

FIG. 1

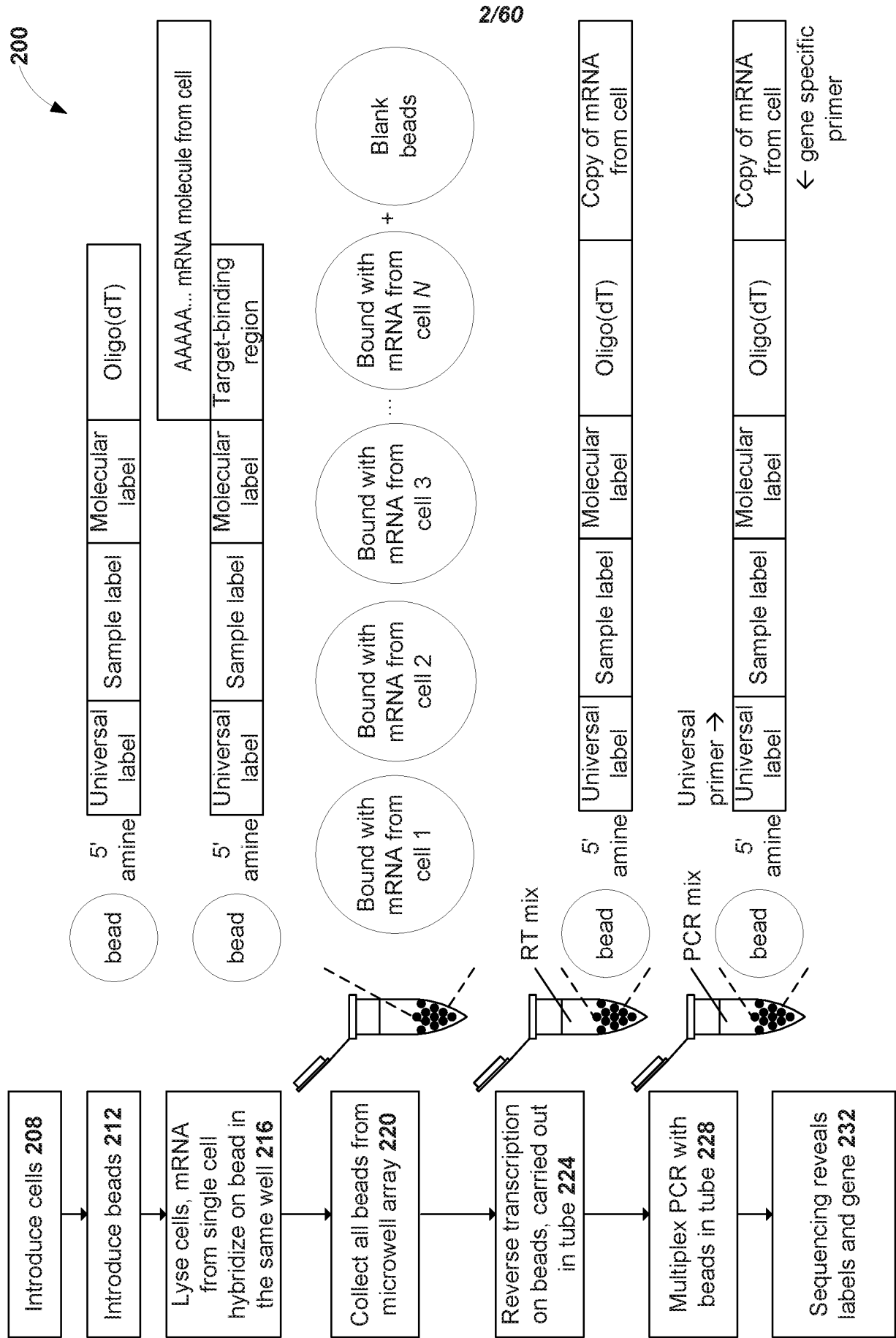
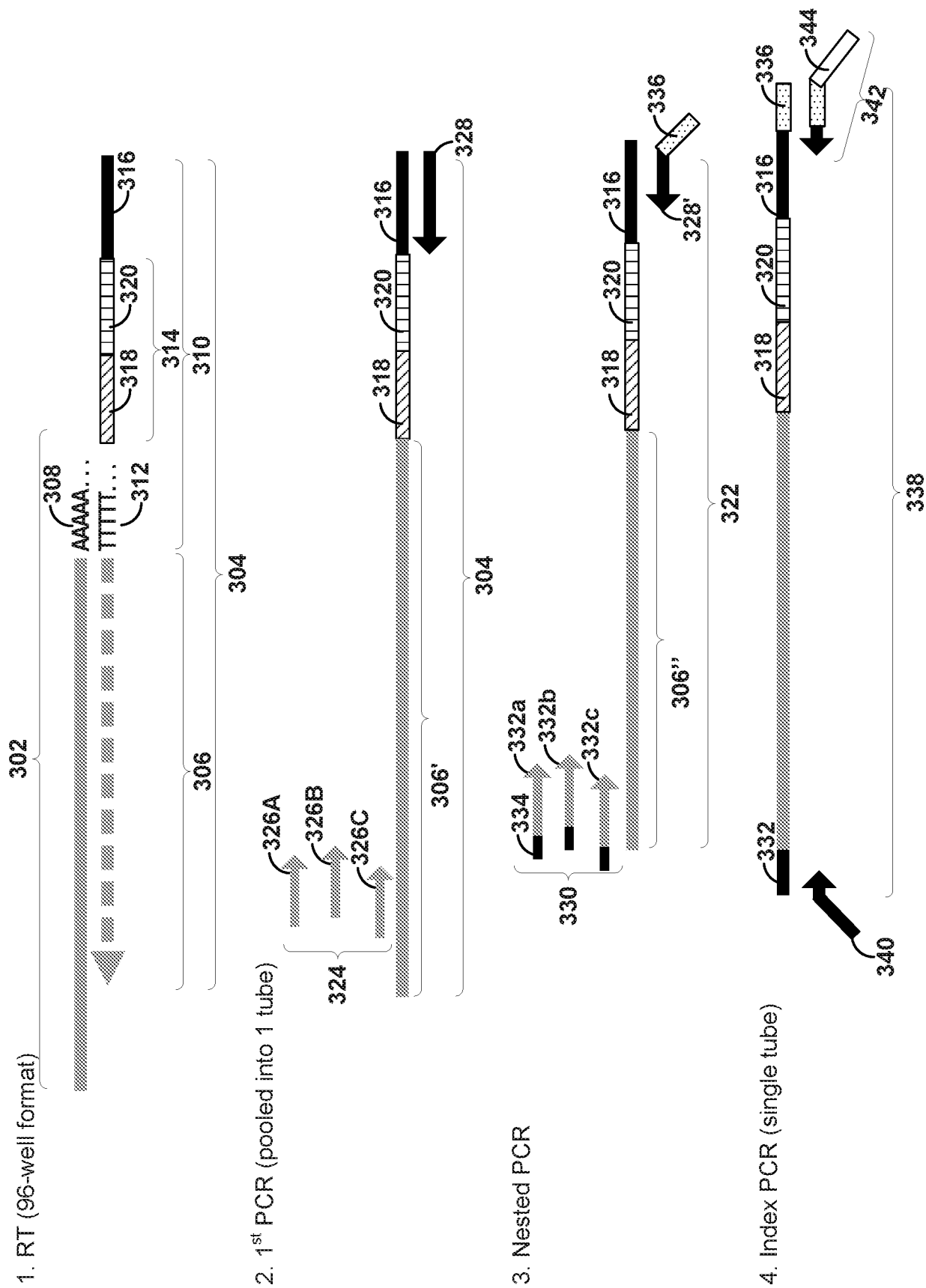
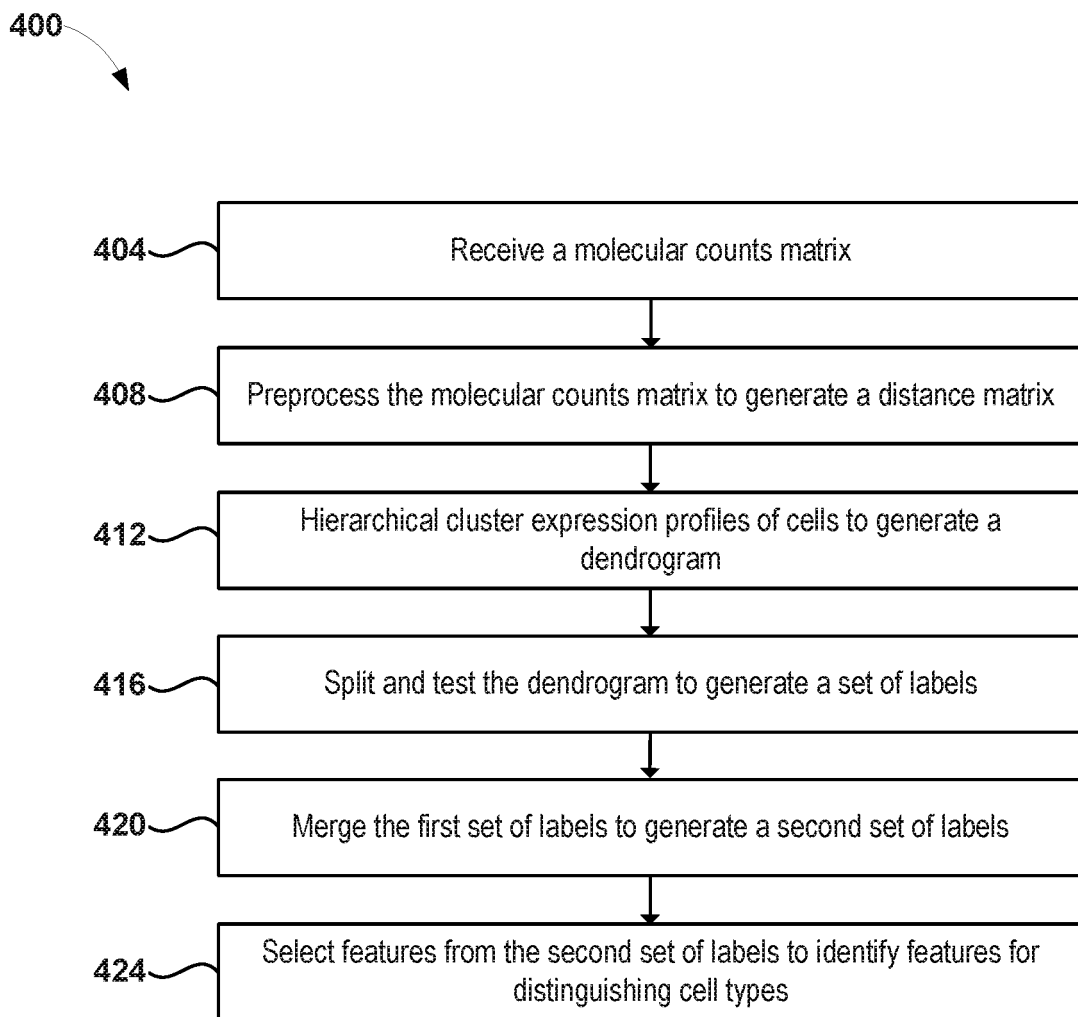


FIG. 2



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**FIG. 4**

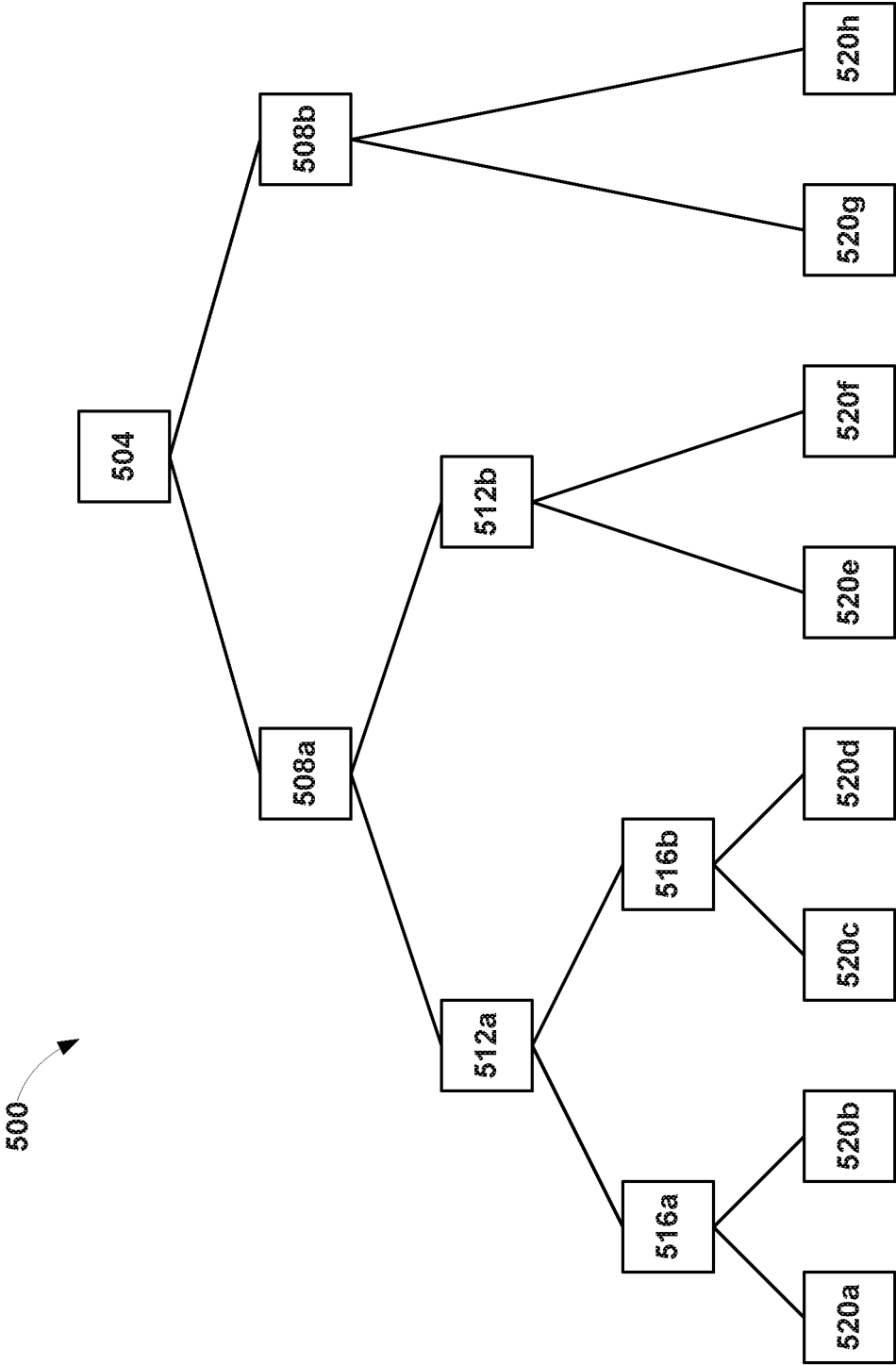
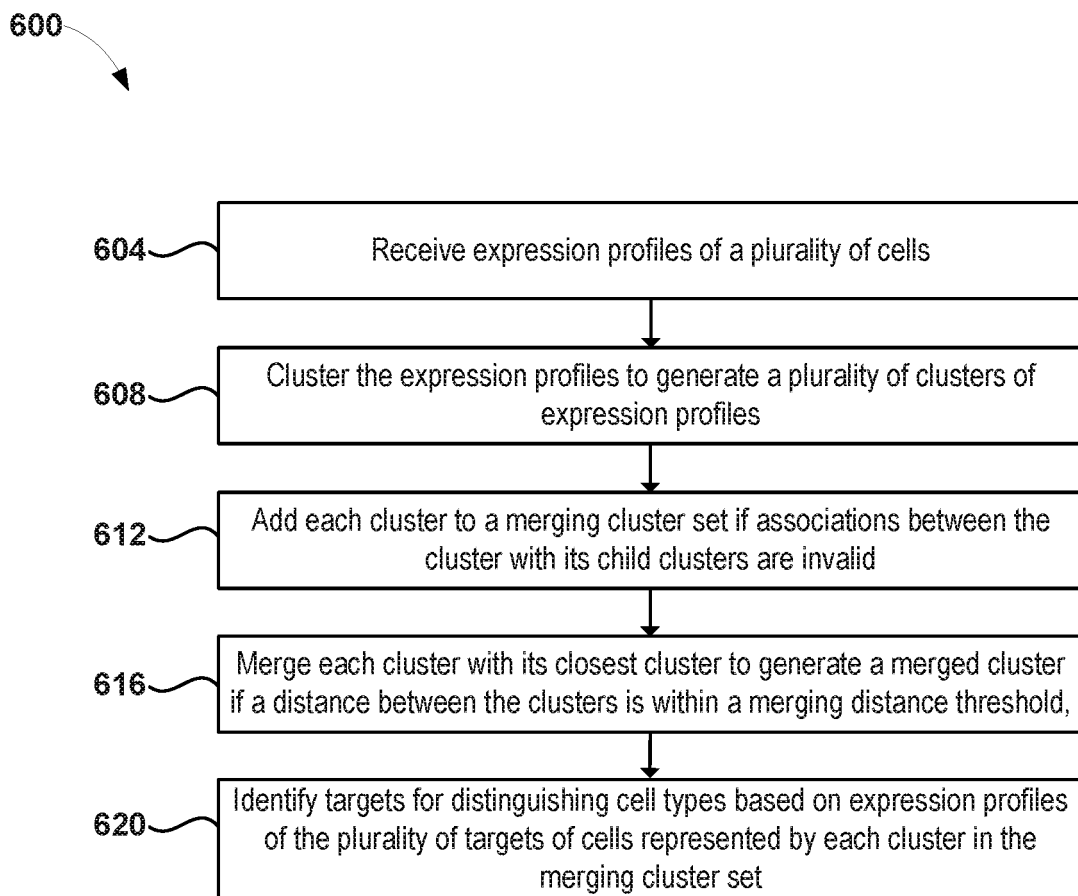


