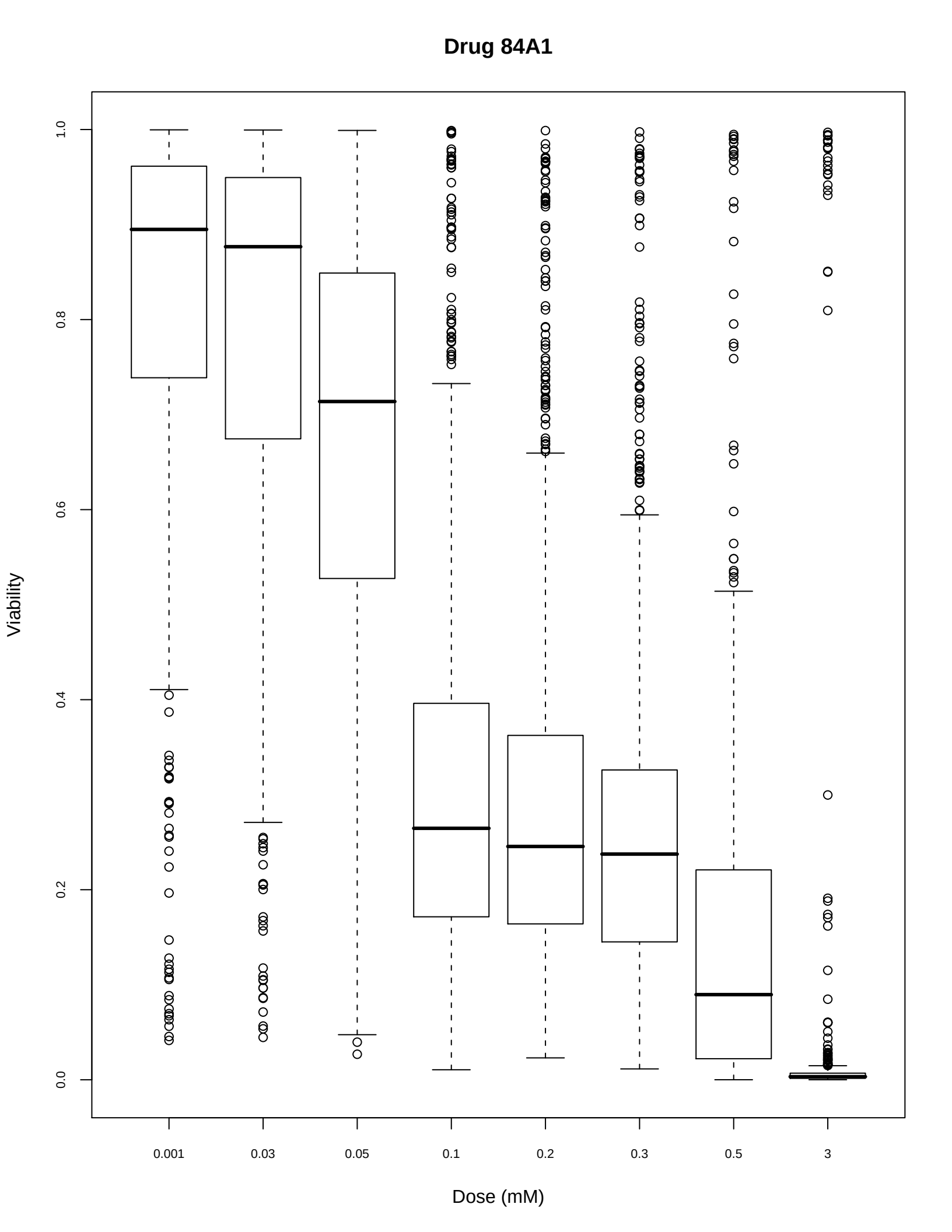
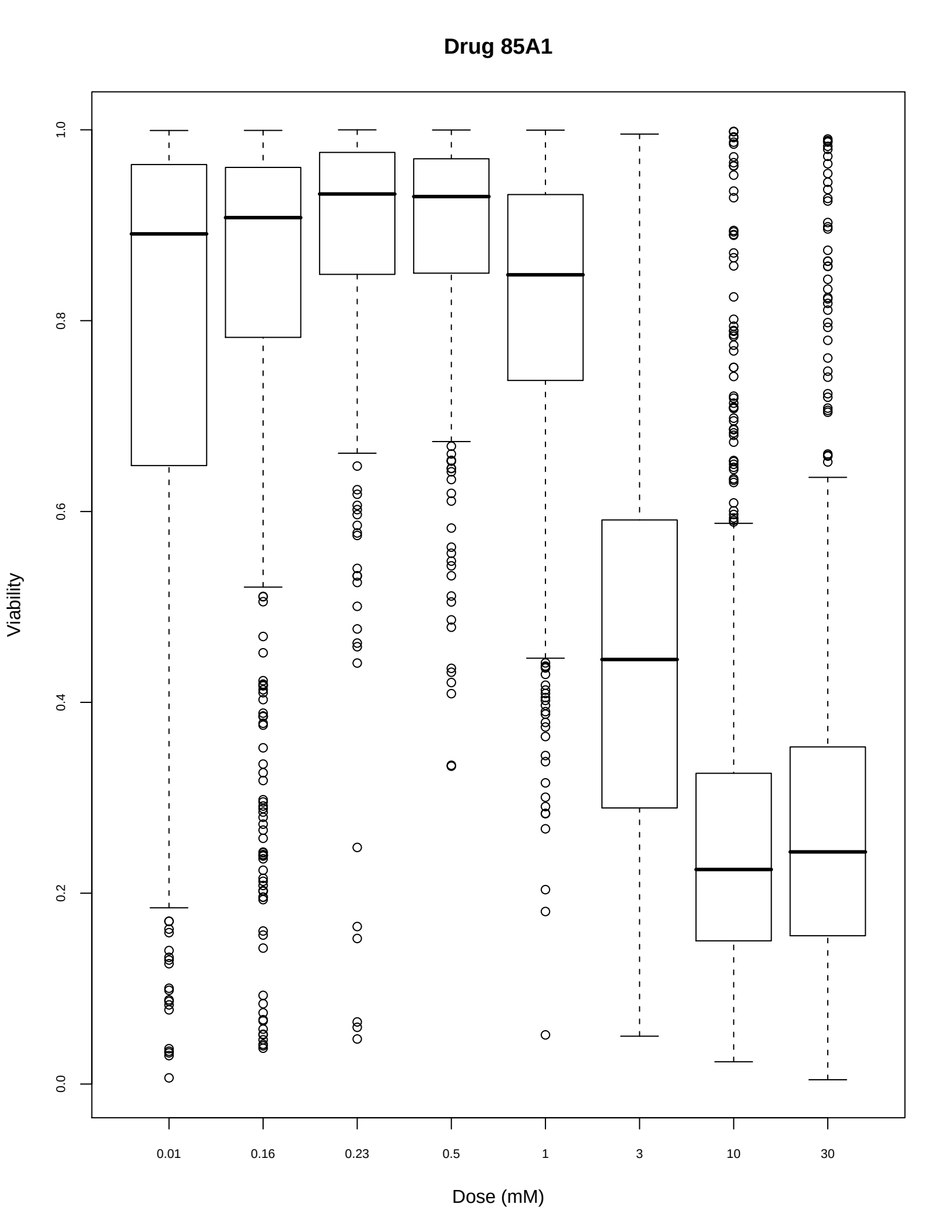
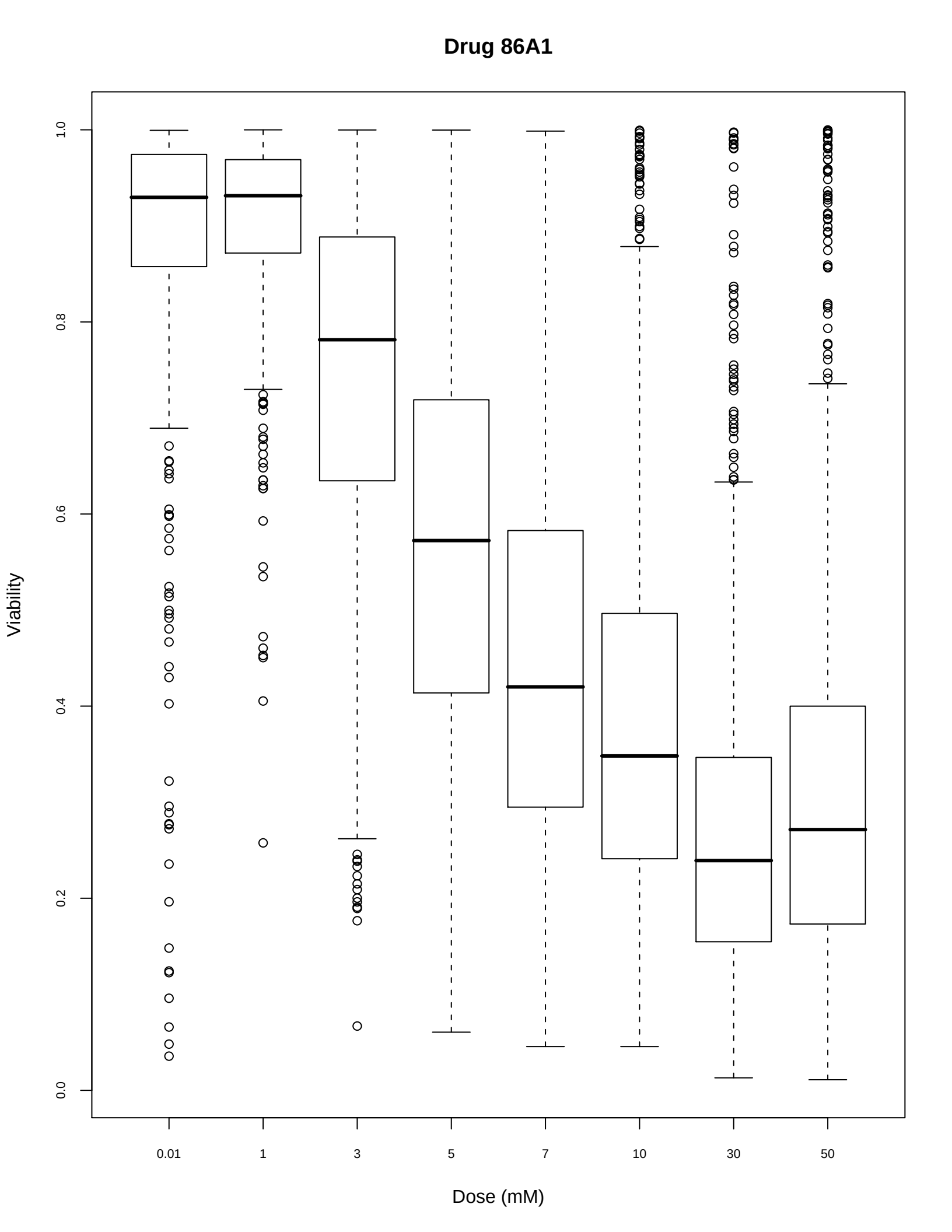
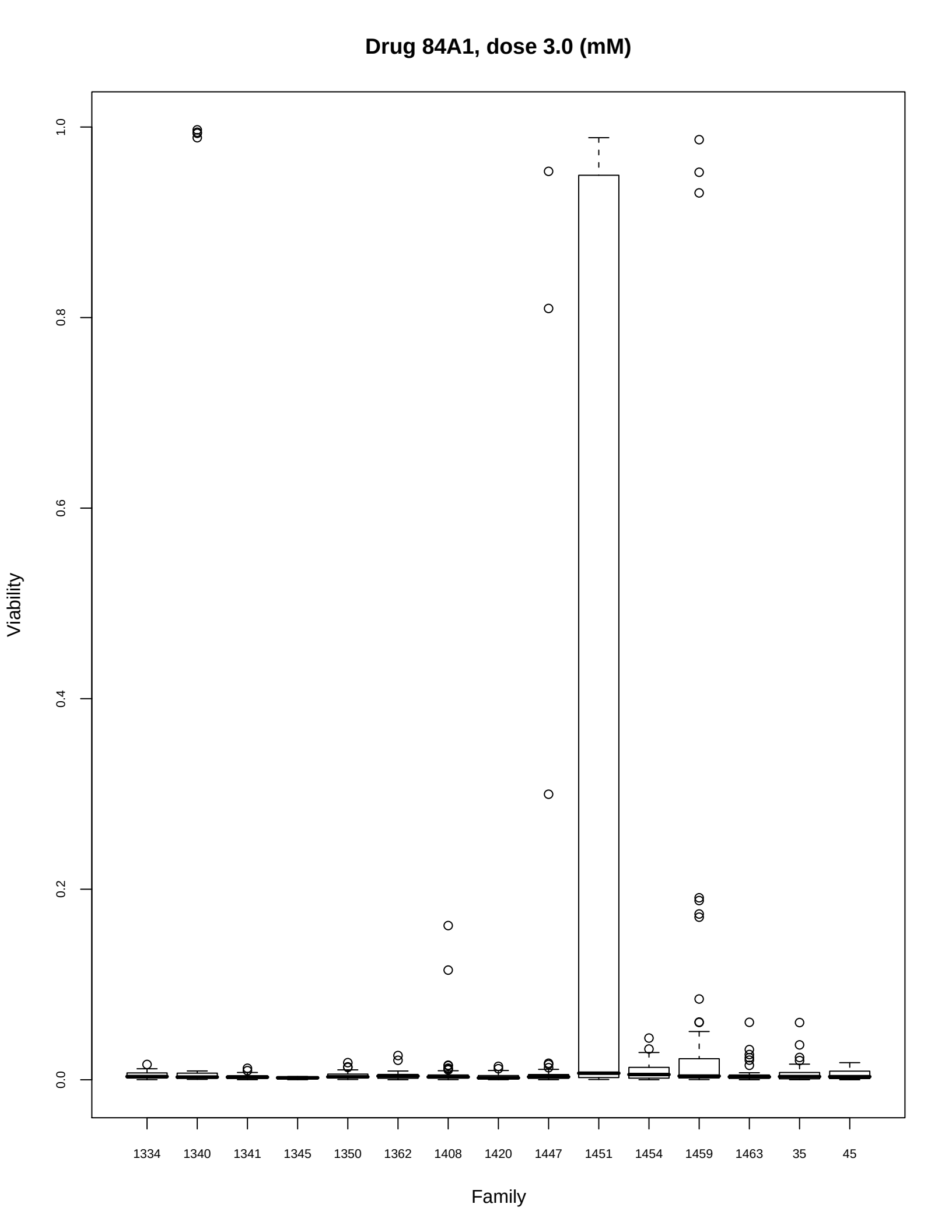
Supplemental Dataset 1. Boxplots illustrating variance in growth inhibition across the entire CEPH population (n = 142) for each compound. Line represents mean phenotypic response, whiskers box represents upper and lower quartiles, and whiskers are 1.5*IQR. Outliers (circles) are individuals whose mean viability is greater than 1.5*IQR. Drug abbreviations are as follows: Indenoisoquinoline 1 = 84A1, Indenoisoquinoline 2 = 85A1, and Indenoisoquinoline 3 = 86A1.

