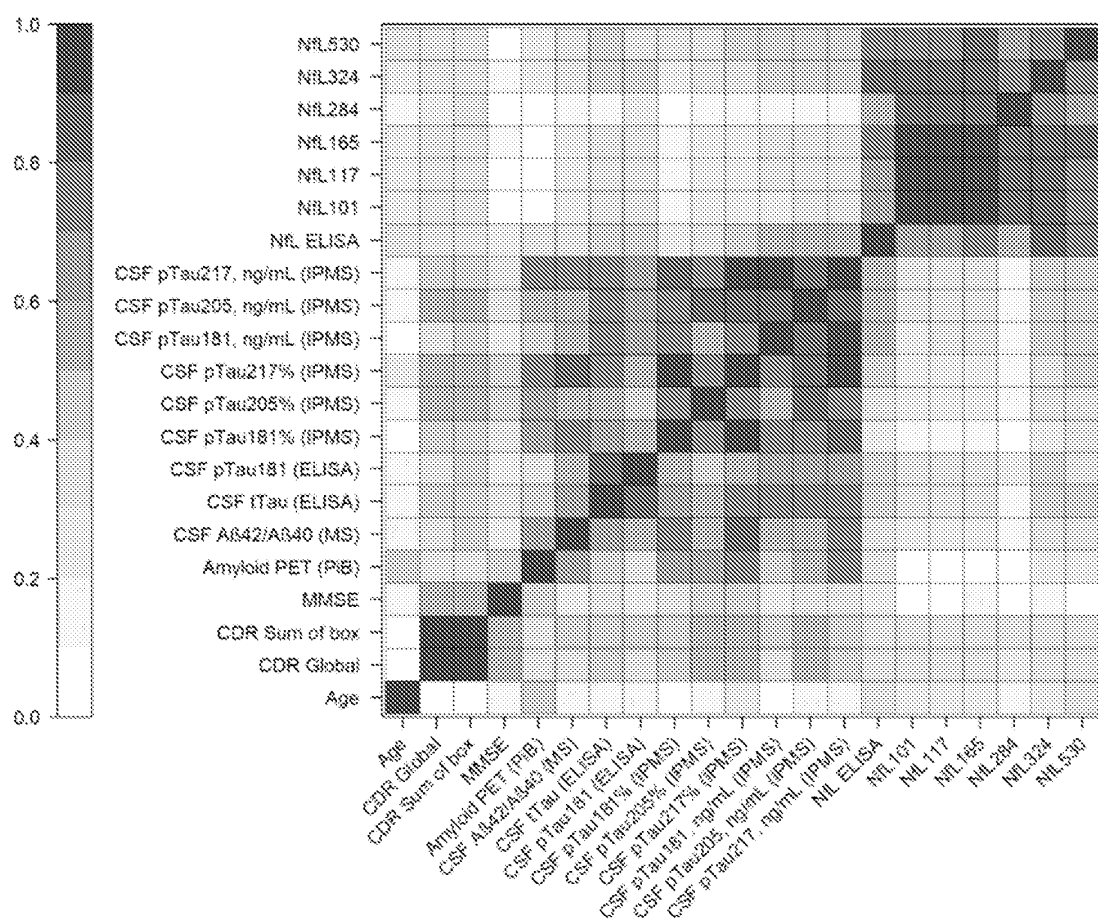


FIG. 56

0.5mL CSF
ALS, SMA, Control

Sample	n
Sporadic ALS	12
Familial ALS, symptomatic	3
Familial ALS, Asymptomatic	3
SMA	10
Control	10

0.5ng 15N13C
ISD added

IP with 1:1:1 mixture of HJ30.13,
HJ30.4, HJ30.11

LC-MS/MS analysis of
14N/15N ratios
• 6 peptide quantitative method 22
peptide qualitative method