FIG. 5

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**FIG. 6**

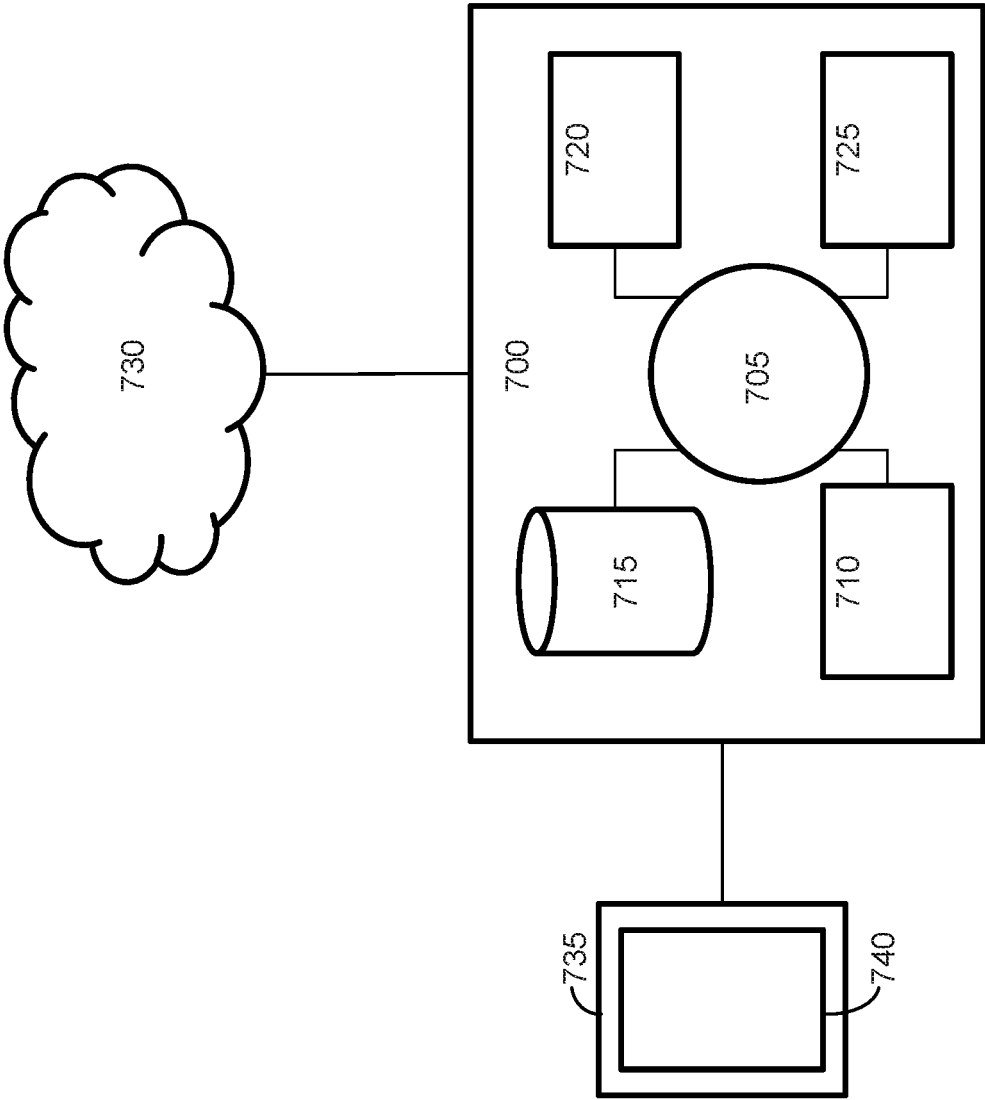


FIG. 7

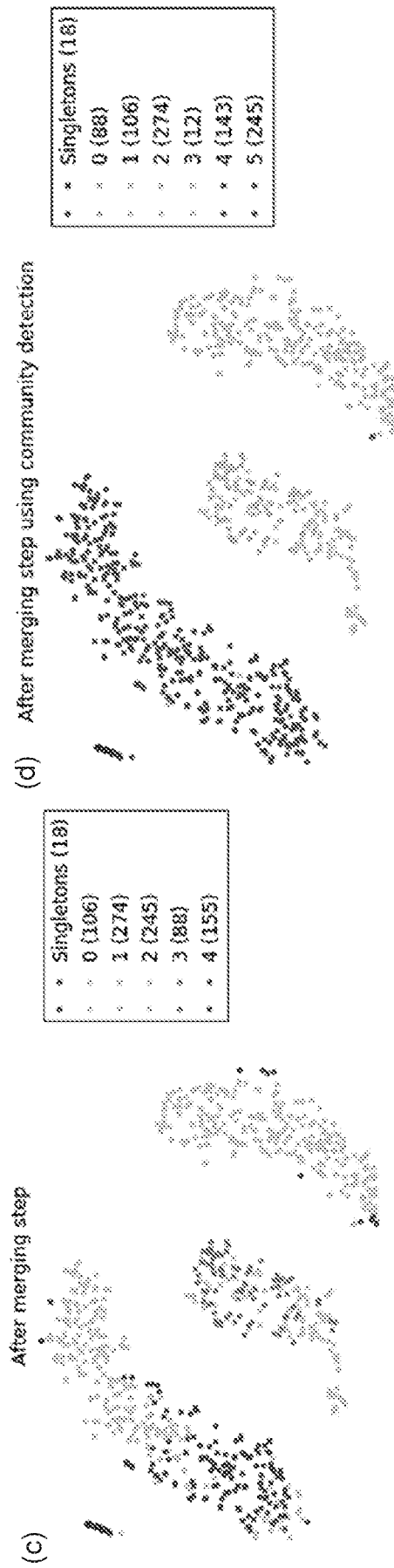
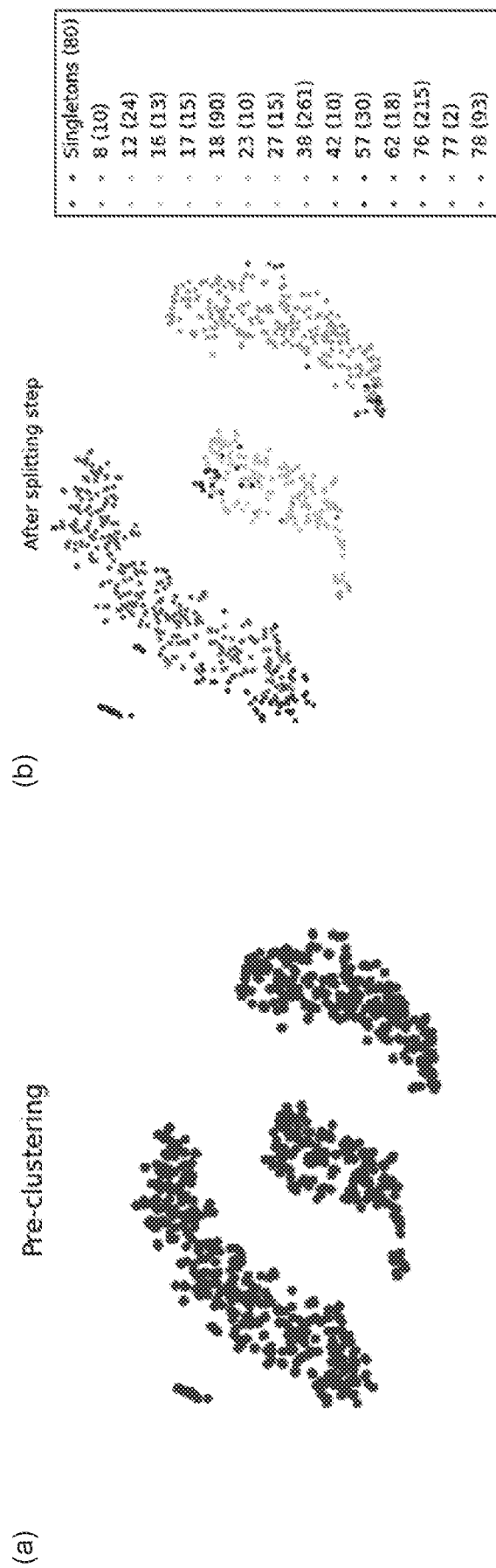
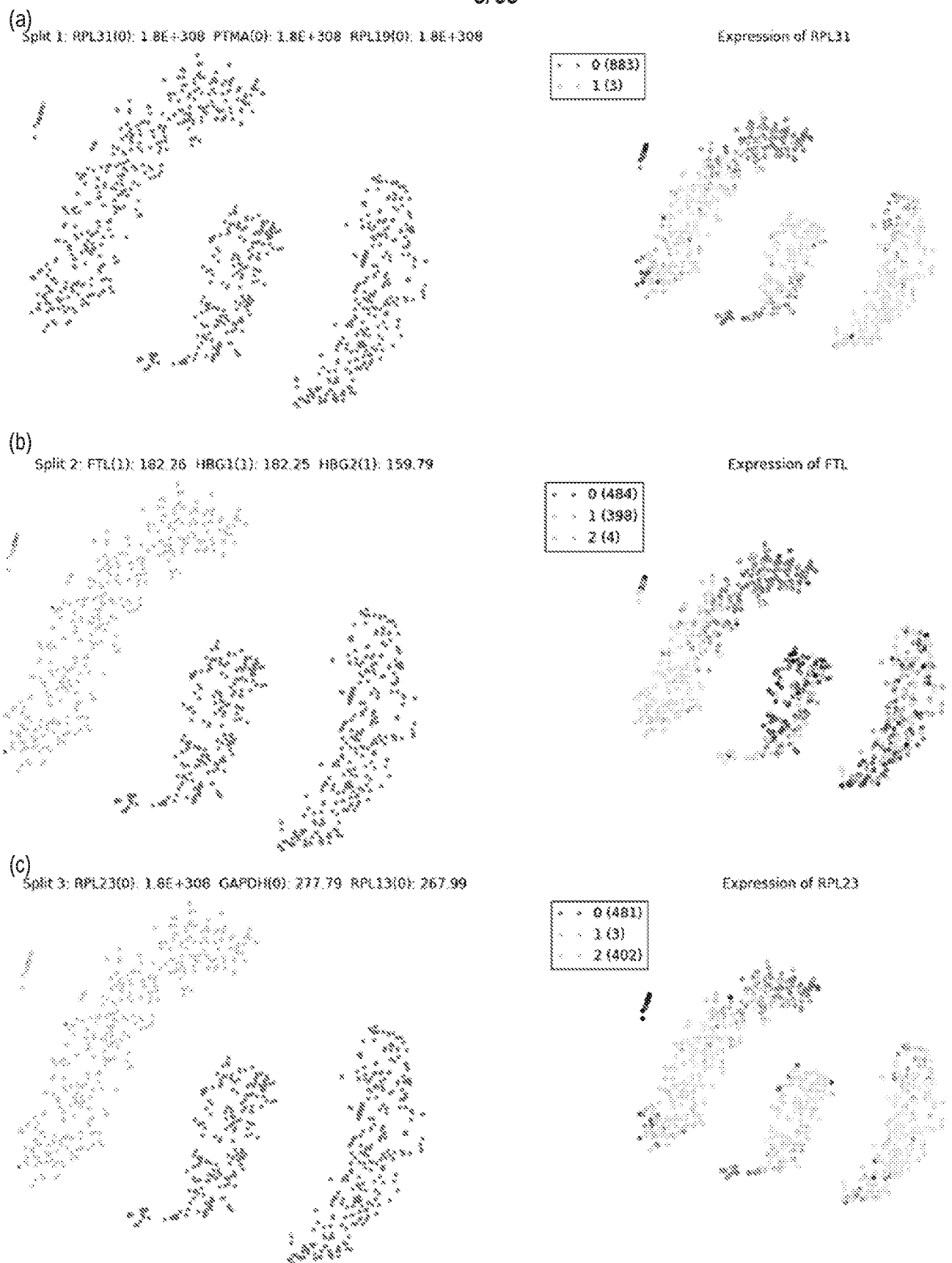


FIG. 8

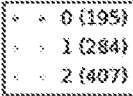
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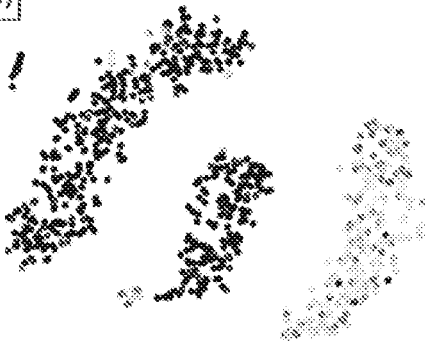
10/60

(d)

Split 4: IGHM(1): 125.49 IGLC3(1): 123.60 CD3D(0): 113.52

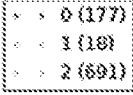
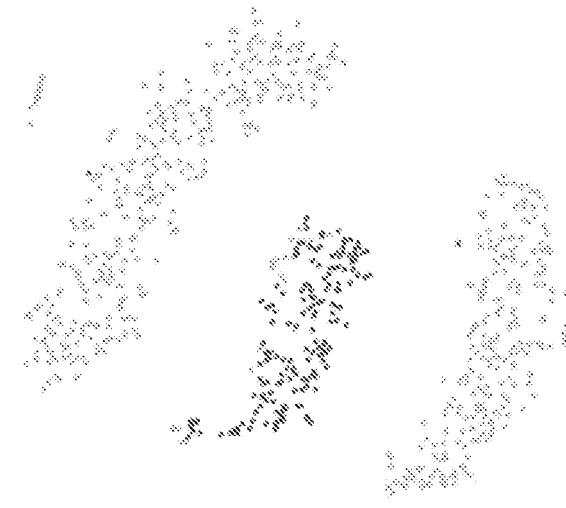


Expression of IGHM

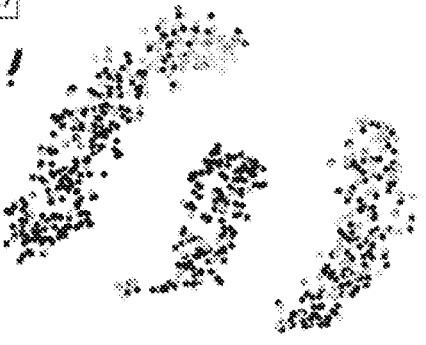


(e)

Split 5: RRP7A(0): 15.35 NDUF4F2(0): 11.80 MRPL12(0): 11.66

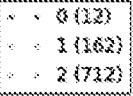


Expression of RRP7A



(f)

Split 6: ANXA11(1): 18.88 DAZAP1(1): 15.00 BOLA3(1): 12.07



Expression of ANXA11



FIG. 9 (Continued)

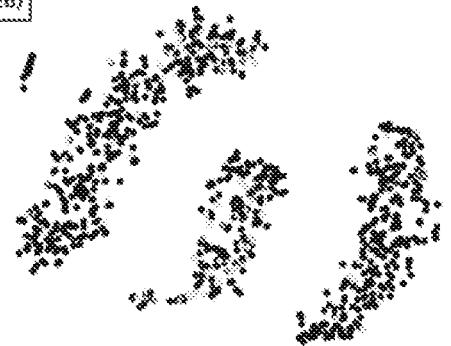
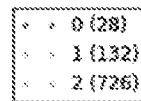
11/60

(g)

Split 7: TTF1(1): 12.32 SPTBN1(1): 11.17 SLC3A2(1): 9.50



Expression of TTF1

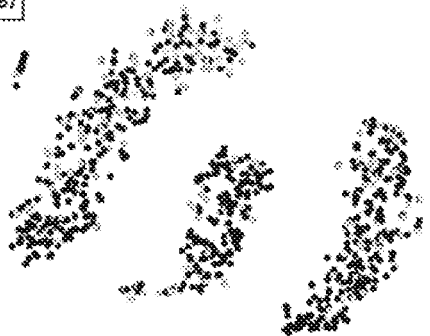
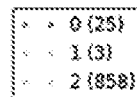


(h)

Split 8: SRPK1(1): 13.94 SMNDC1(1): 10.31 Clorf35(1): 10.31



Expression of SRPK1

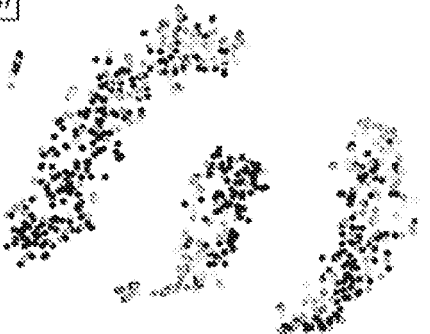
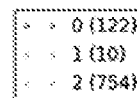


(i)

Split 9: TOP2A(0): 18.52 TUBB4B(0): 18.48 ECI2(0): 18.19



Expression of TOP2A

**FIG. 9 (Continued)**

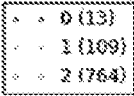
12/60

(j)

Split 10: CACYBP(1): 24.92 PHPT1(1): 15.44 ATIC1(1): 13.68

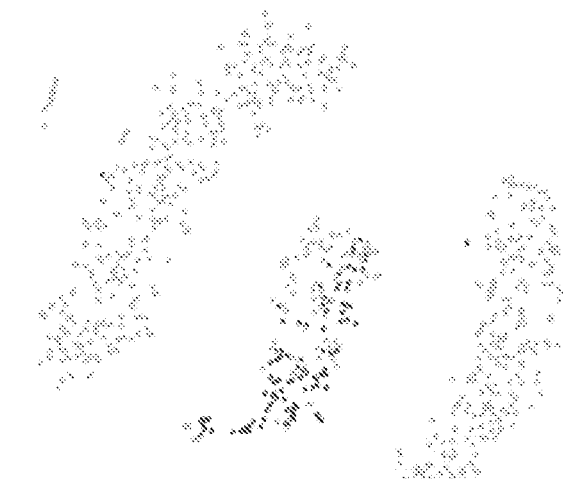


Expression of CACYBP

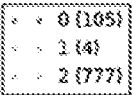


(k)

Split 11: RPSA(0): 31.72 HNRNPOL(0): 29.92 NUCKS1(0): 29.68



Expression of RPSA



(l)

Split 12: PSMD14(1): 11.31 DBF4(1): 11.19 MOC52(1): 11.05



Expression of PSMD14

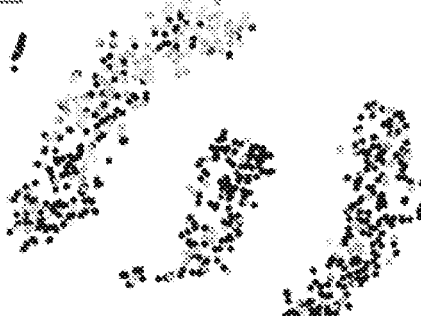
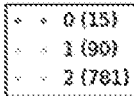
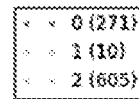


FIG. 9 (Continued)

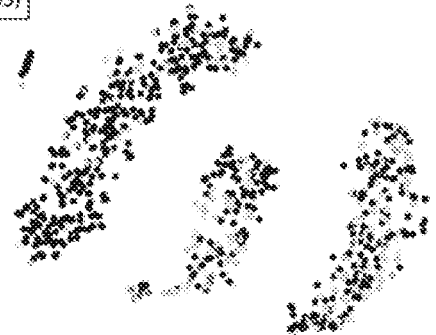
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(m)

Split 13: RNA5EH2B(0): 38.04 EIF3F(0): 34.36 PPP2CA(0): 34.00

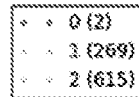


Expression of RNA5EH2B



(n)

Split 14: GAS8(0): 233.23 ALKBH3(0): 177.62 RPL19(1): 169.72

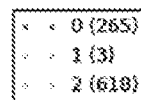


Expression of GAS8



(o)

Split 15: CNPY3(1): 80.24 NDUFB2(0): 79.70 IFT57(1): 76.61



Expression of CNPY3

**FIG. 9 (Continued)**

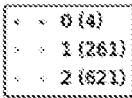
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(p)

Split 16: MZB1(1): 100.26 RPL11-5106.1(1): 76.45 MYL128(1): 79.36



Expression of MZB1

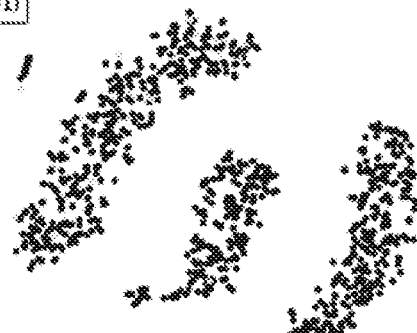
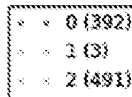