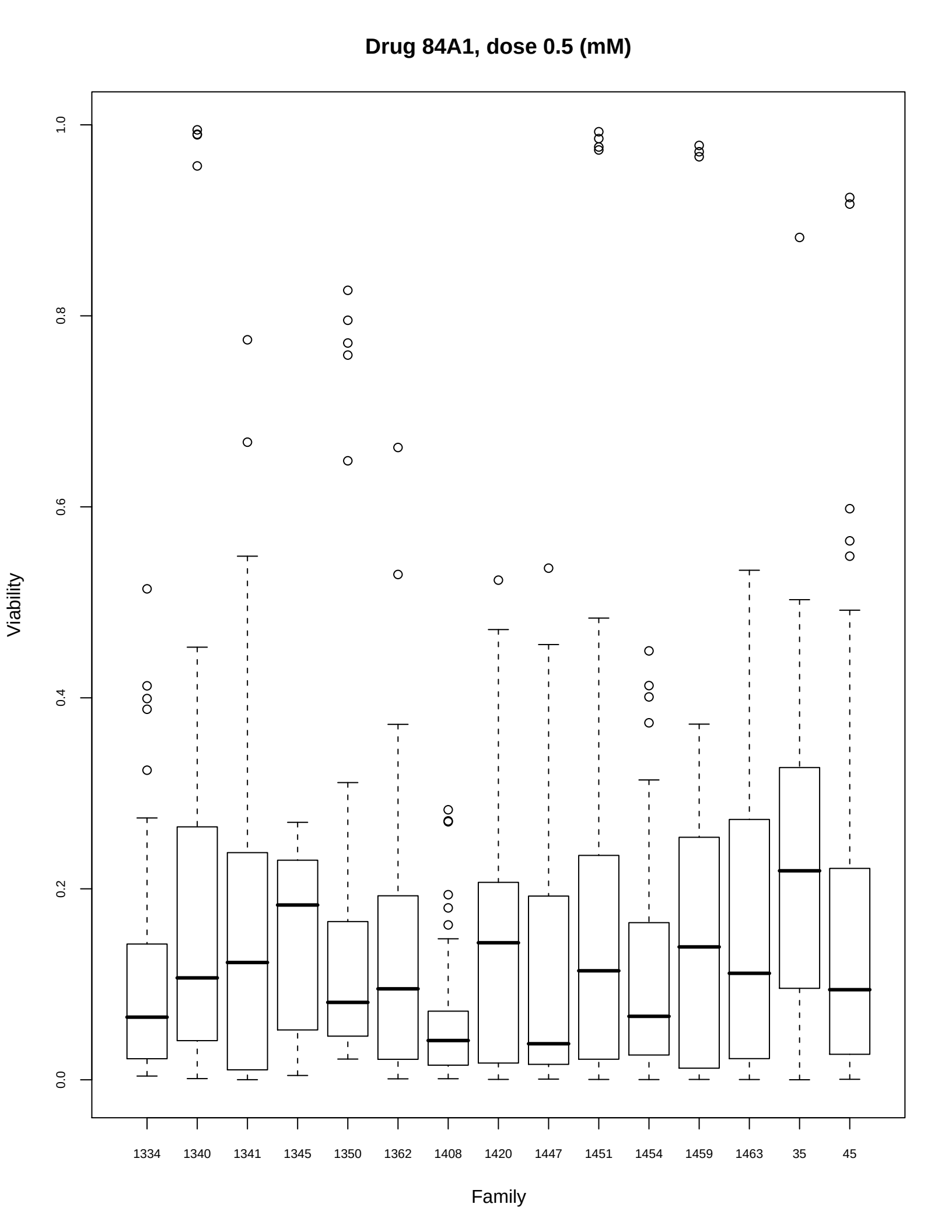

Drug 84A1
Viability
0.0
0.2
0.4
0.6
0.8
1.0
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3
Dose (mM)

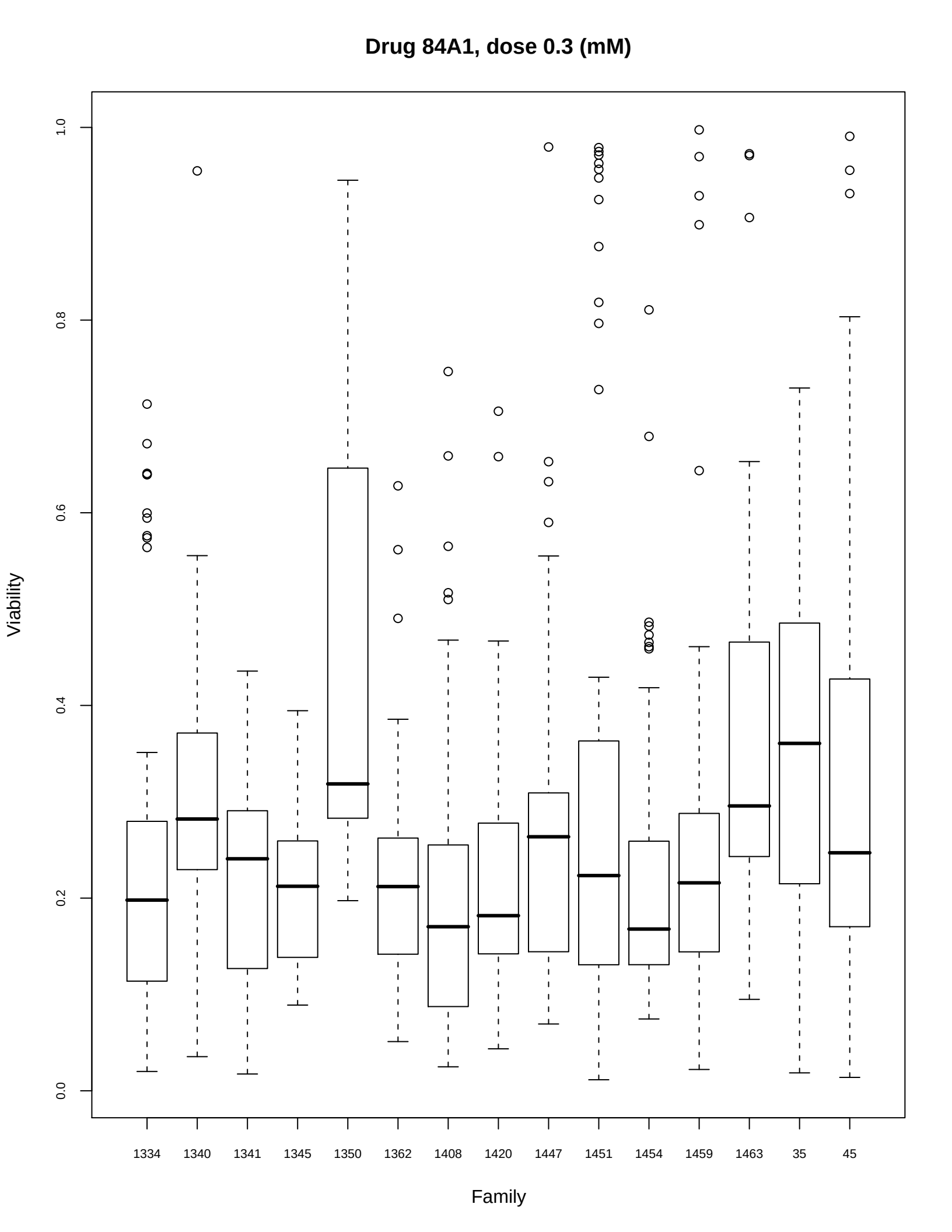

Drug 85A1
Viability
0.0
0.2
0.4
0.6