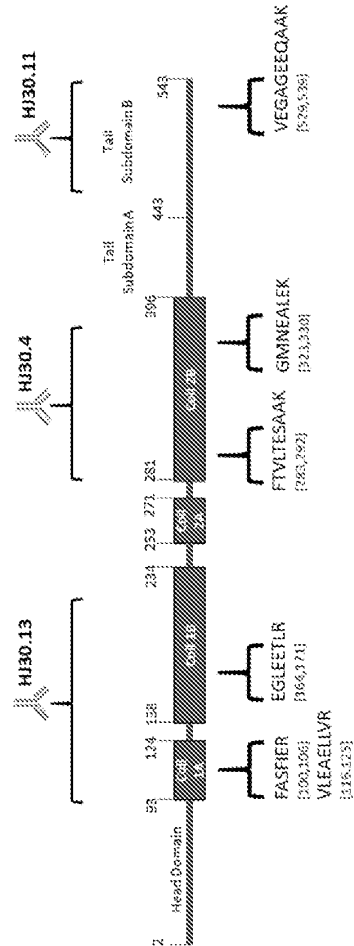


FIG. 57

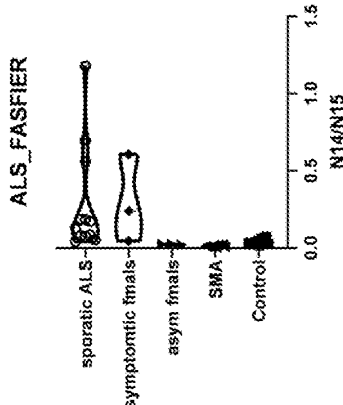
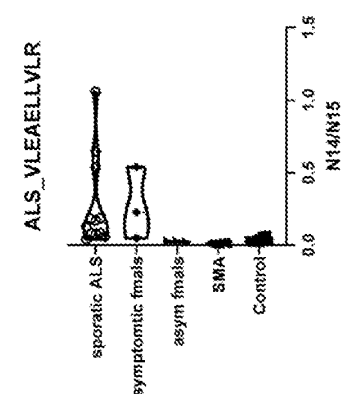
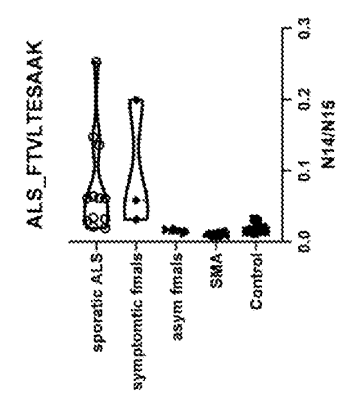
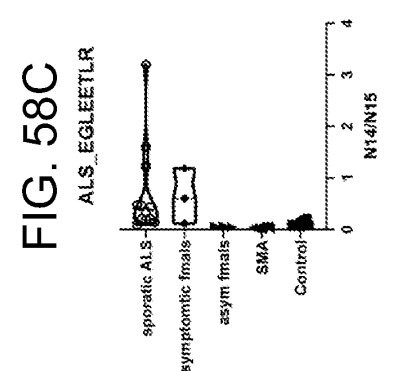
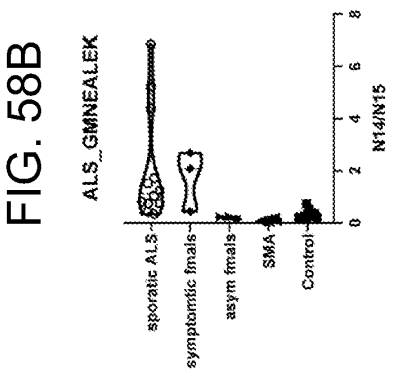
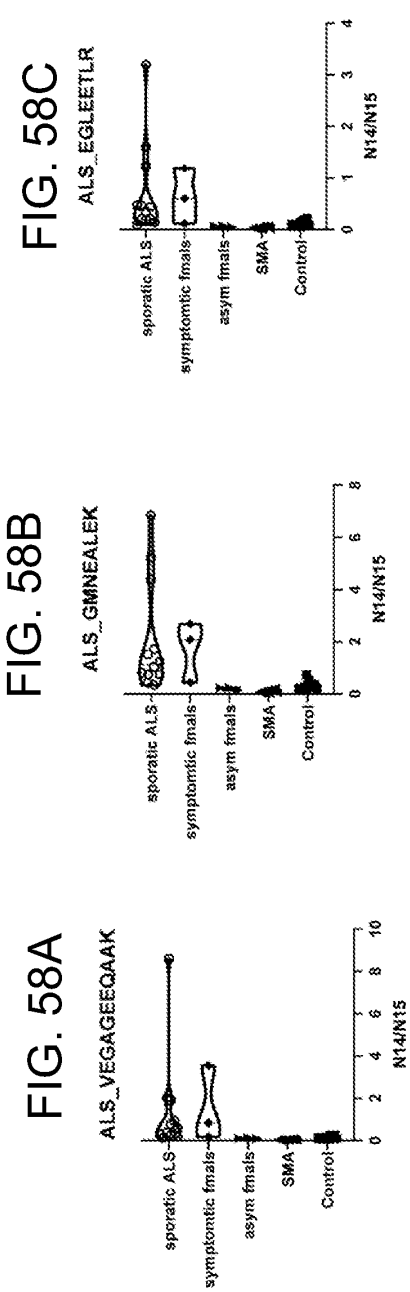