(q)

Split 17: CREB3L1(1): 228.58 RPL32(0): 224.99 RPS20(0): 212.30



Expression of CREB3L1



(r)

Split 18: VMP1(1): 33.24 TFR2(1): 72.67 STT3A(1): 19.27



Expression of VMP1

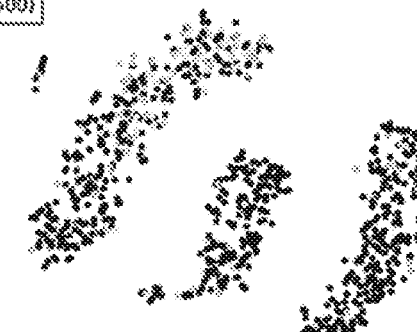
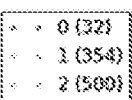
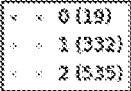


FIG. 9 (Continued)

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(s)

Split 19: EIF2B1(1): 32.06 ARPC1A(1): 31.45 HMGN5(1): 30.06

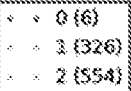


Expression of EIF2B1

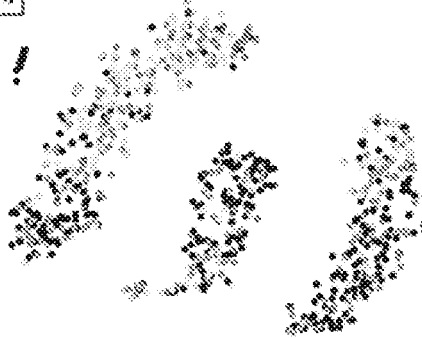


(t)

Split 20: NUDT5(1): 83.57 MSN(1): 81.87 ANAPC5(1): 80.59

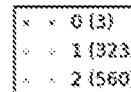


Expression of NUDT5



(u)

Split 21: TMSB4X(1): 148.25 PPIA(1): 126.76 SNRPF(1): 122.61



Expression of TMSB4X

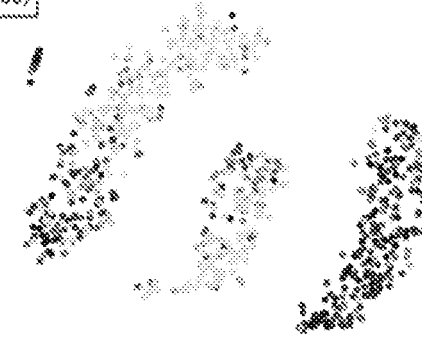


FIG. 9 (Continued)

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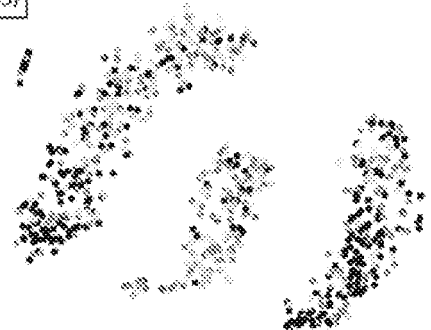
(v)

Split 22: C12orf57(0): 71.43 RP11-234A1.1(0): 65.08 RNP51(0): 62.22



Expression of C12orf57

x x 0 (314)
x x 1 (9)
x x 2 (553)



(w)

Split 23: RPL27A(0): 48.70 UQCRH(0): 44.94 UBA52(0): 44.85



Expression of RPL27A

x x 0 (221)
x x 1 (93)
x x 2 (572)



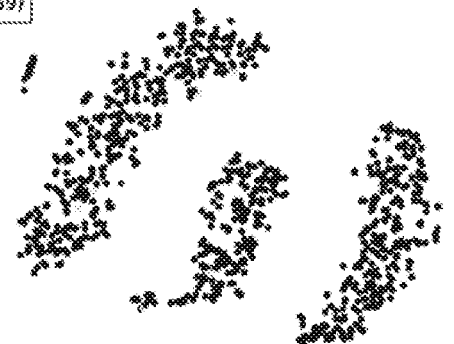
(x)

Split 24: JUN(1): 133.42 NDUFS5(0): 133.15 PEBP1(0): 126.54



Expression of JUN

x x 0 (215)
x x 1 (2)
x x 2 (669)

**FIG. 9 (Continued)**

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•	•	0 (177)
•	•	1 (18)
•	•	2 (691)

Split 5:

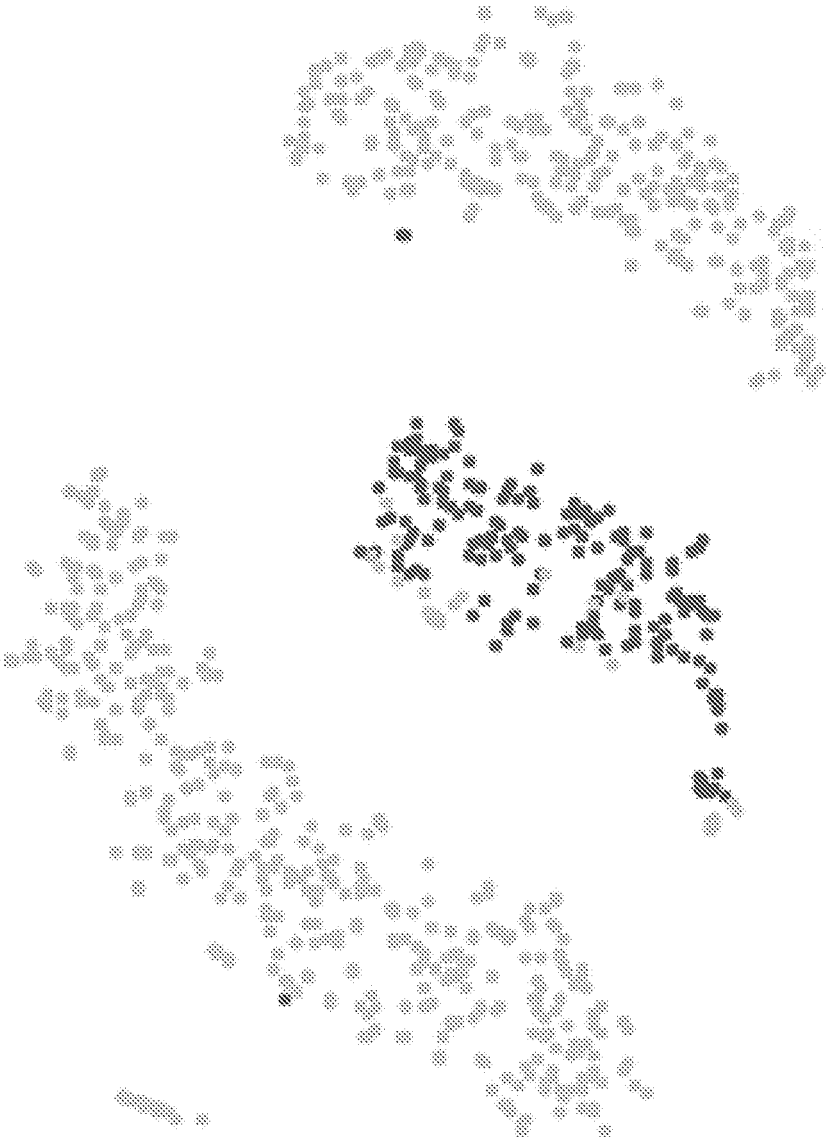
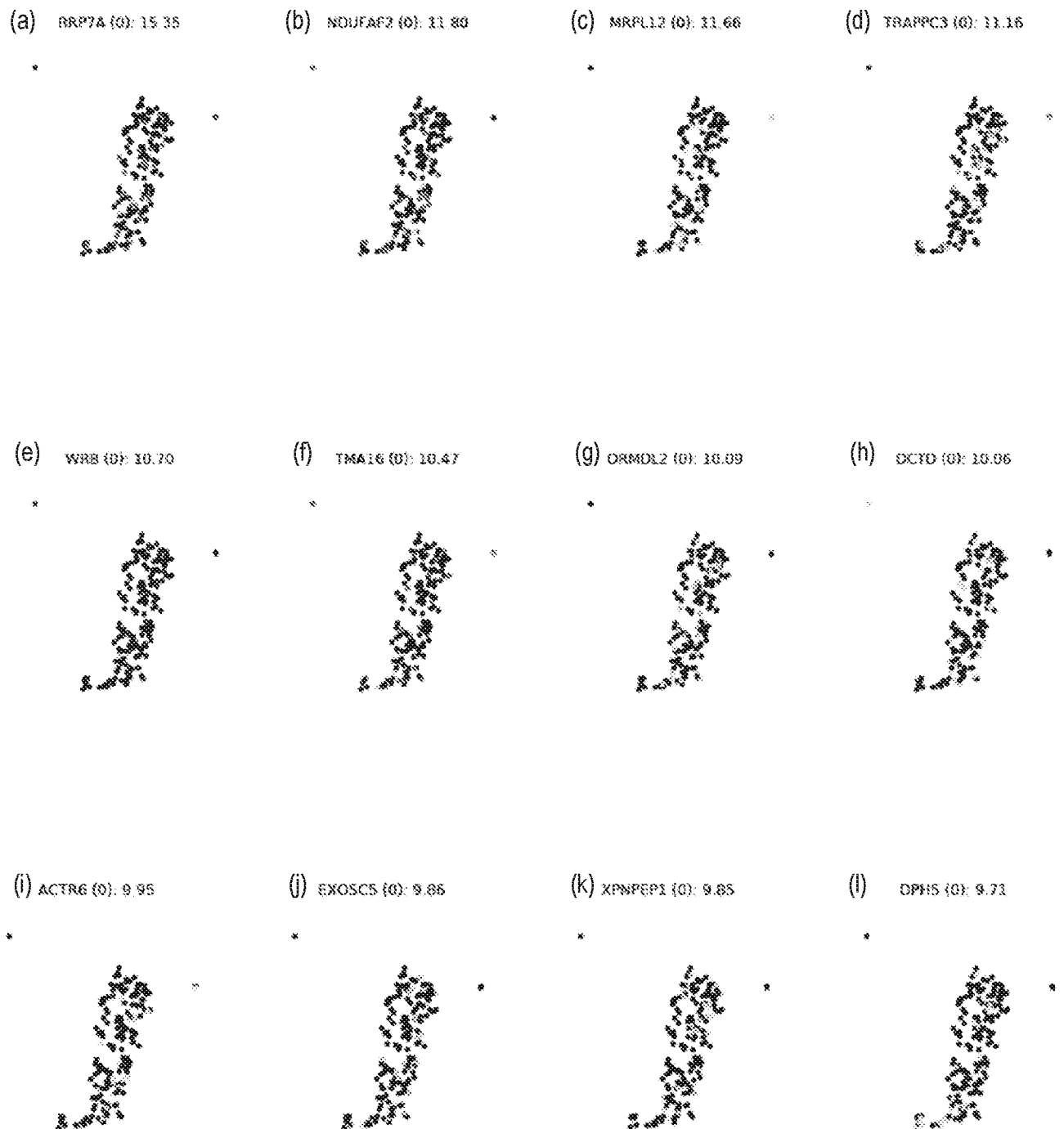


FIG. 10

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**FIG. 11**

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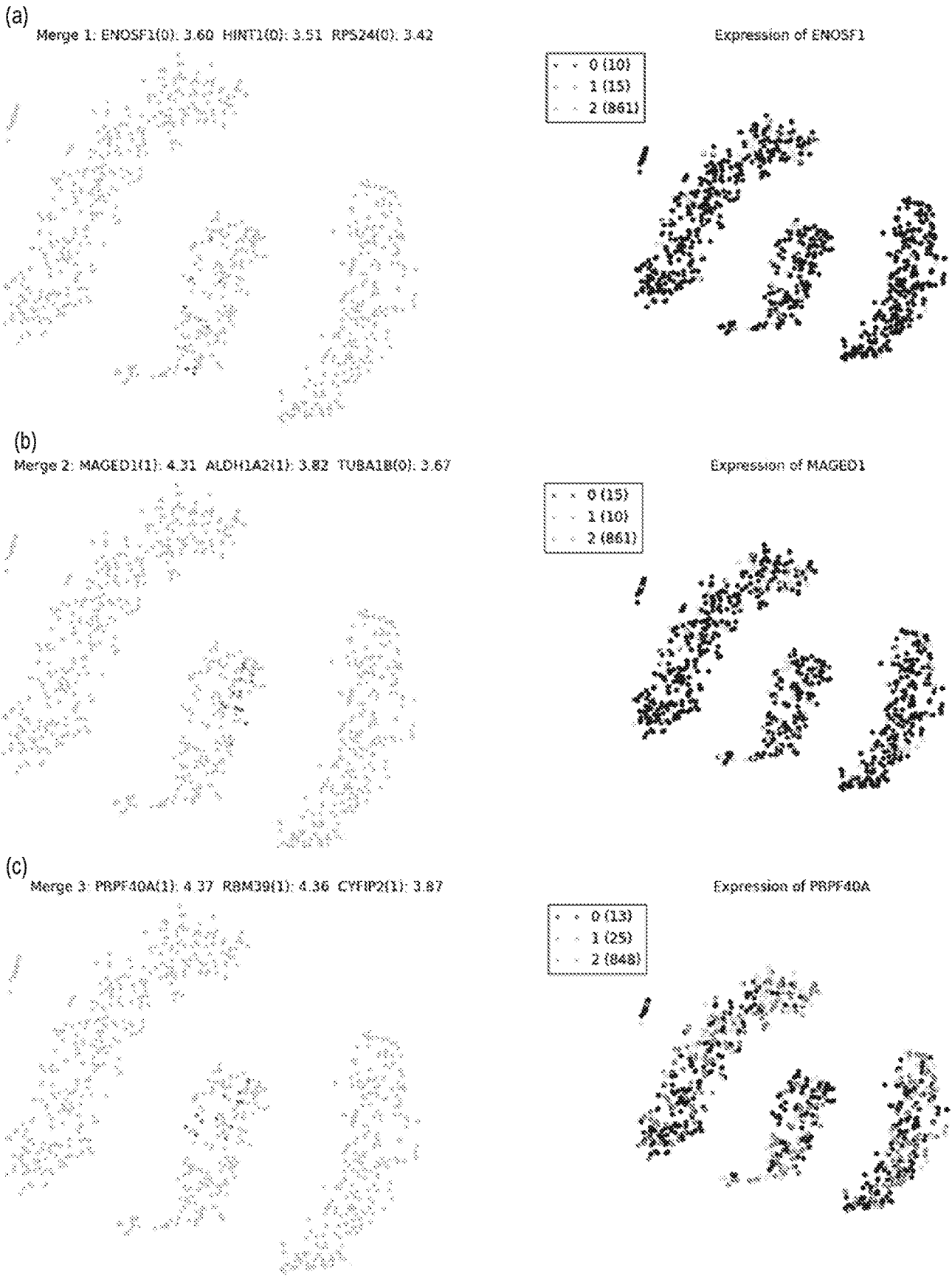


FIG. 12

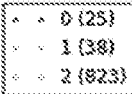
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(d)

Merge 4: ALDOC(0): 5.23 RPL31(0): 4.29 RPS11(0): 4.24



Expression of ALDOC

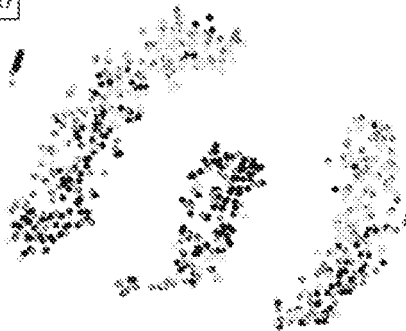
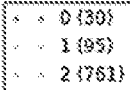


(e)

Merge 5: PARP1(0): 6.04 SET(0): 5.67 CALM2(0): 5.60



Expression of PARP1



(f)

Merge 6: IGLC3(0): 6.81 LCP1(0): 6.59 IGHM(0): 5.56



Expression of IGLC3

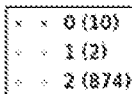


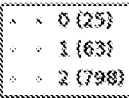
FIG. 12 (Continued)

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(g) Merge 7: HMGB2(0): 7.19 HSP90AA1(0): 6.71 TOP2A(0): 5.49



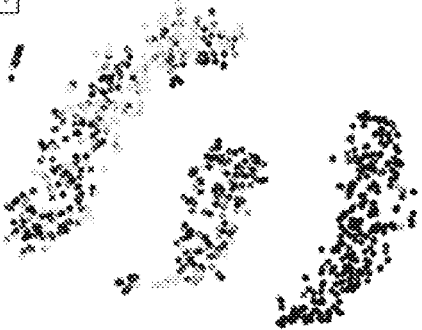
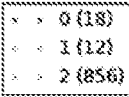
Expression of HMGB2



(h) Merge 8: VIM(0): 7.23 GLUL(0): 6.55 DLK1(0): 6.00



Expression of VIM



(i) Merge 9: HMGN5(0): 9.76 YWHAZ(1): 6.37 TCHP(0): 6.18



Expression of HMGN5

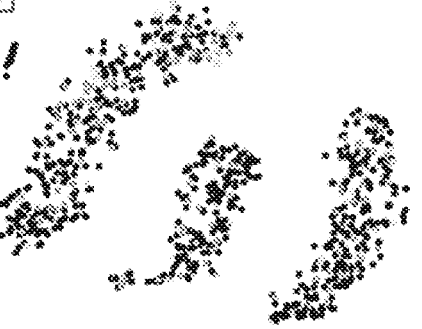
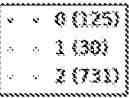


FIG. 12 (Continued)

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•	•	0 (15)
•	•	1 (10)
•	•	2 (861)

Merge 2:



FIG. 13

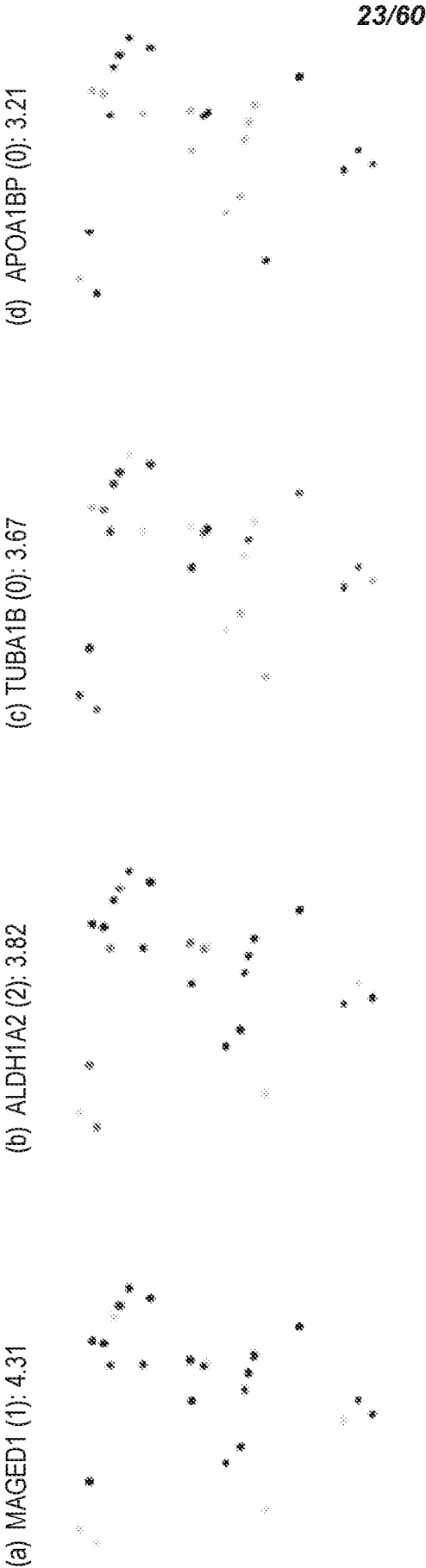


FIG. 14



FIG. 15

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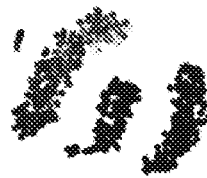
(d)