0.8
1.0
0.01
0.16
0.23
0.5
1
3
10
30
Dose (mM)

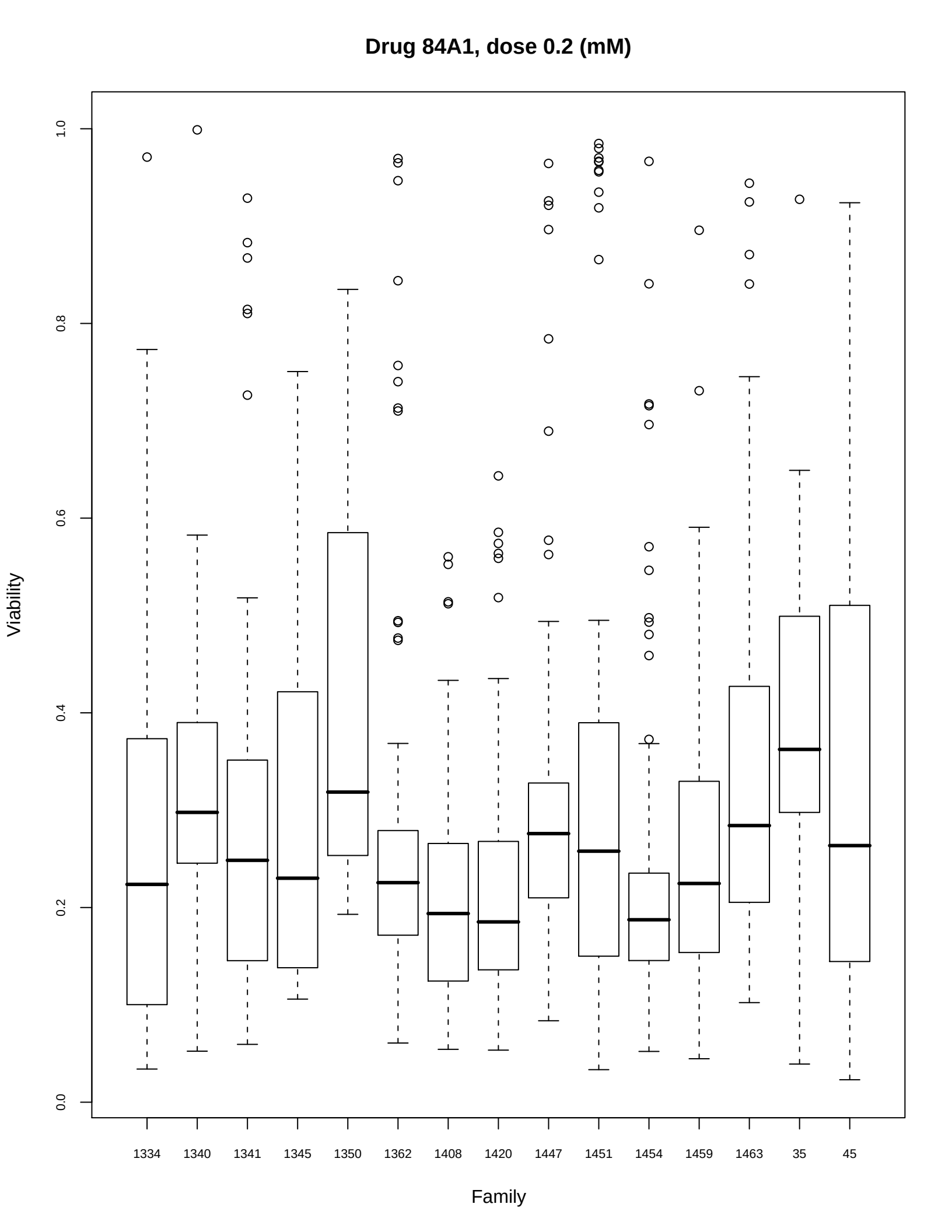

Drug 86A1
Viability
0.0
0.2
0.4
0.6
0.8
1.0
0.01
1
3
5
7
10
30
50
Dose (mM)

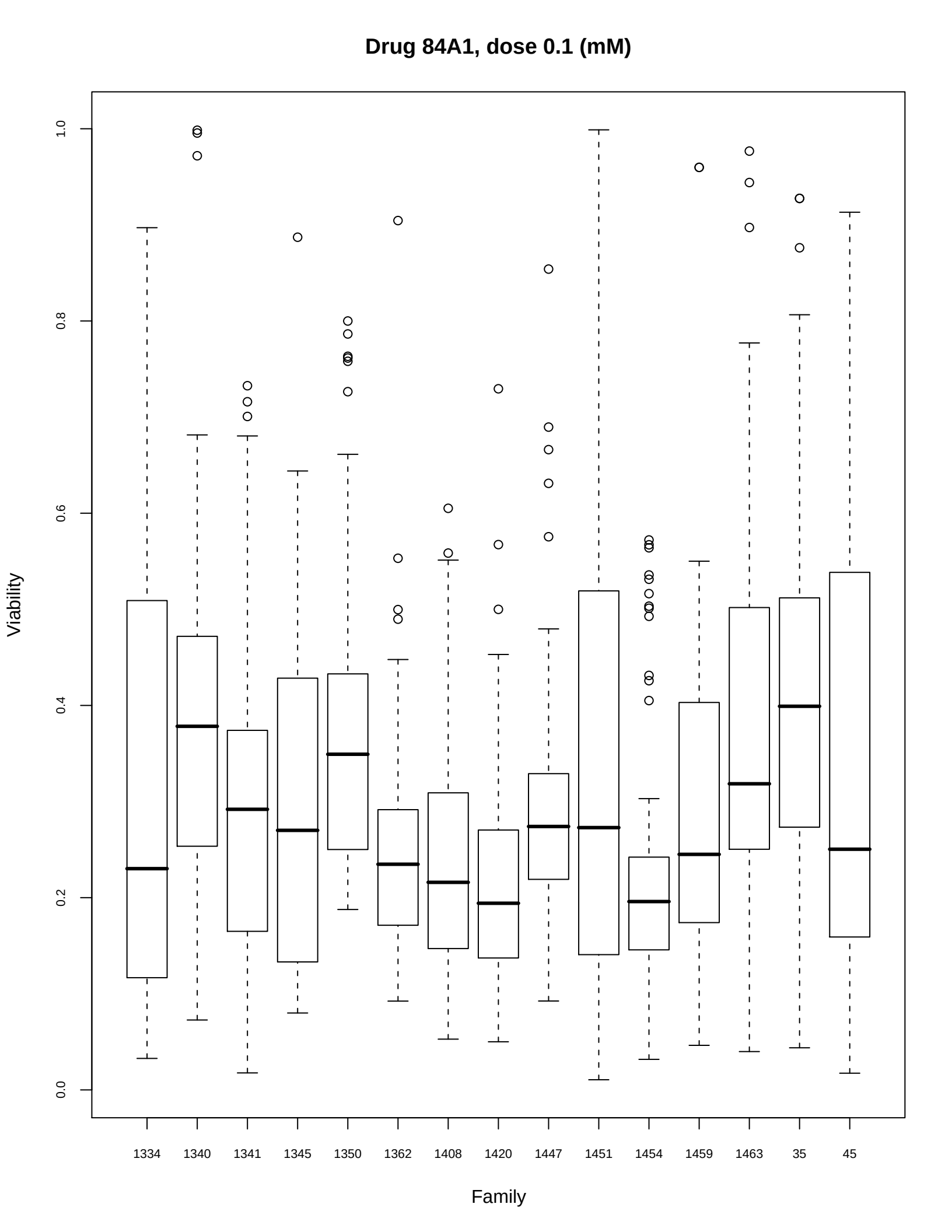