FIG. 59A

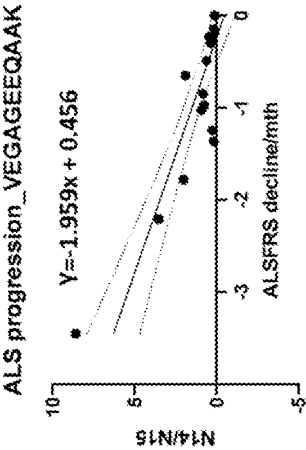


FIG. 59B

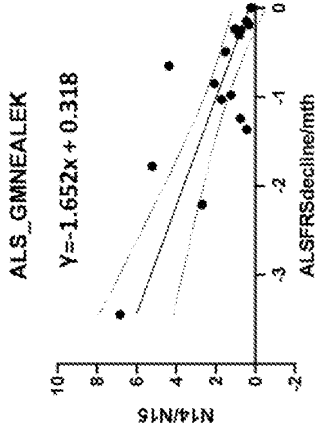


FIG. 59C

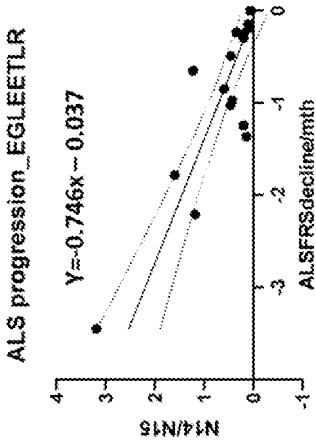


FIG. 59D

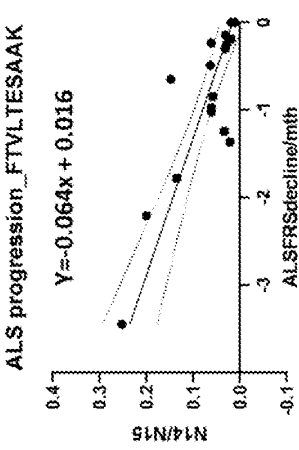


FIG. 59E

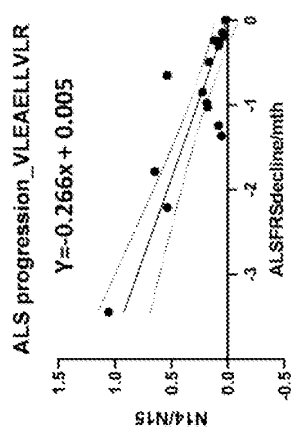
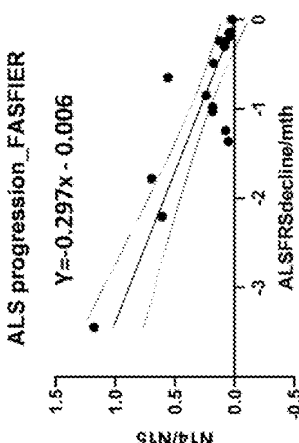