Clust: 2, Score: 137.51

FTL 137.51

HBG1 120.99

UQCRL 114.51



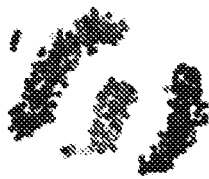
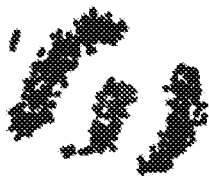
(e)

Clust: 3, Score: 32.53

CD3D 32.53

ADA 28.54

CHI3L2 28.50



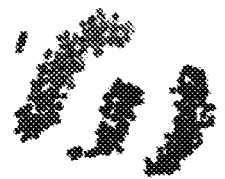
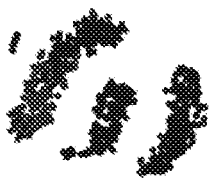
(f)

Clust: 4, Score: 18.15

FTL 18.15

PRAME 14.63

KRT18 10.43

**FIG. 15 (Continued)**

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(a)

Clust -1 v. clust 0. Score: 45.79

ADA 45.79

CH3L2 36.20

AIF1 33.93

• • -1 (0)
• • 0 (0)

(b)

Clust -1 v. clust 1. Score: 96.53

HLA-B 96.53

UCHL1 89.81

RFX1 69.76

• • -1 (0)
• • 1 (0)

(c)

Clust -1 v. clust 2. Score: 81.45

ATPSH 81.45

NSA2 79.18

PSME2 76.23

• • -1 (0)
• • 2 (0)

(d)

Clust -1 v. clust 3. Score: 41.05

ADA 41.05

CH3L2 28.92

AIF1 26.26

• • -1 (0)
• • 3 (0)

FIG. 16

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(e)

Clust -1 v. clust 4, Score: 33.87

ATPSH 33.87

SNRPC 30.90

NSA2 30.75

• -1 (0)
• -4 (0)

(f)

Clust 0 v. clust 1, Score: 62.52

CD3D 62.52

IGHM 53.49

CH3L2 48.75

• 0 (0)
• 1 (0)

(g)

Clust 0 v. clust 2, Score: 119.88

APOC1 119.88

HBG1 109.45

HBG2 101.04

• 0 (0)
• 2 (0)

(h)

Clust 0 v. clust 3, Score: 10.81

H2AF2 10.81

RAN 10.30

UBE2D3 8.98

• 0 (0)
• 3 (0)

FIG. 16 (Continued)

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(i)

Clust 0 v. clust 4, Score: 55.14

HBG1 55.14

APOC1 54.92

TRBC2 51.82

• • 0 (0)
• • 4 (0)



(j)

Clust -1 v. clust 4, Score: 33.87

ATP5H 33.87

SNRPC 30.90

NSA2 30.75

• • -1 (0)
• • 4 (0)



(k)

Clust 0 v. clust 1, Score: 62.52

CD3D 62.52

IGHM 53.49

CH3L2 48.75

• • 0 (0)
• • 1 (0)



(l)

Clust 1 v. clust 4, Score: 135.92

IGJ 135.92

IGHM 119.15

IGLC3 117.51

• • 1 (0)
• • 4 (0)

**FIG. 16 (Continued)**

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(m)

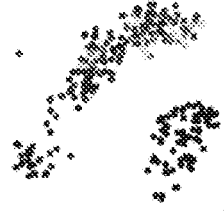
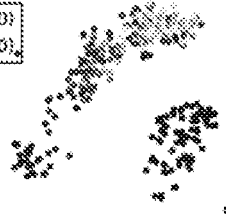
Clust 2 v. clust 3, Score: 112.35

APOC1 112.35

HBG1 108.94

GTSF1 97.86

• • 2 (0)
• • 3 (0)



(n)

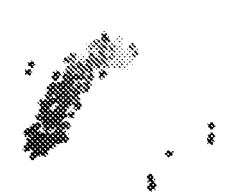
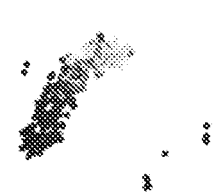
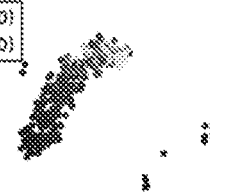
Clust 2 v. clust 4, Score: 38.82

RPS19 38.82

RPL27A 38.04

RPS20 37.55

• • 2 (0)
• • 4 (0)



(o)

Clust 3 v. clust 4, Score: 55.42

HBG1 55.42

APOC1 52.32

FTL 48.21

• • 3 (0)
• • 4 (0)

**FIG. 16 (Continued)**

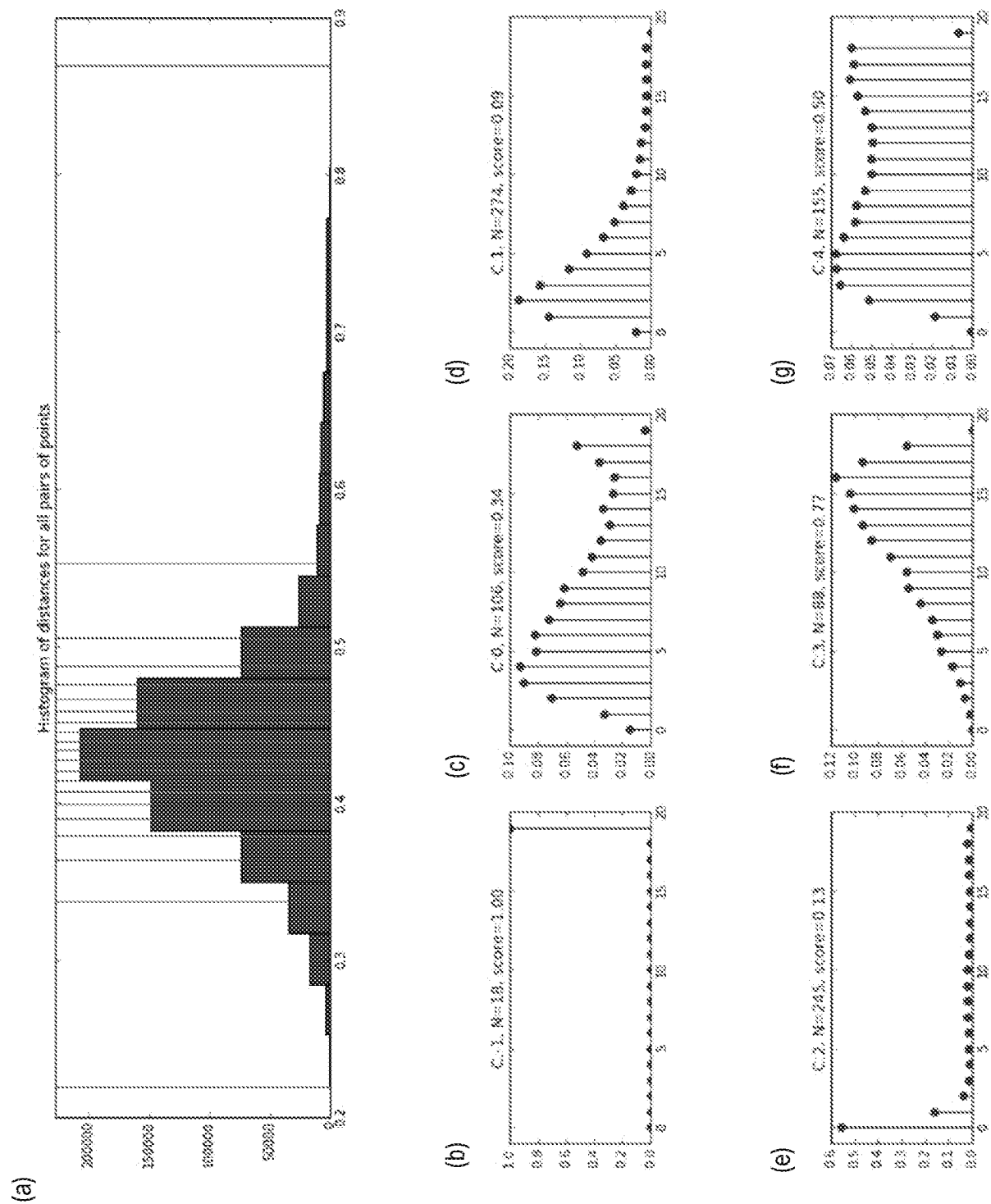


FIG. 17

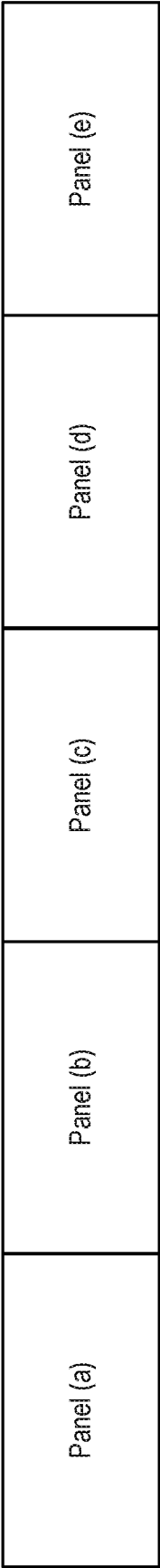


FIG. 18

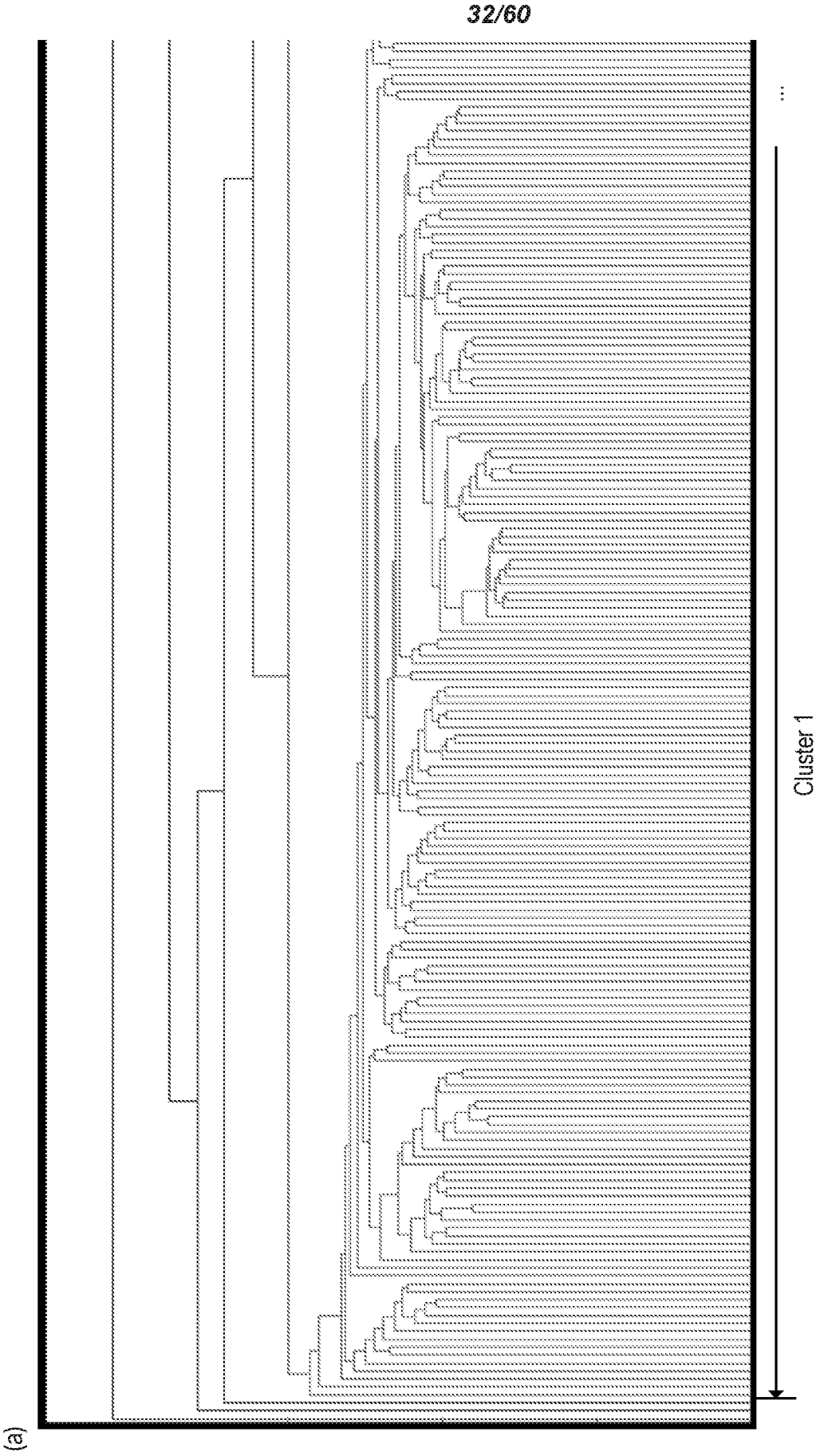


FIG. 18 (Continued)

(b)

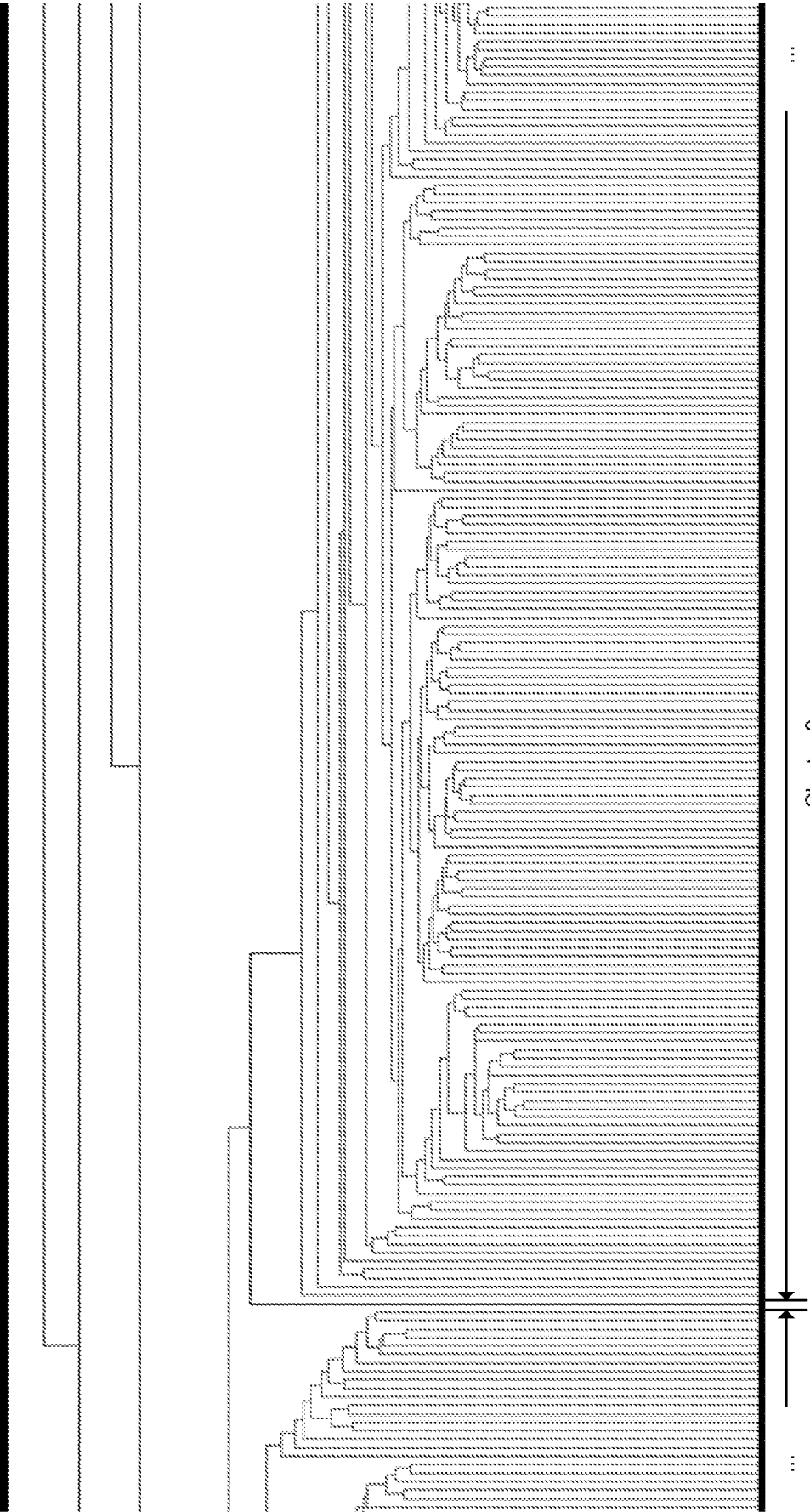


FIG. 18 (Continued)

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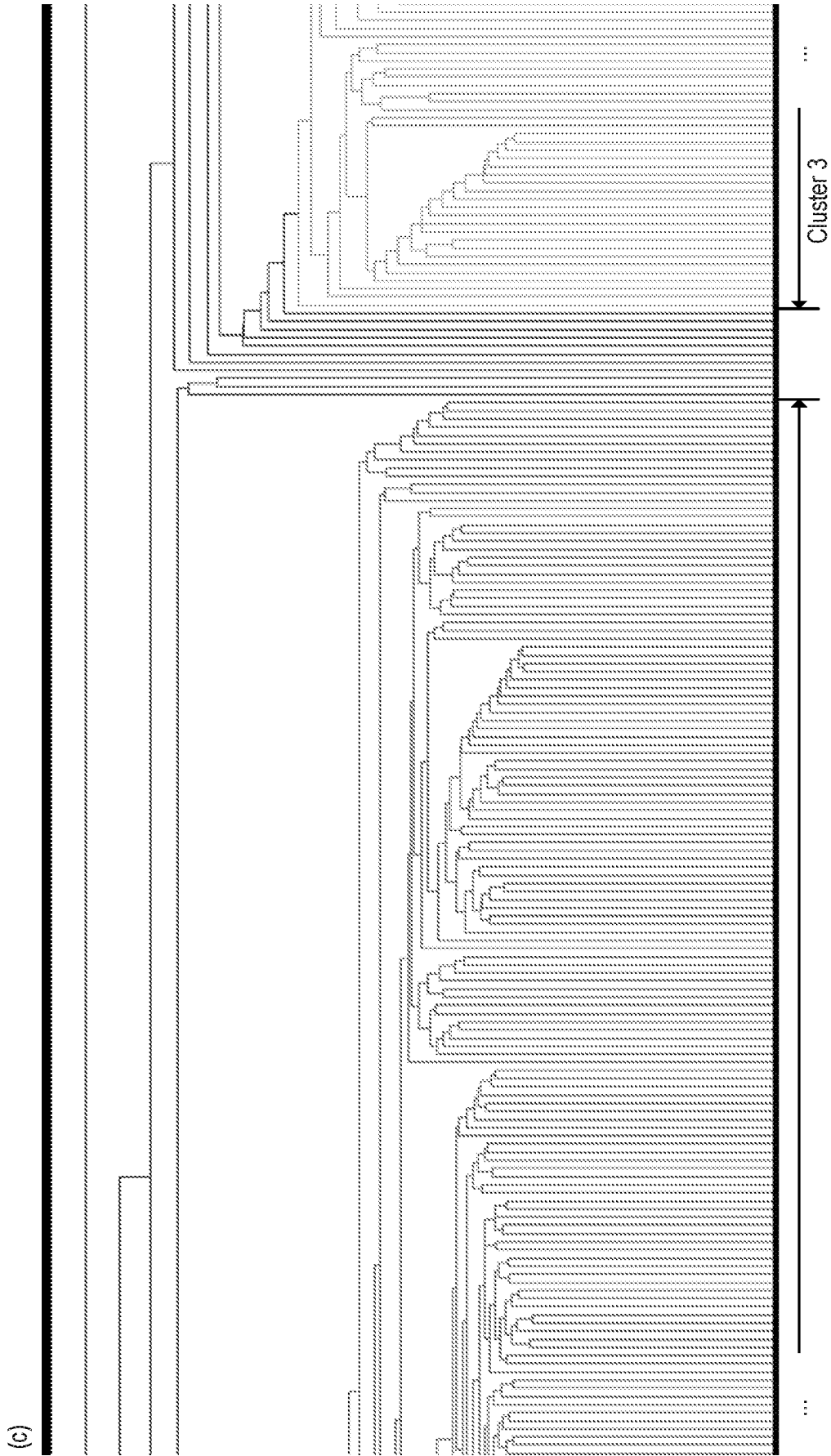


FIG. 18 (Continued)

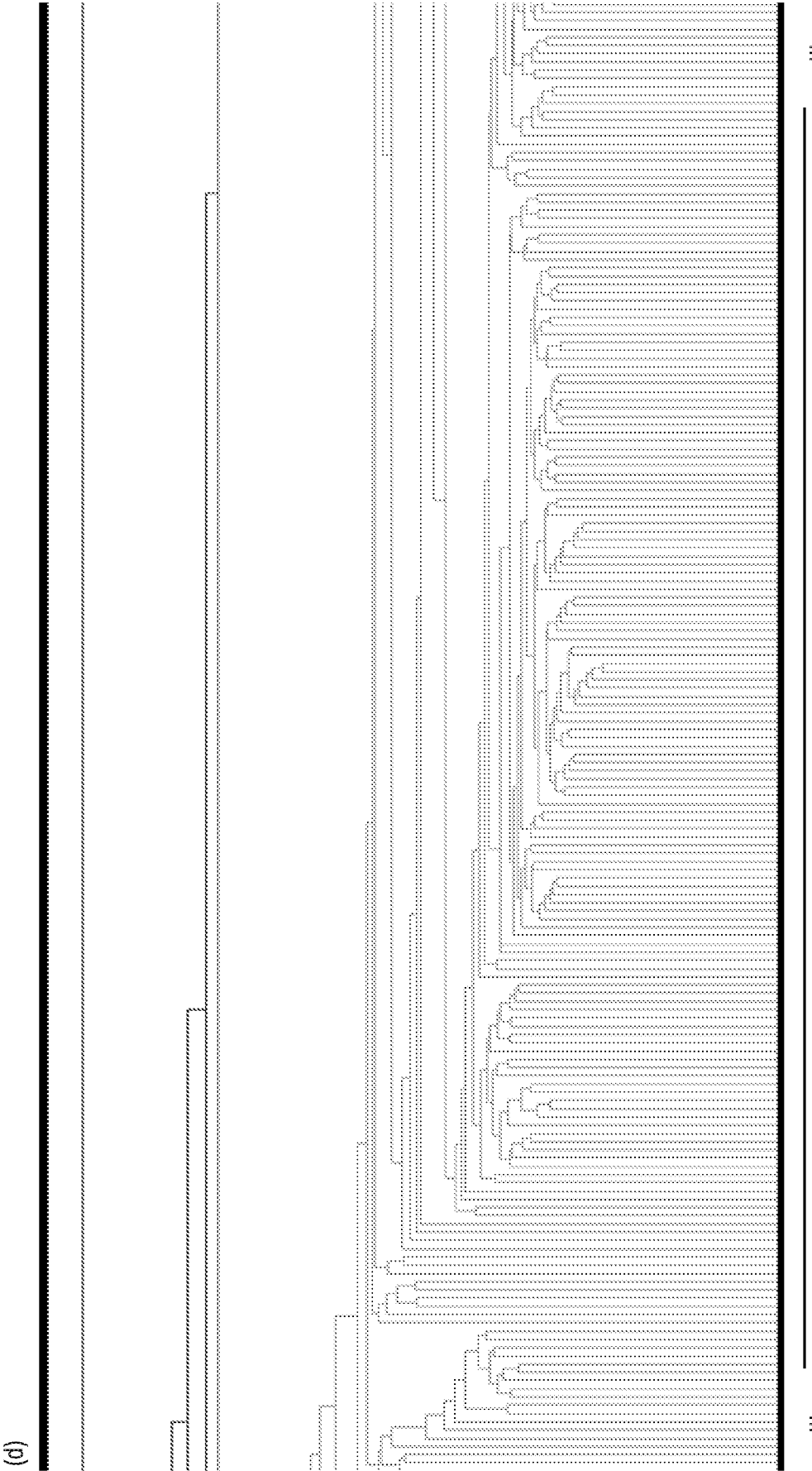


FIG. 18 (Continued)

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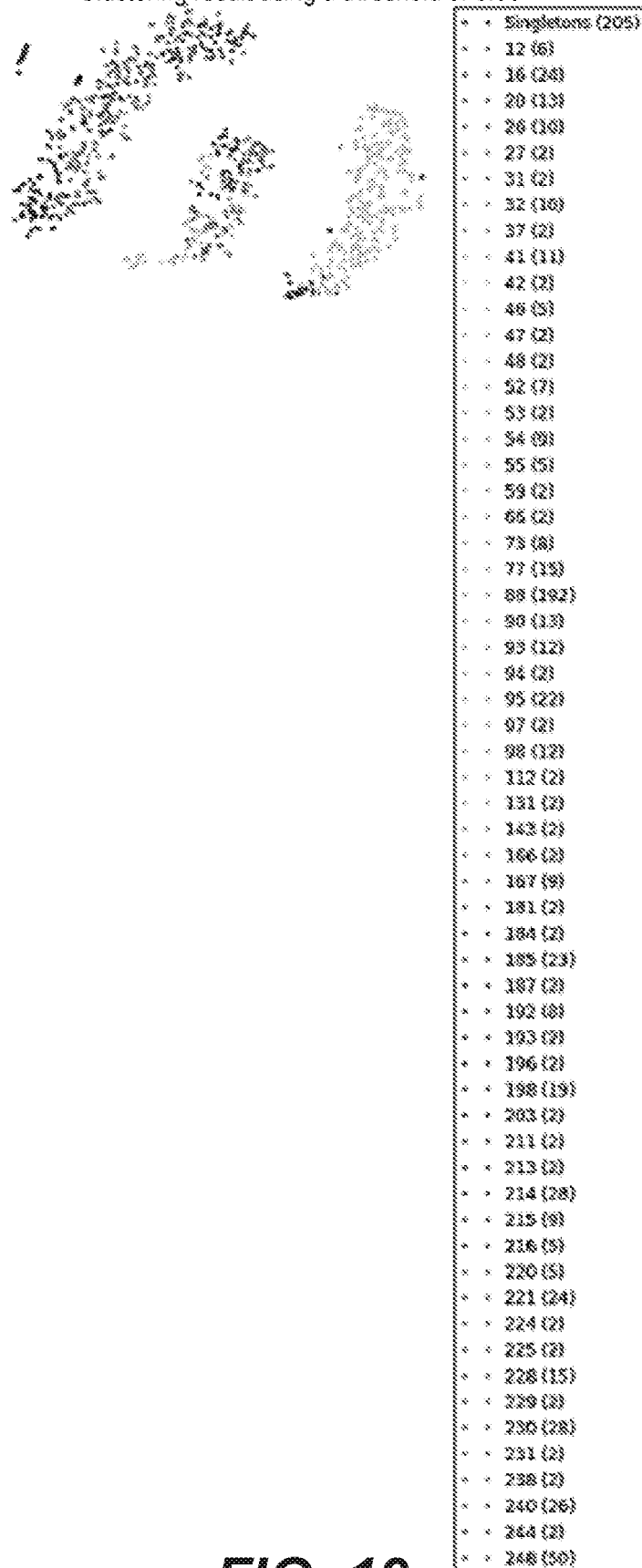
(e)



FIG. 18 (Continued)

(a)

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Clustering result using a threshold of 5.00

**FIG. 19**

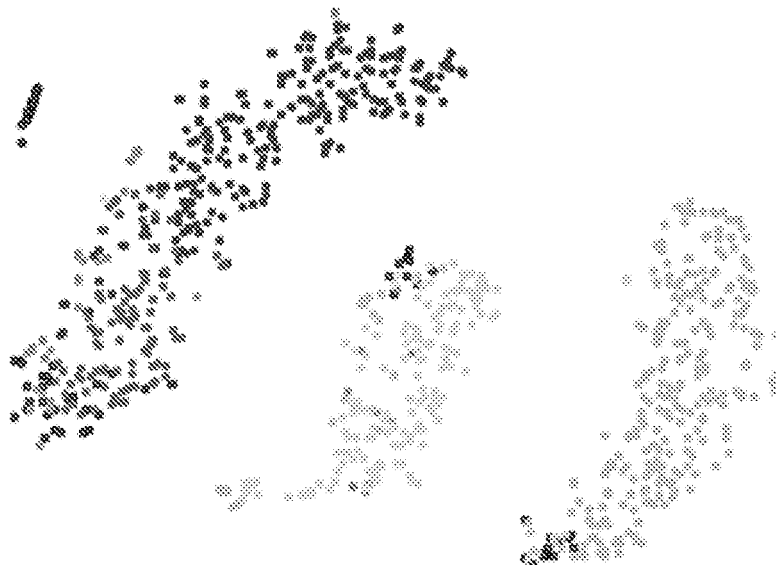
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(b) Clustering result using a threshold of 10.000



• •	Singletons (80)
• •	8 (10)
• •	12 (24)
• •	16 (13)
• •	17 (15)
• •	18 (90)
• •	23 (10)
• •	27 (15)
• •	38 (261)
• •	42 (10)
• •	57 (30)
• •	62 (18)
• •	76 (215)
• •	77 (2)
• •	78 (93)

(c) Clustering result using a threshold of 15.000

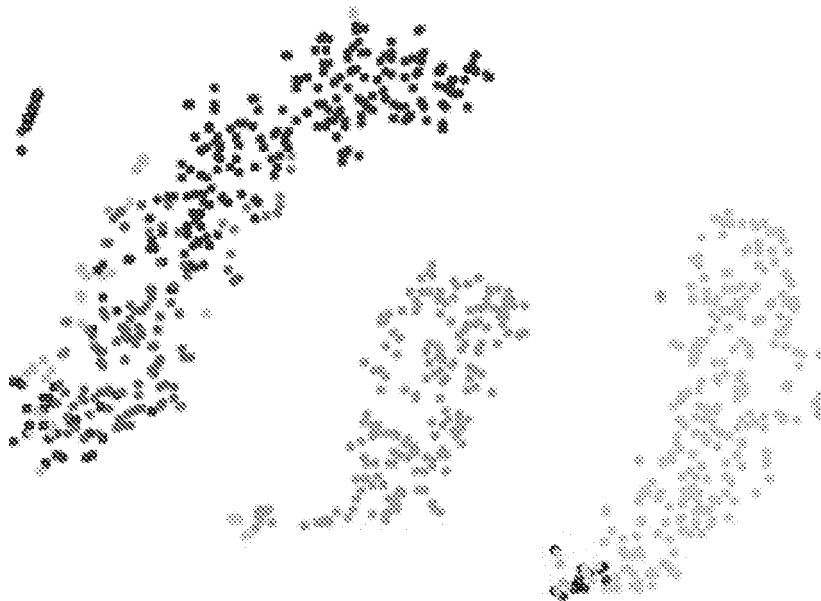


• •	Singletons (72)
• •	8 (10)
• •	11 (160)
• •	15 (15)
• •	26 (261)
• •	30 (10)
• •	45 (30)
• •	50 (18)
• •	64 (215)
• •	65 (2)
• •	66 (93)

FIG. 19 (Continued)

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(d) Clustering result using a threshold of 20.000



• •	Singletons (62)
• •	3 (195)
• •	14 (261)
• •	18 (10)
• •	33 (30)
• •	38 (18)
• •	52 (215)
• •	53 (2)
• •	54 (93)

(e) Clustering result using a threshold of 25.000



• •	Singletons (62)
• •	3 (195)
• •	14 (261)
• •	18 (10)
• •	33 (30)
• •	38 (18)
• •	52 (215)
• •	53 (2)
• •	54 (93)

FIG. 19 (Continued)

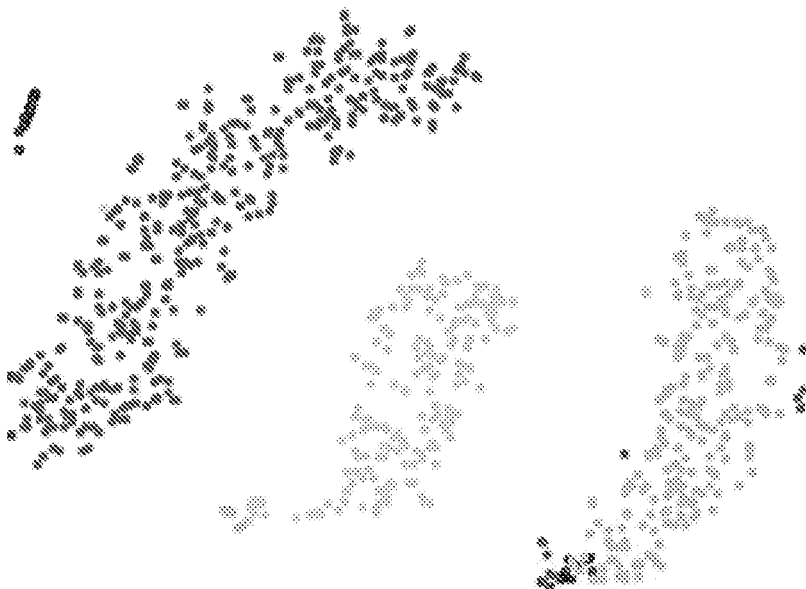
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(f) Clustering result using a threshold of 30.000



* *	Singletons (62)
* *	3 (195)
* *	14 (261)
* *	18 (10)
* *	33 (30)
* *	38 (18)
* *	52 (215)
* *	53 (2)
* *	54 (93)

(g) Clustering result using a threshold of 35.000



* *	Singletons (34)
* *	3 (195)
* *	14 (261)
* *	18 (10)
* *	31 (386)

FIG. 19 (Continued)

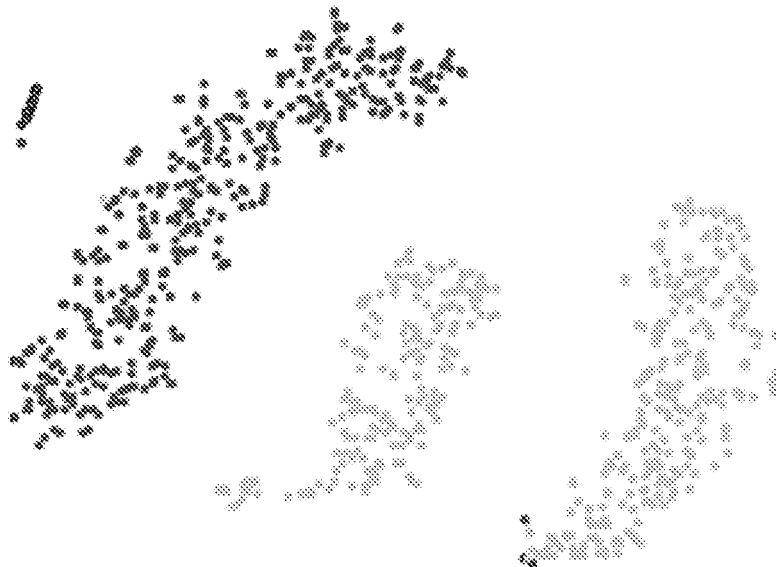
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(h) Clustering result using a threshold of 40.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

(i) Clustering result using a threshold of 45.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

FIG. 19 (Continued)

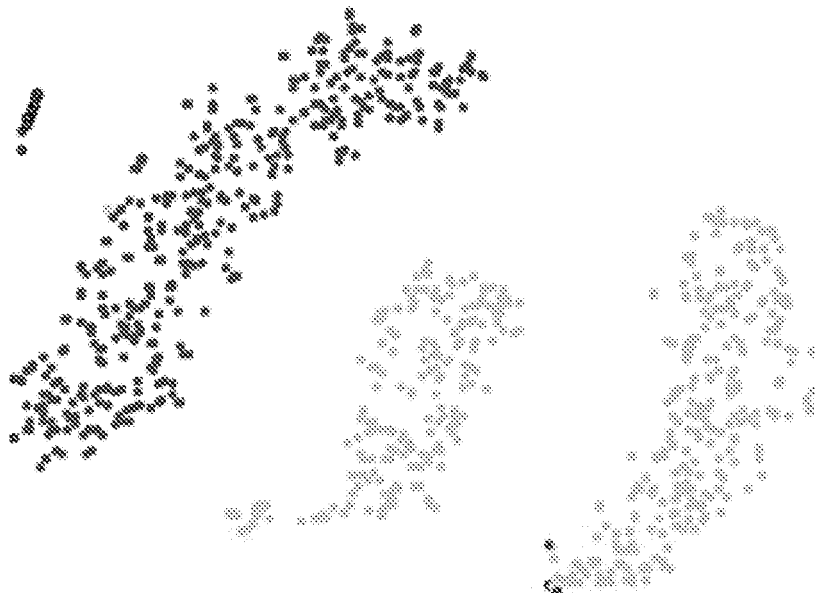
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(j) Clustering result using a threshold of 50.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