FIG. 59F



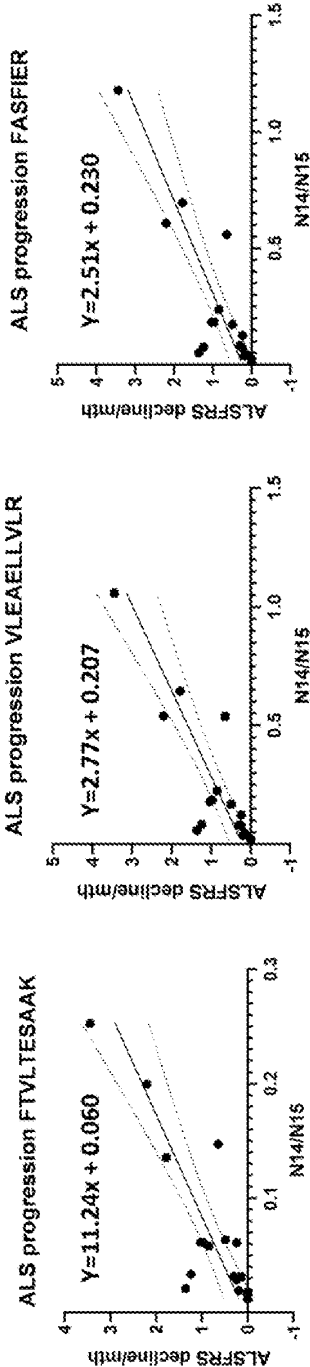
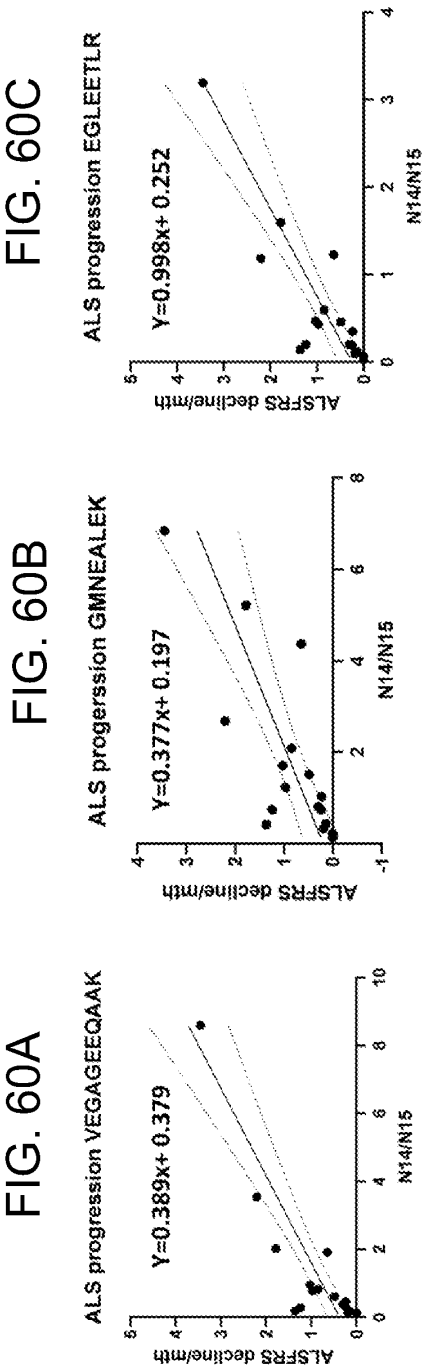