(k) Clustering result using a threshold of 55.000

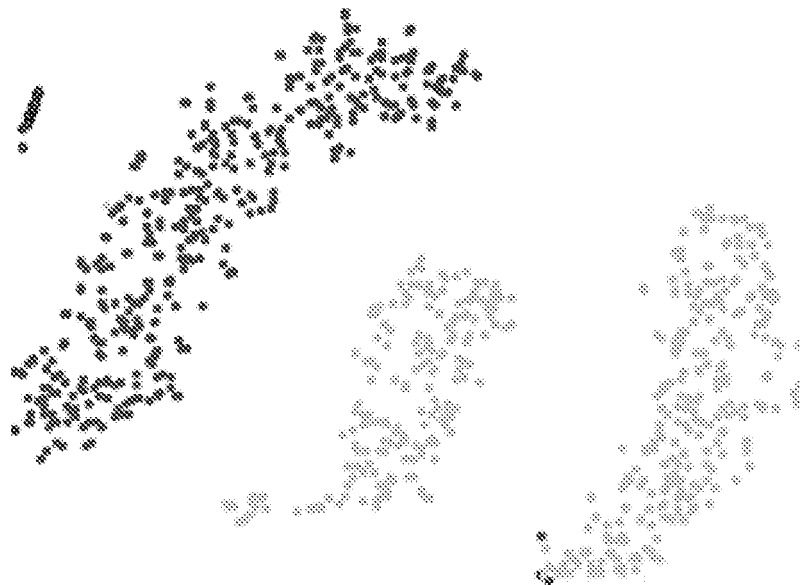


• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

FIG. 19 (Continued)

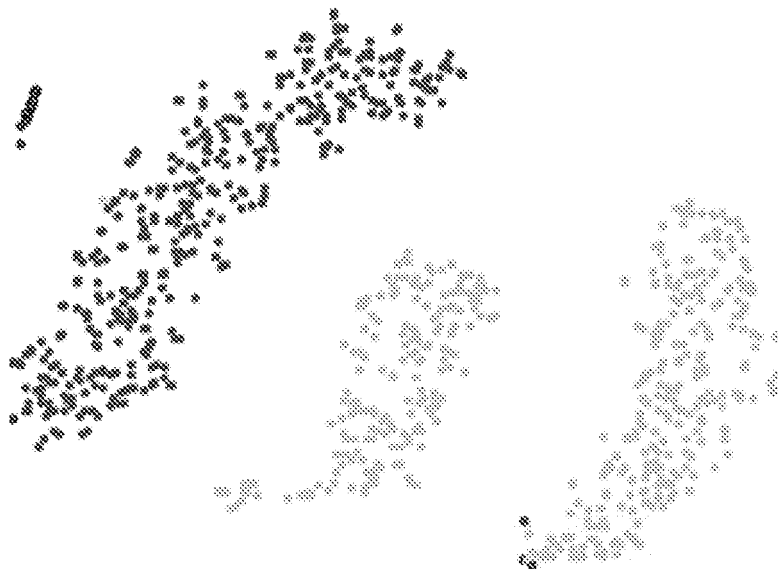
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(l) Clustering result using a threshold of 60.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

(m) Clustering result using a threshold of 65.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

FIG. 19 (Continued)

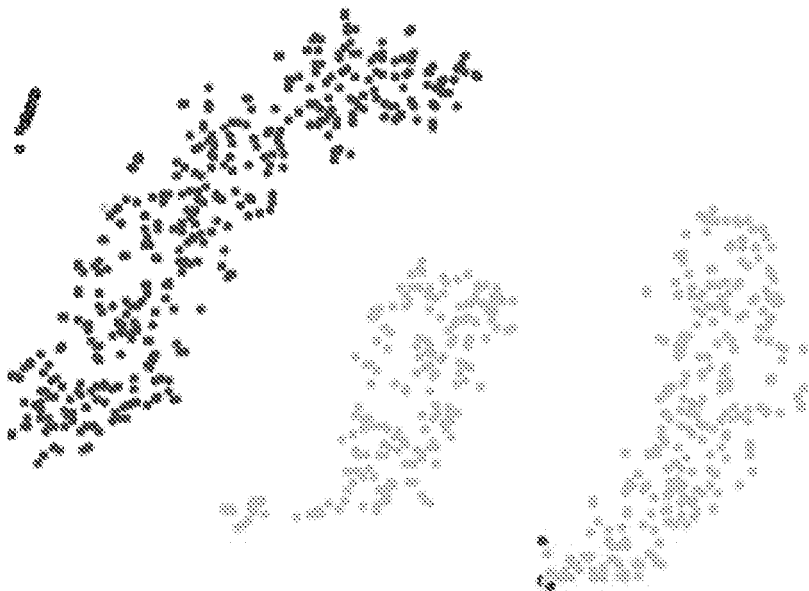
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(n) Clustering result using a threshold of 70.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

(o) Clustering result using a threshold of 75.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

FIG. 19 (Continued)

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(p) Clustering result using a threshold of 80.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

(q) Clustering result using a threshold of 85.000

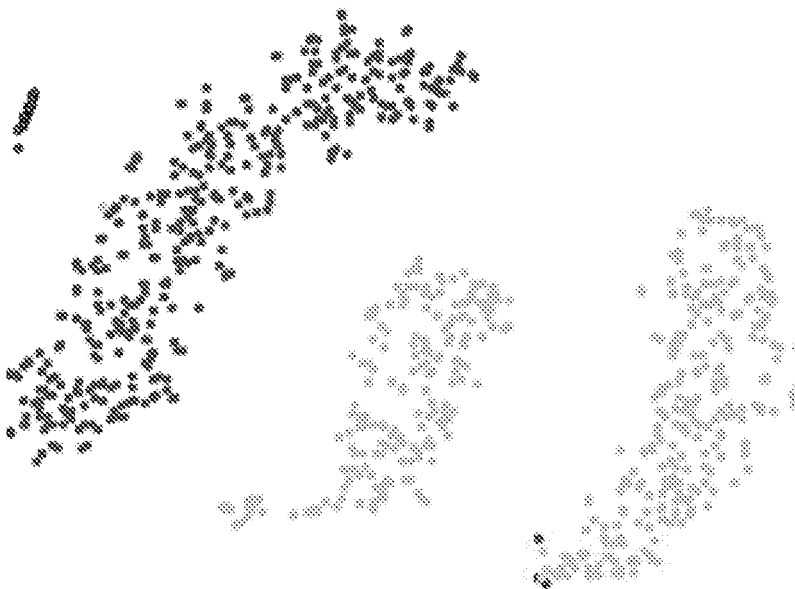


• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

FIG. 19 (Continued)

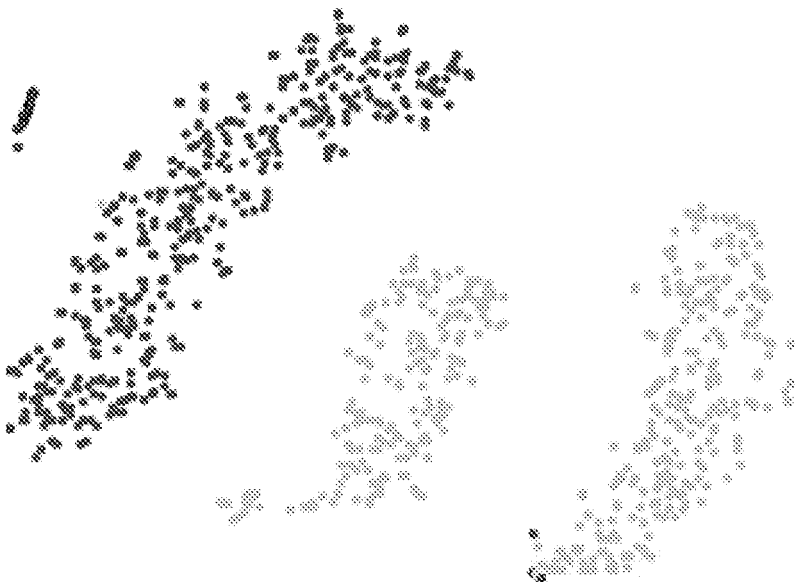
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(r) Clustering result using a threshold of 90.000



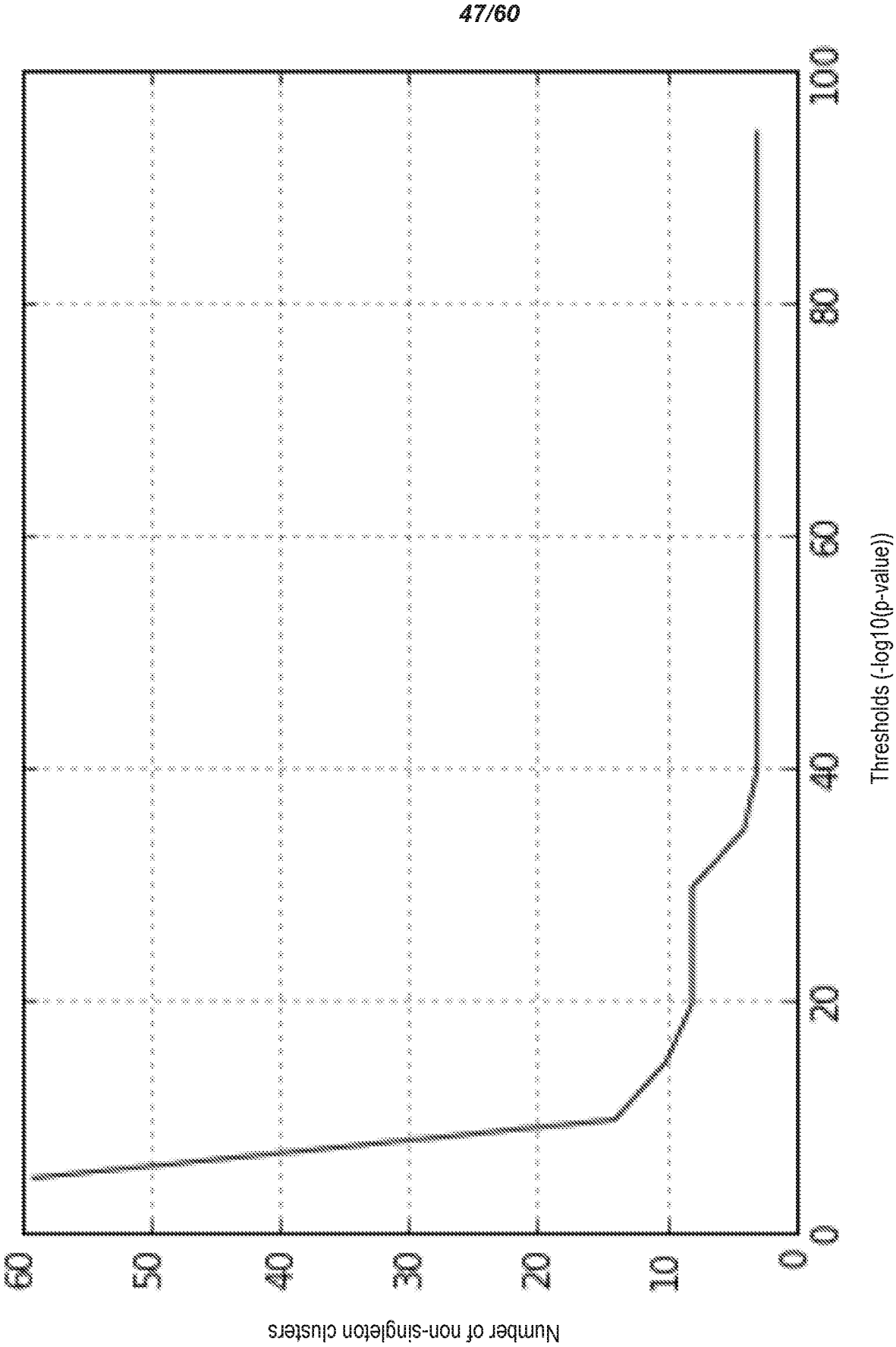
• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

(s) Clustering result using a threshold of 95.000



• •	Singletons (24)
• •	3 (195)
• •	7 (281)
• •	20 (386)

FIG. 19 (Continued)



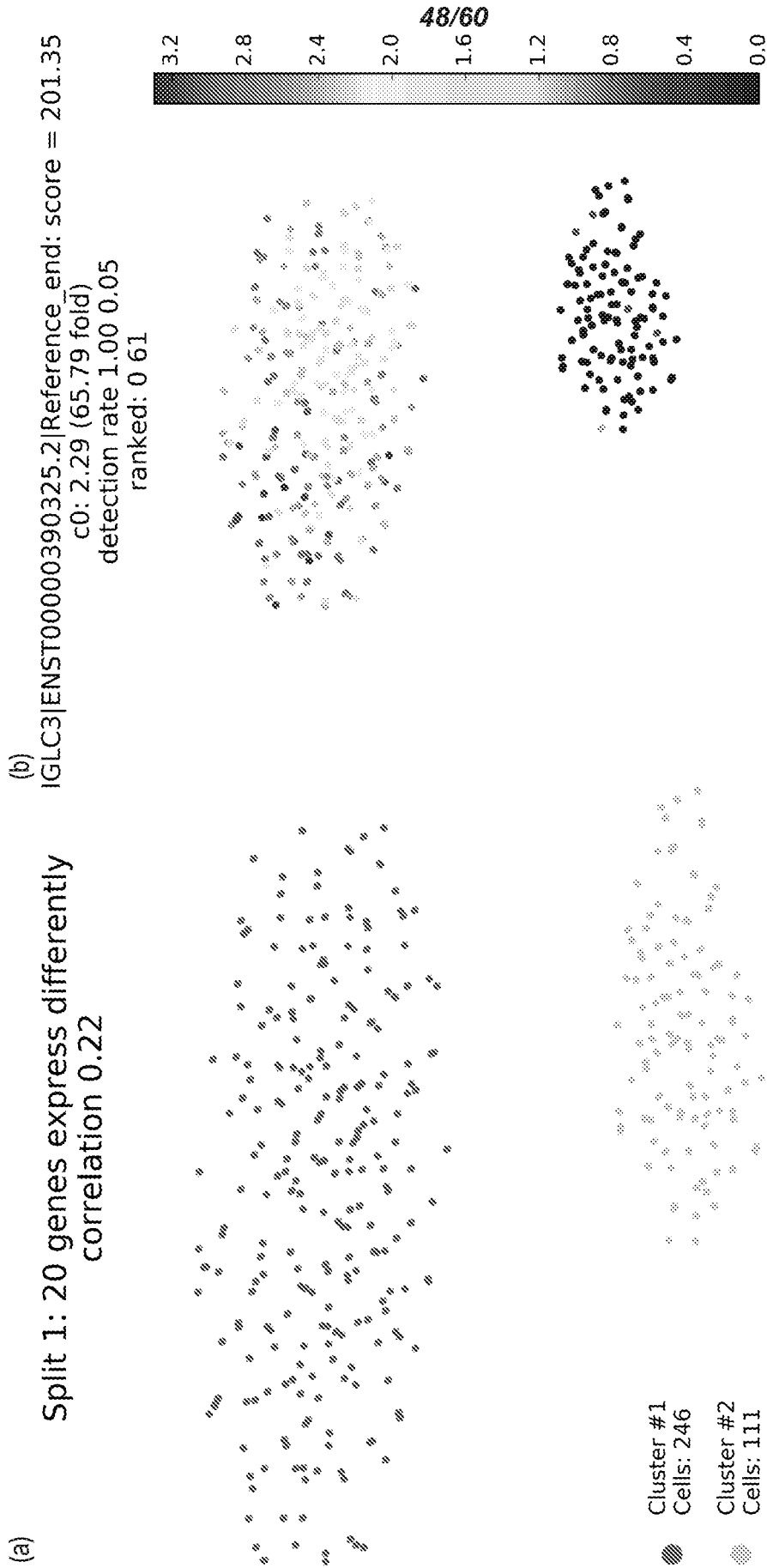


FIG. 21

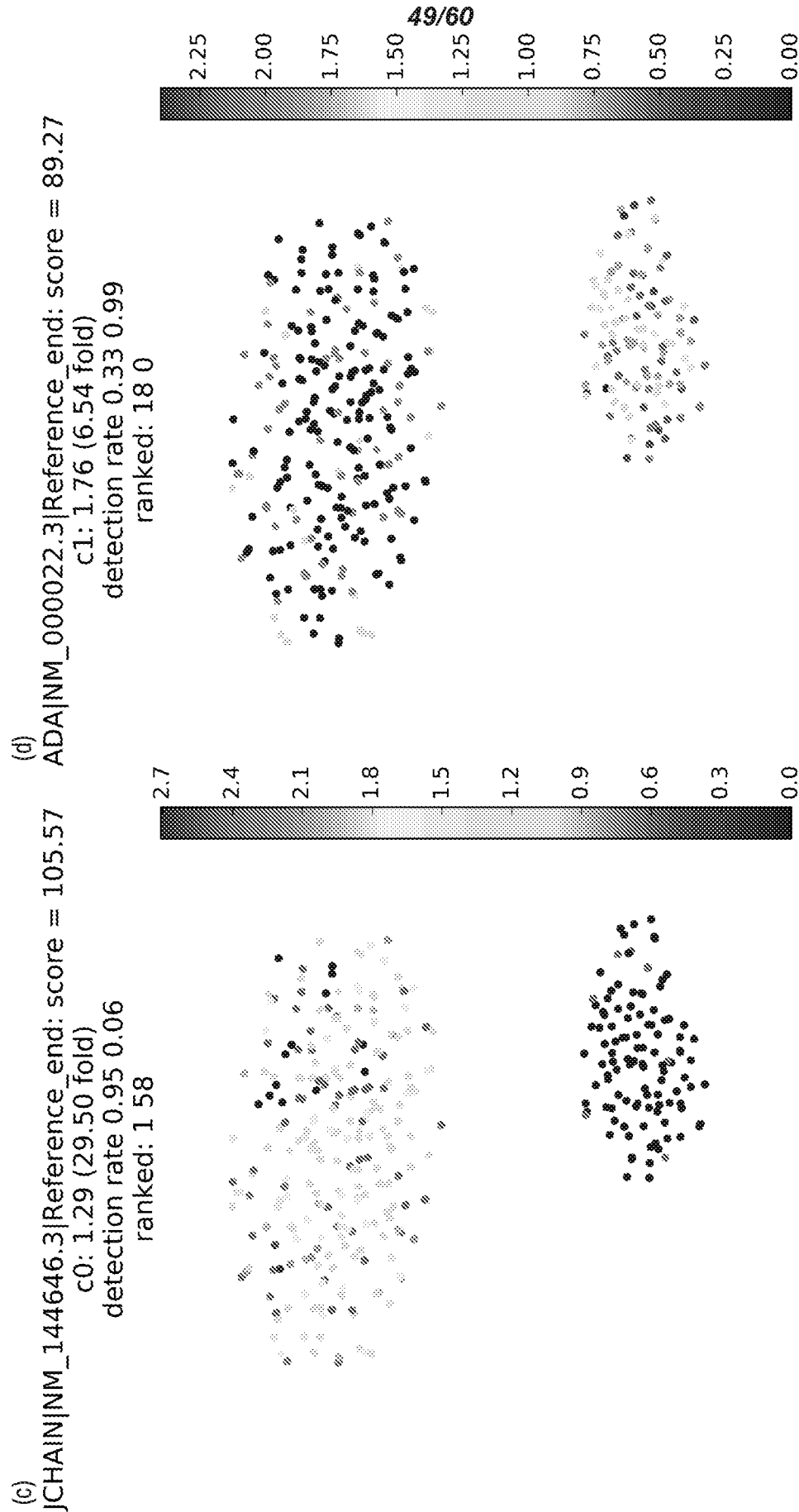


FIG. 21 (Continued)

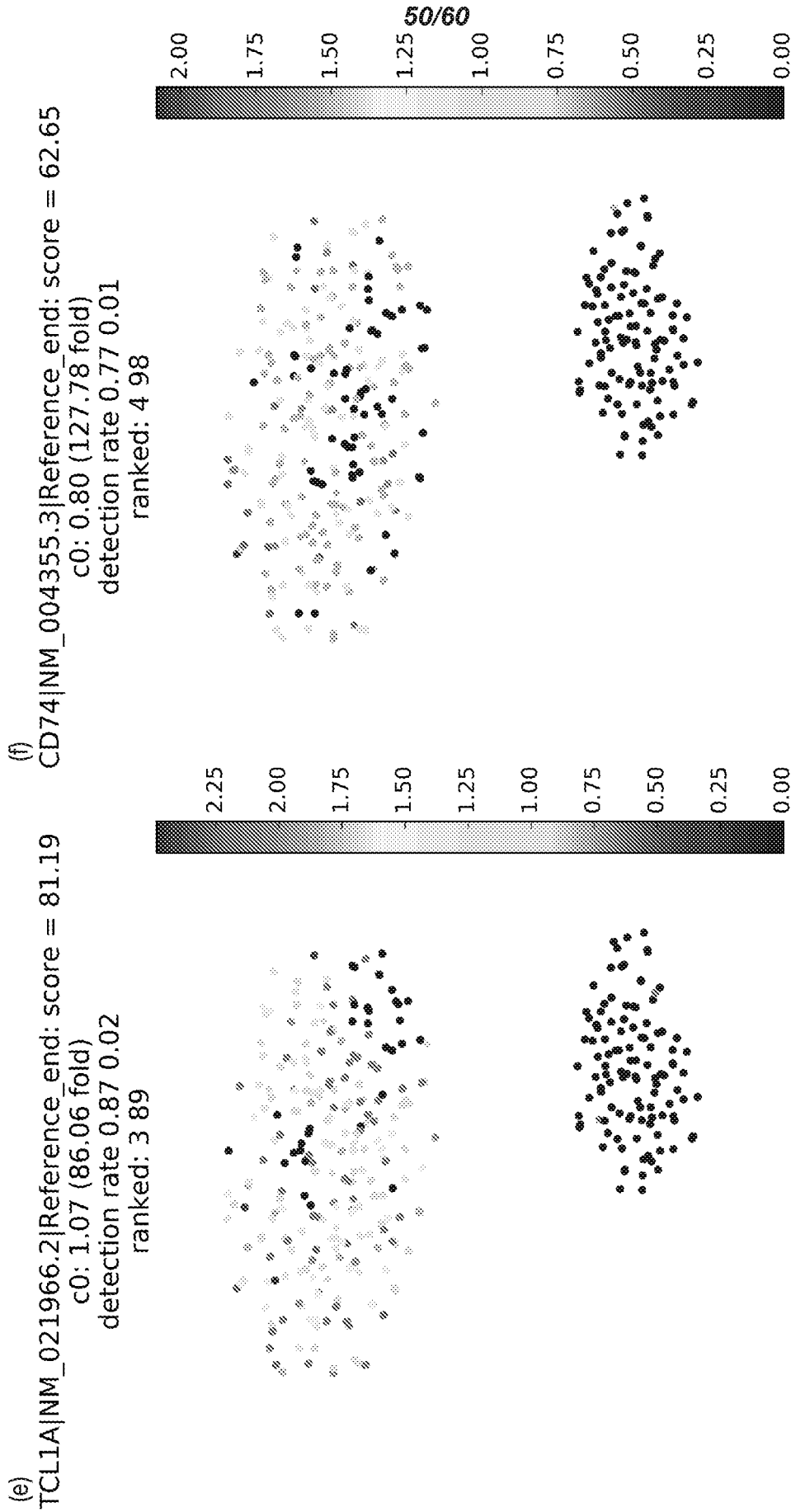


FIG. 21 (Continued)

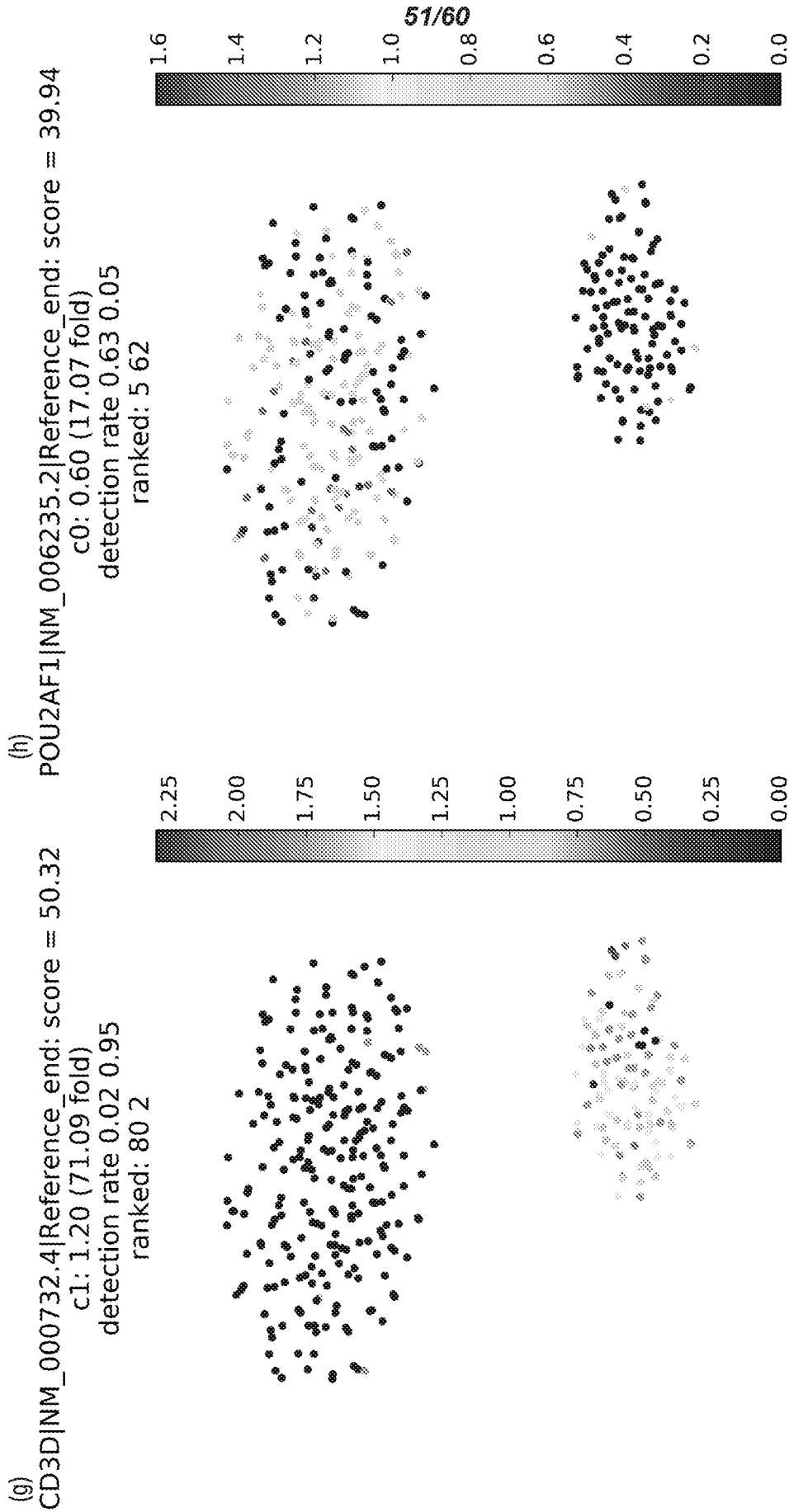


FIG. 21 (Continued)

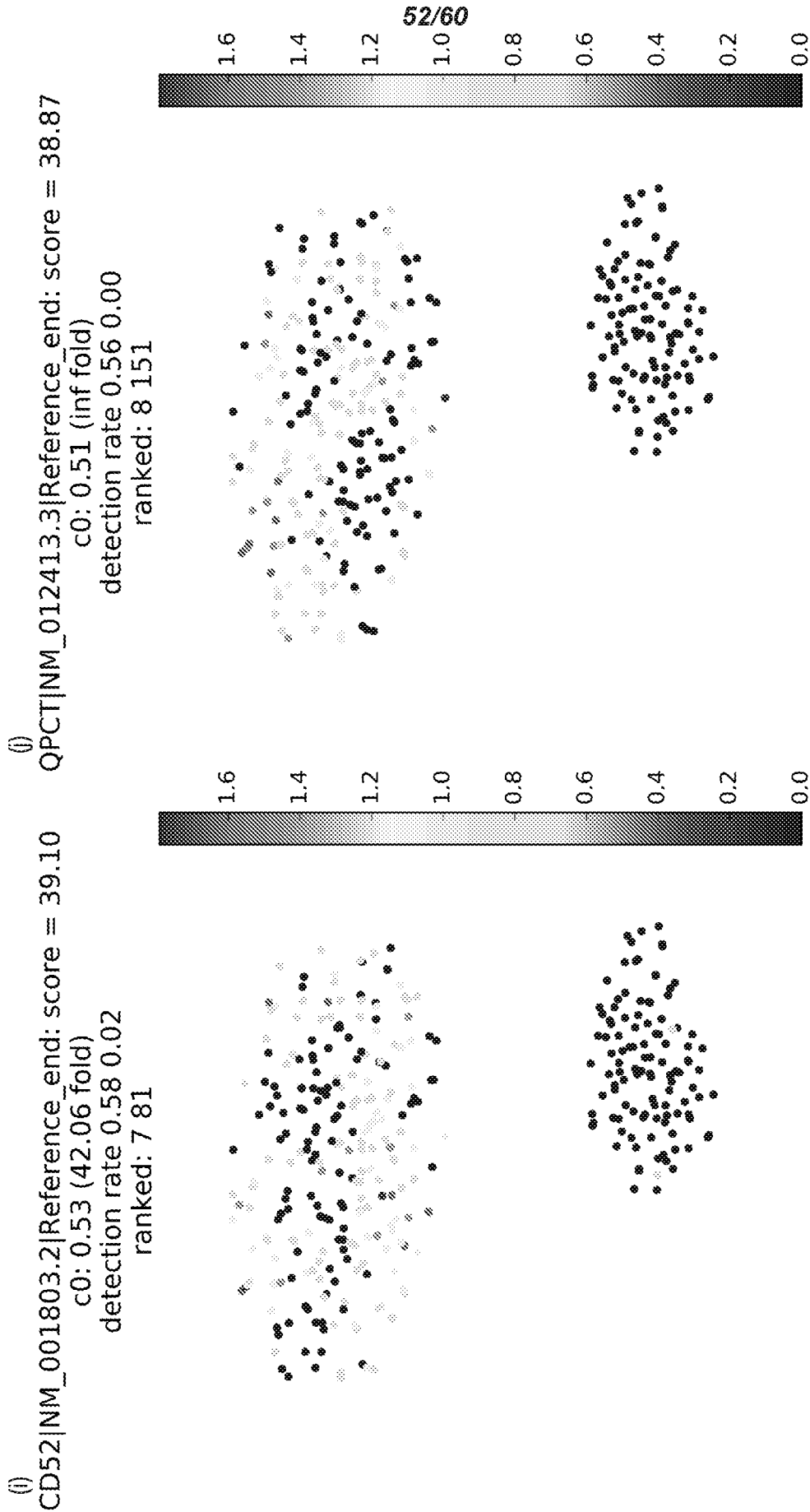


FIG. 21 (Continued)

t-SNE dimension reduction with 2 clusters
splitting result using a threshold of 10

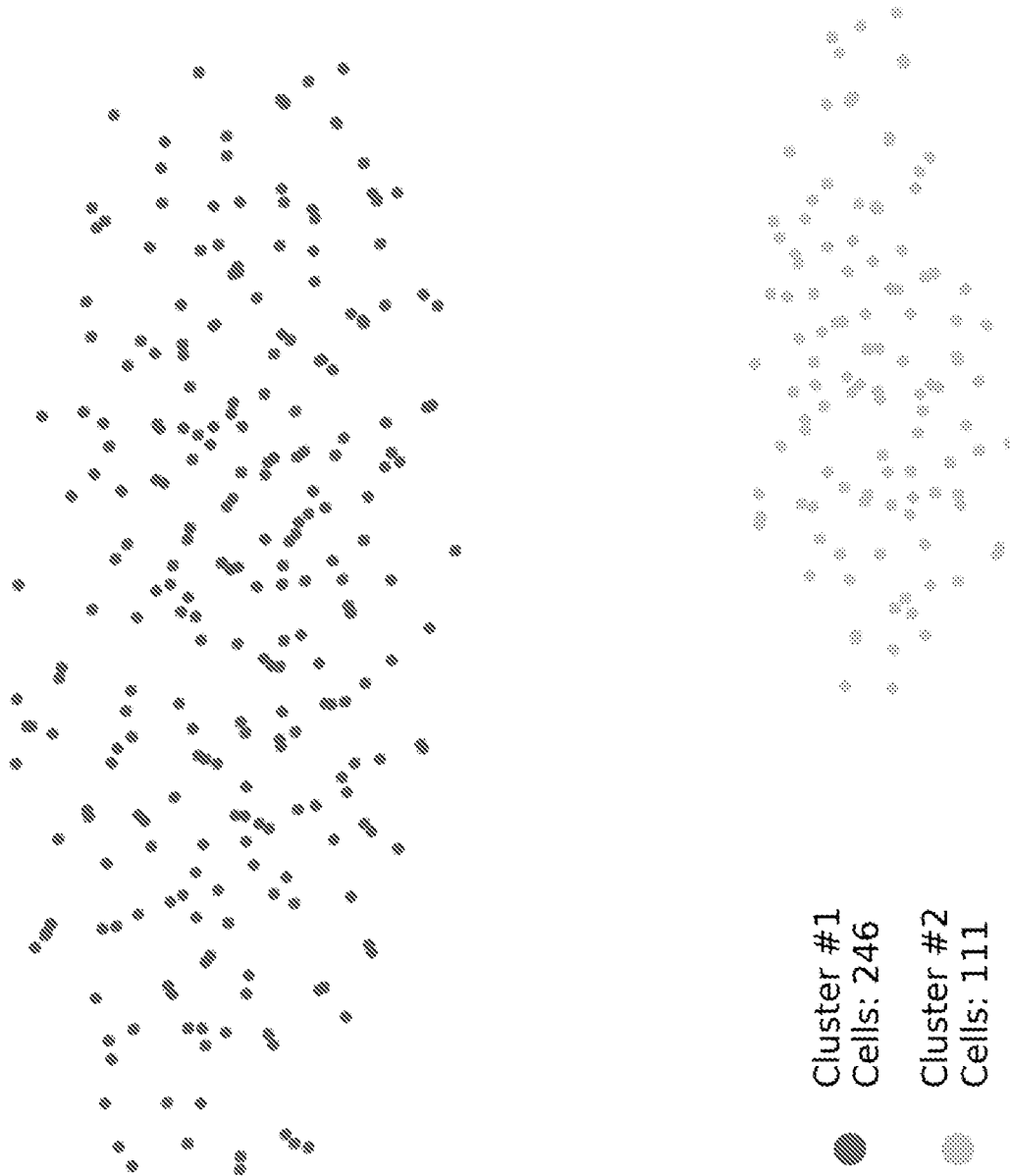


FIG. 22

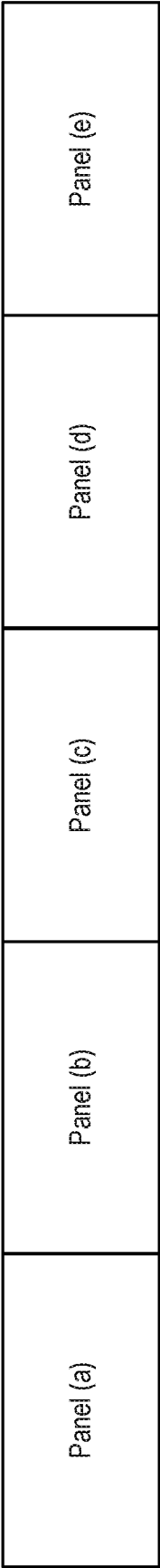


FIG. 23

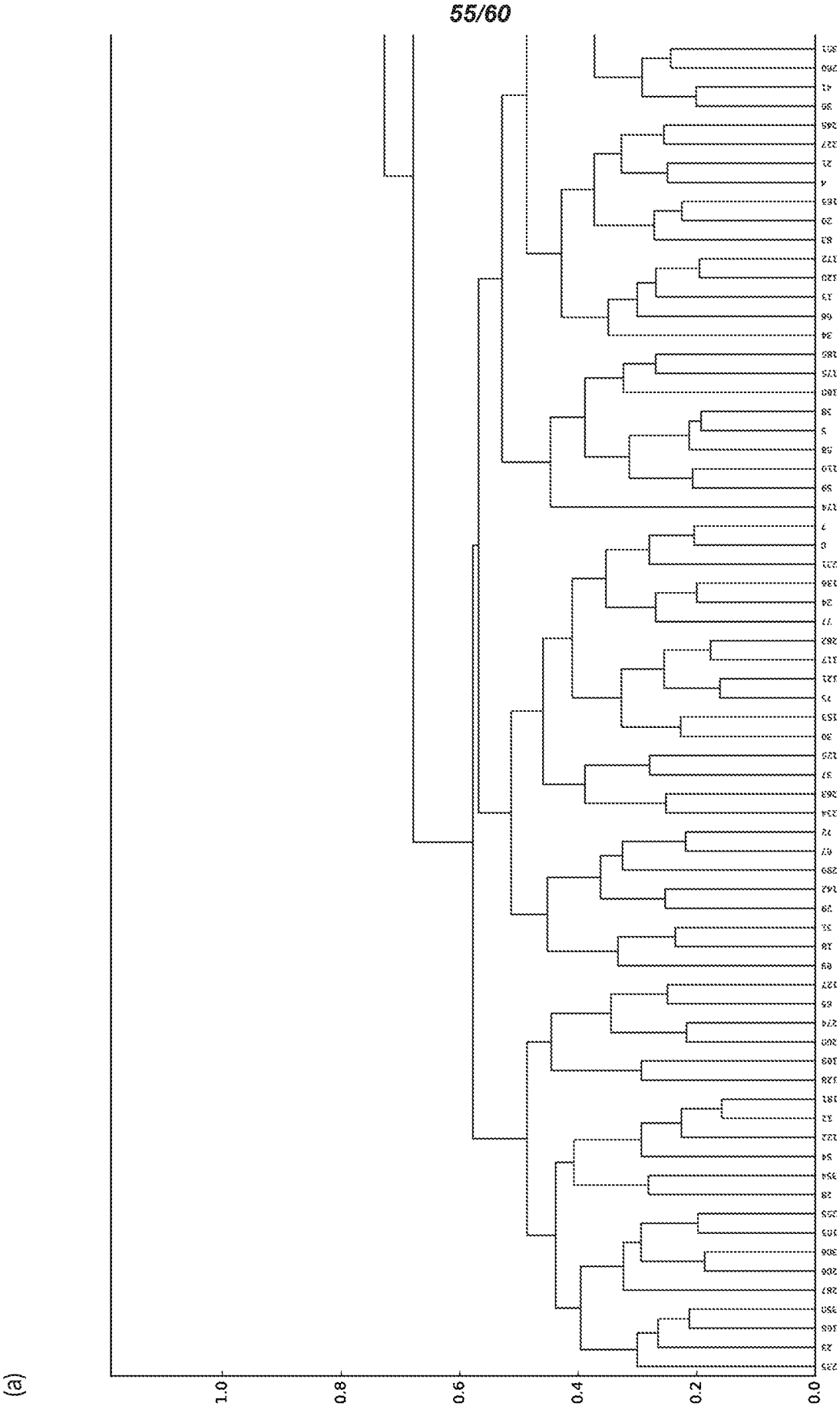


FIG. 23 (Continued)