FIG. 60F

FIG. 60E

FIG. 60D

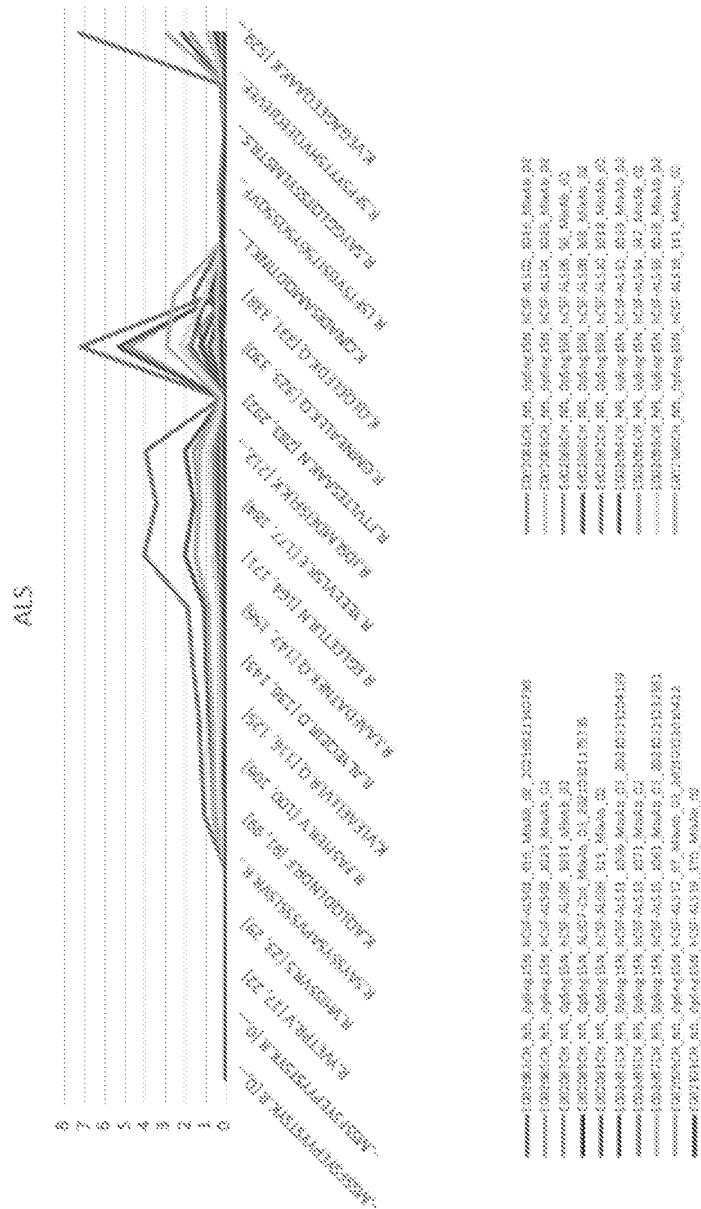


FIG. 61

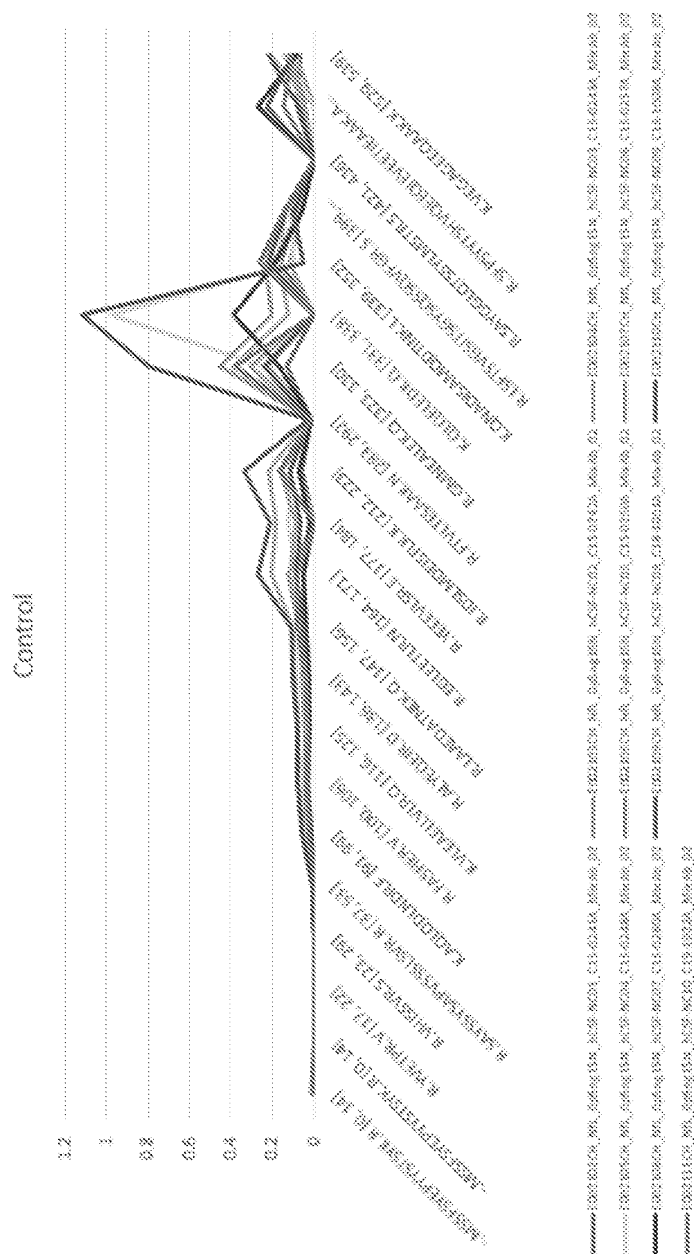




FIG. 63