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(b)

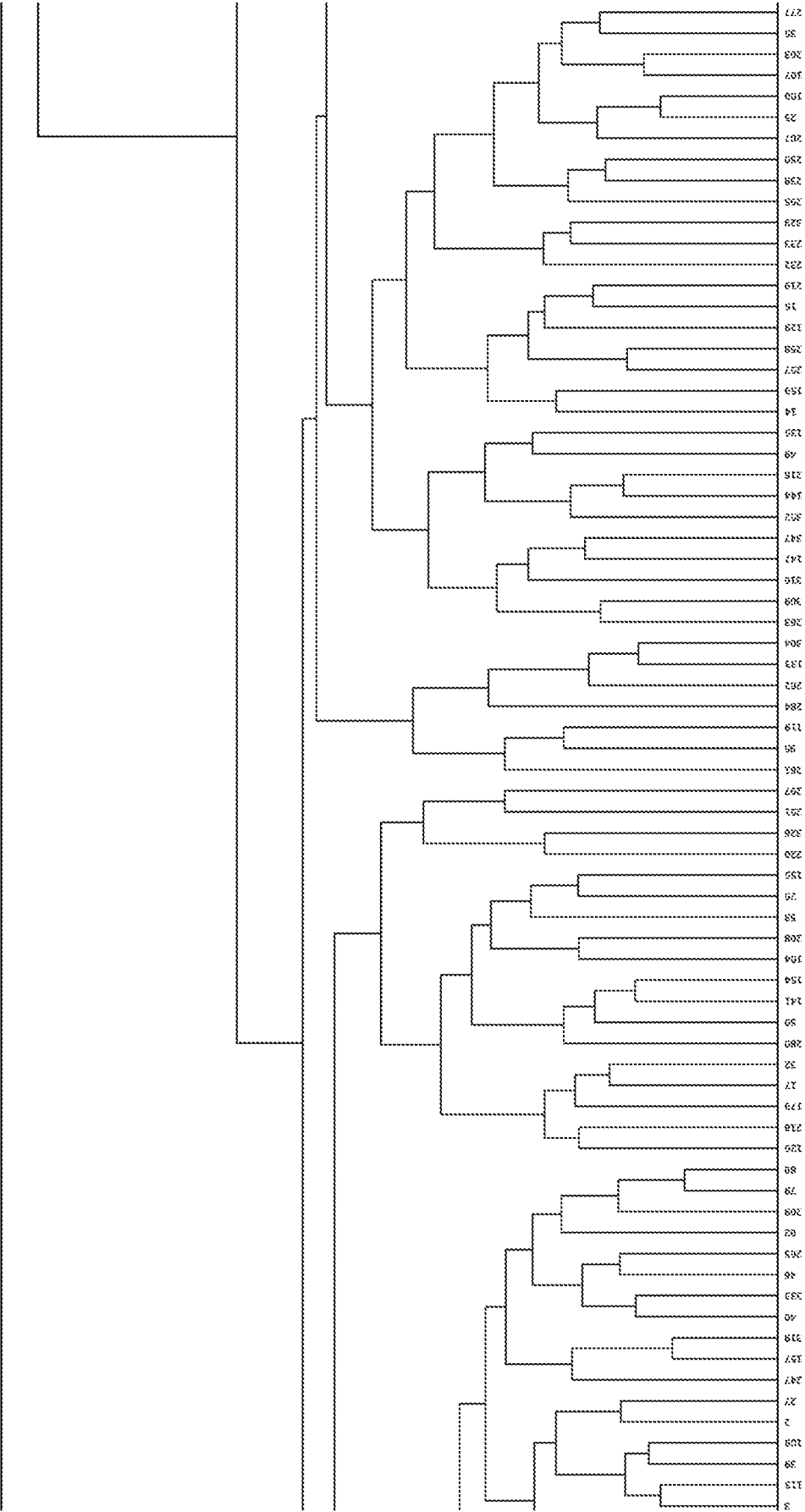


FIG. 23 (Continued)

(c)

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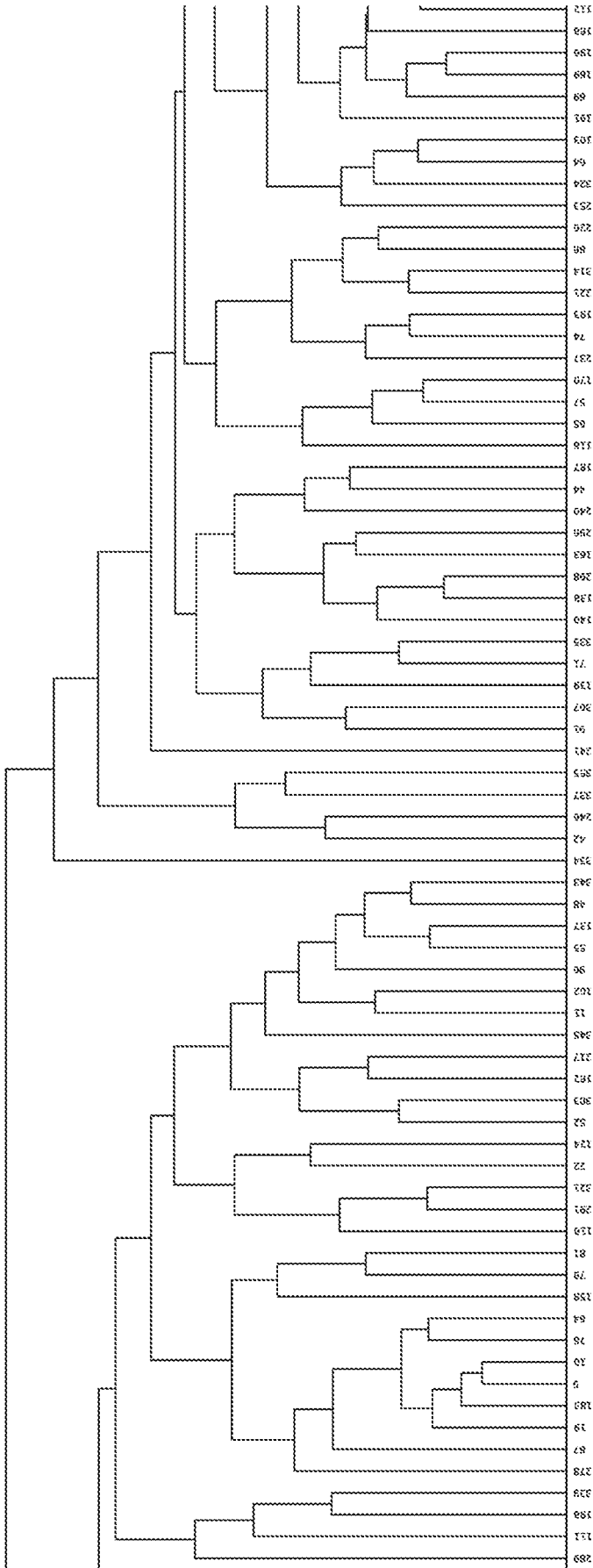


FIG. 23 (Continued)

(d)

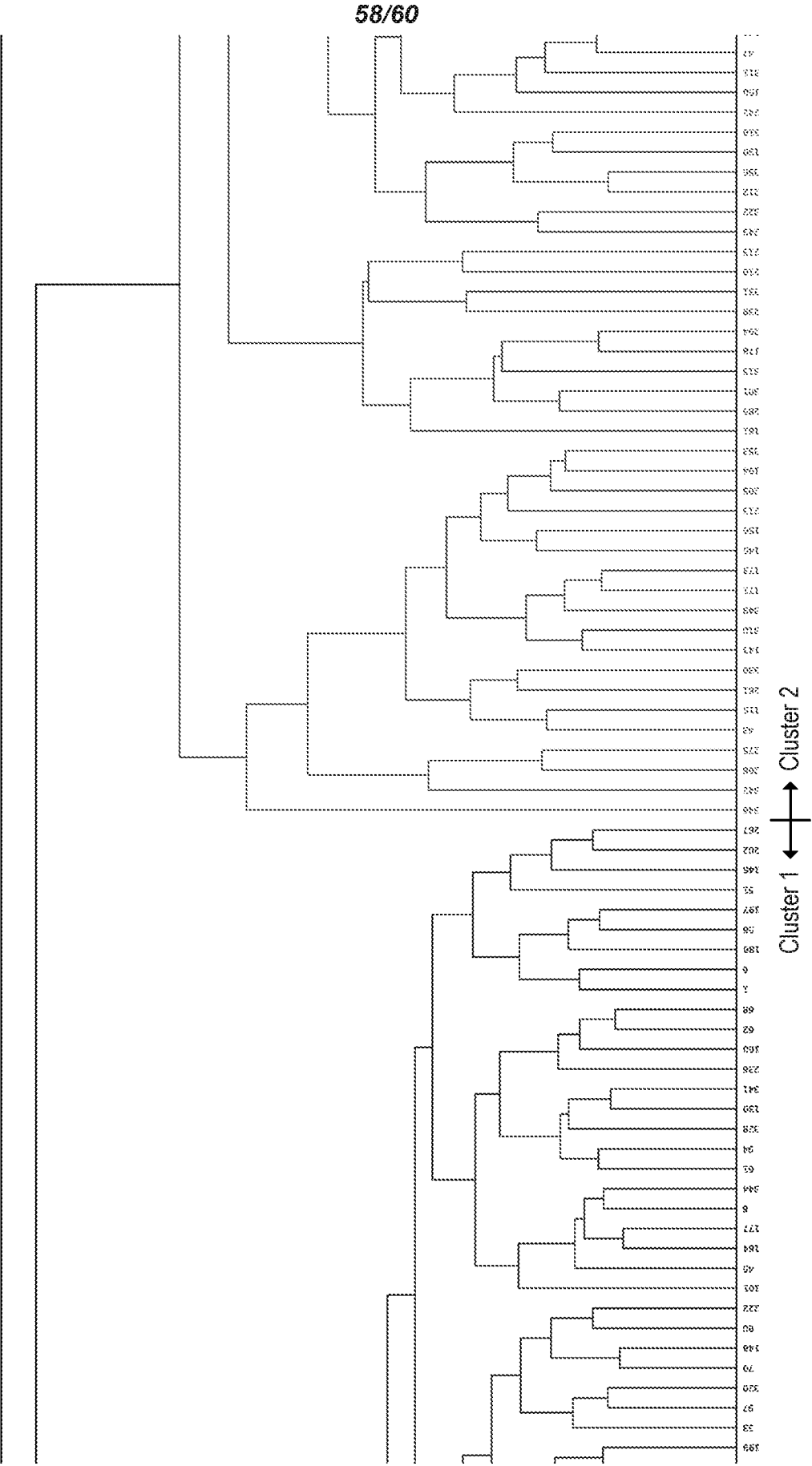


FIG. 23 (Continued)

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(e)

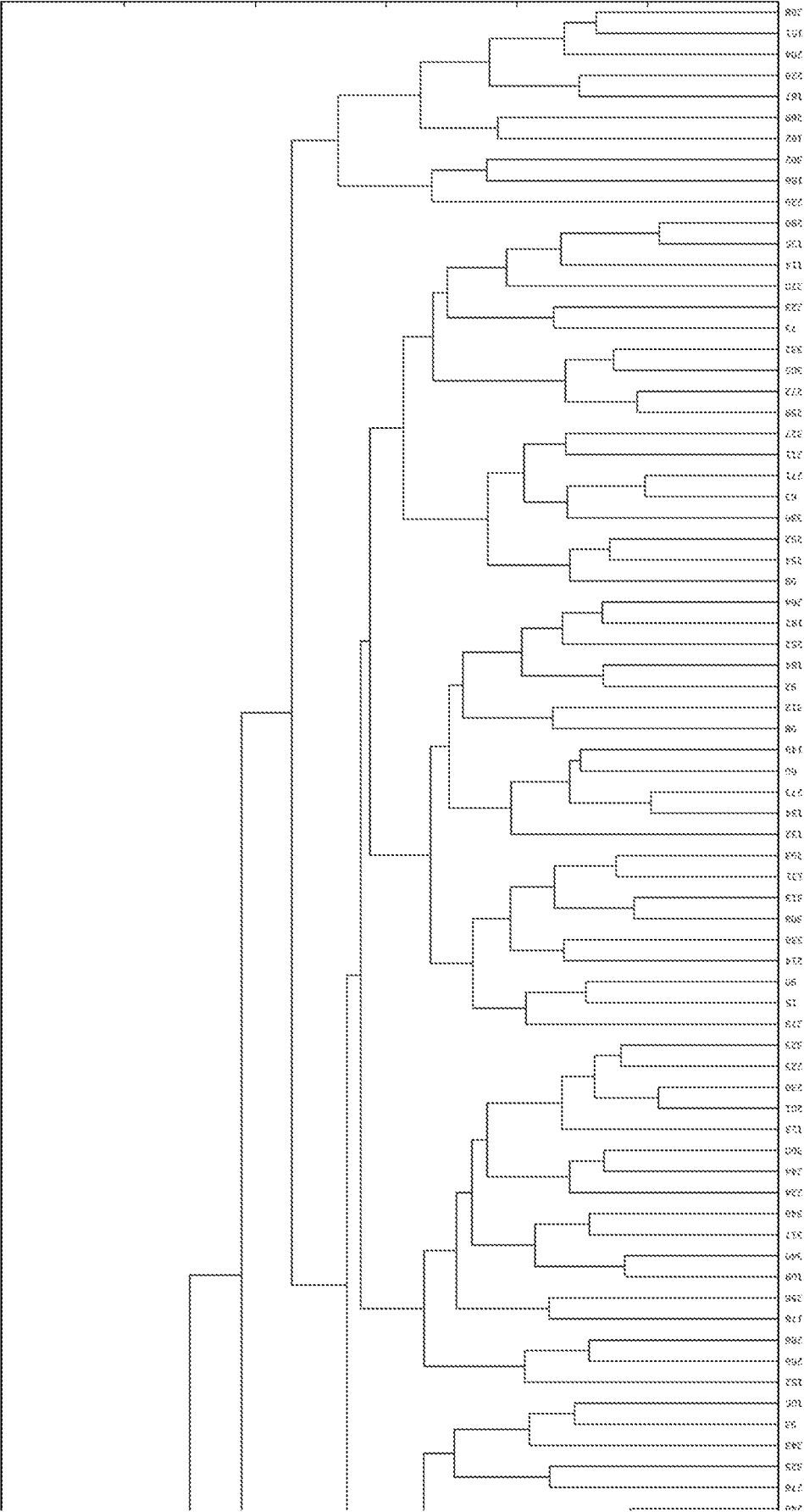


FIG. 23 (Continued)

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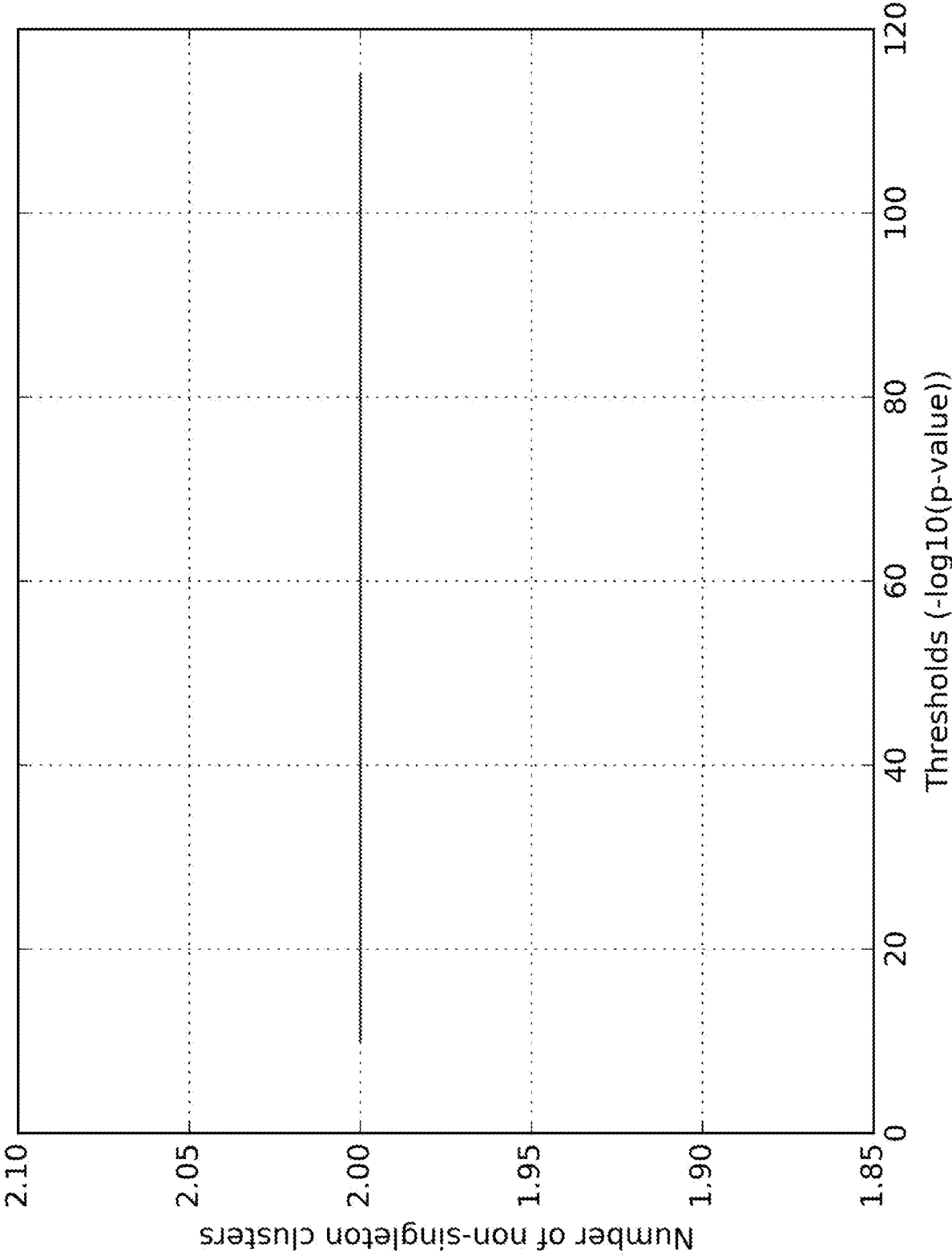


FIG. 24