Supplemental Dataset 2. Boxplots illustrating intra- and inter-family variance in growth inhibition for each compound and concentration across CEPH families. Line represents mean phenotypic response, whiskers box represents upper and lower quartiles, and whiskers are 1.5*IQR. Outliers (circles) are individuals whose mean viability is greater than 1.5*IQR. Drug abbreviations are as follows: Indenoisoquinoline 1 = 84A1, Indenoisoquinoline 2 = 85A1, and Indenoisoquinoline 3 = 86A1.

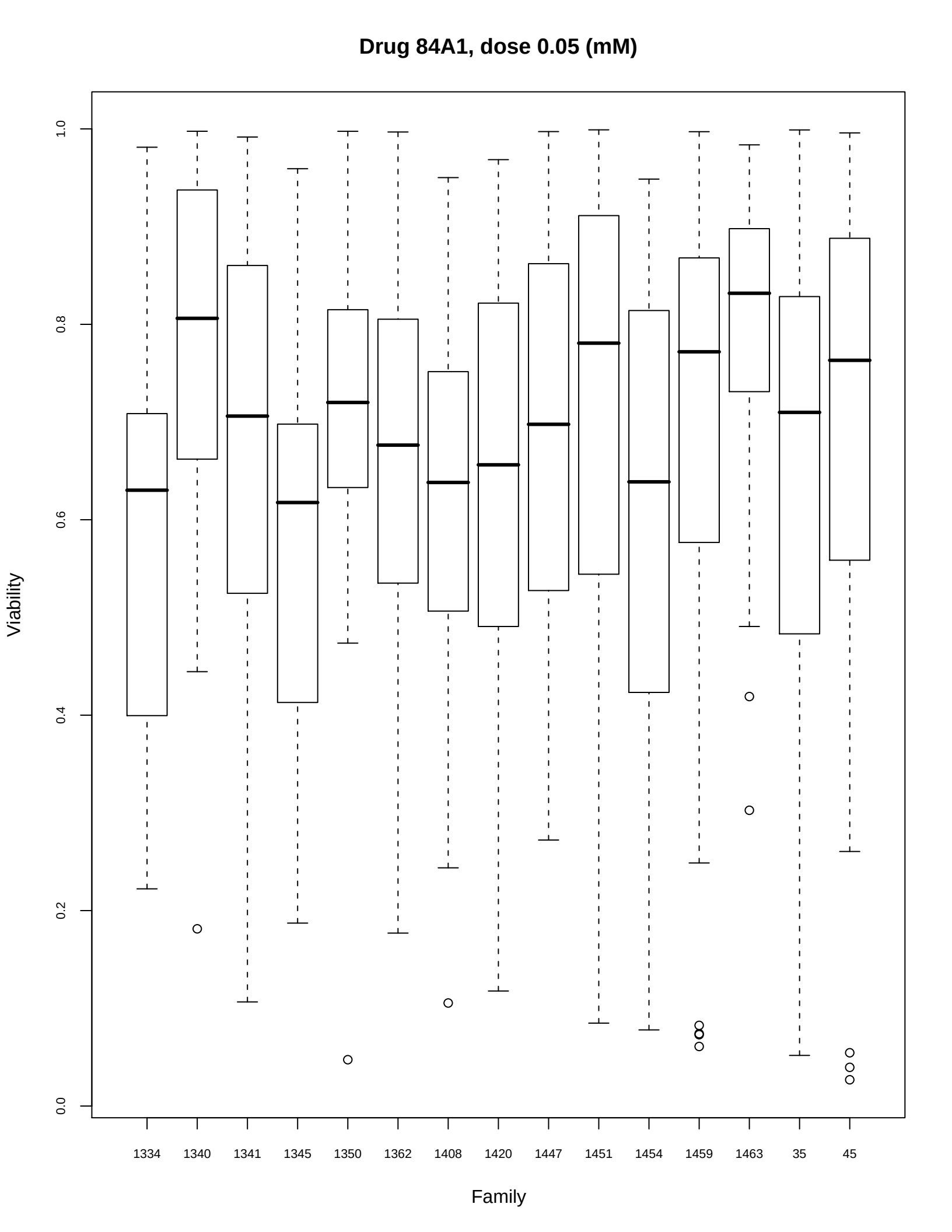

Drug 84A1, dose 3.0 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

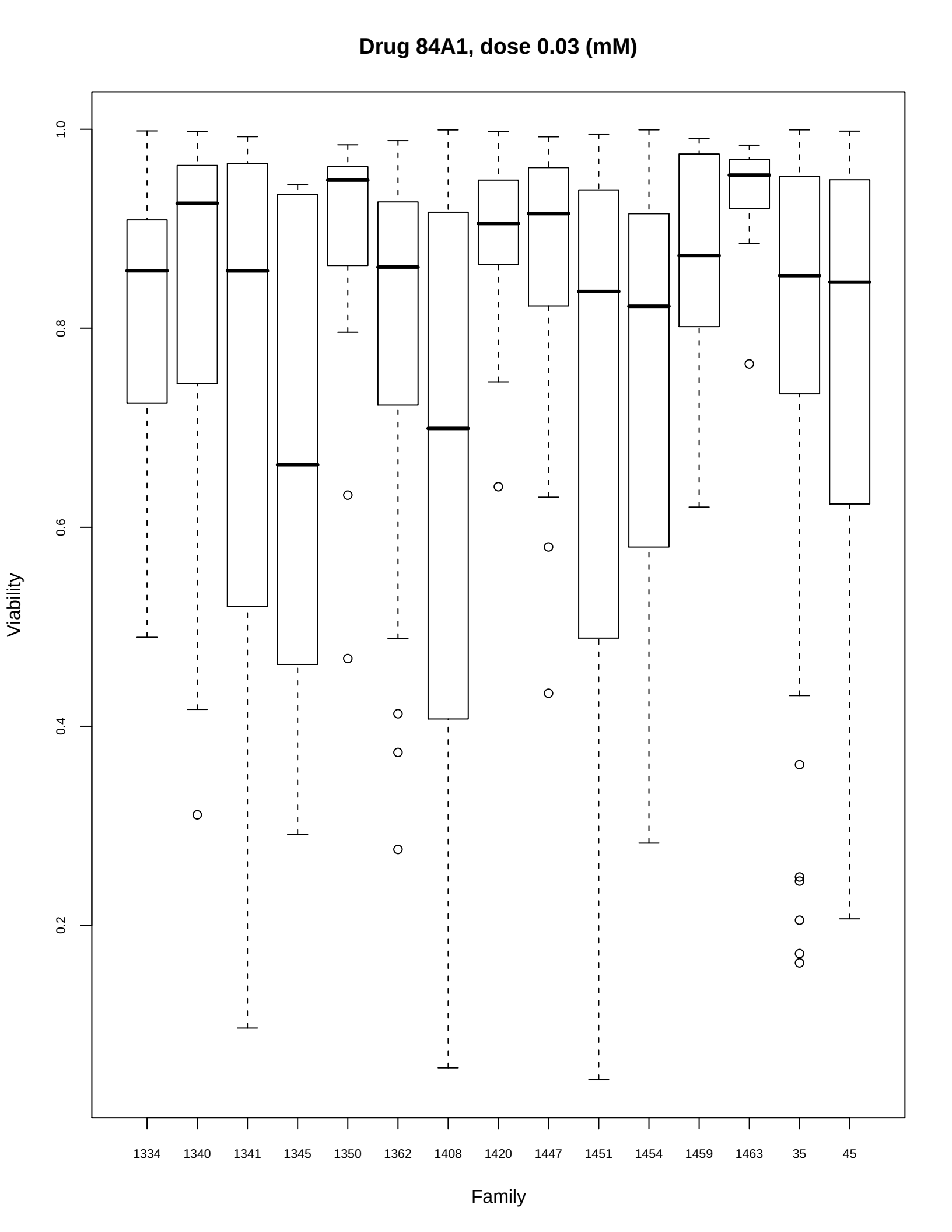

Drug 84A1, dose 0.5 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

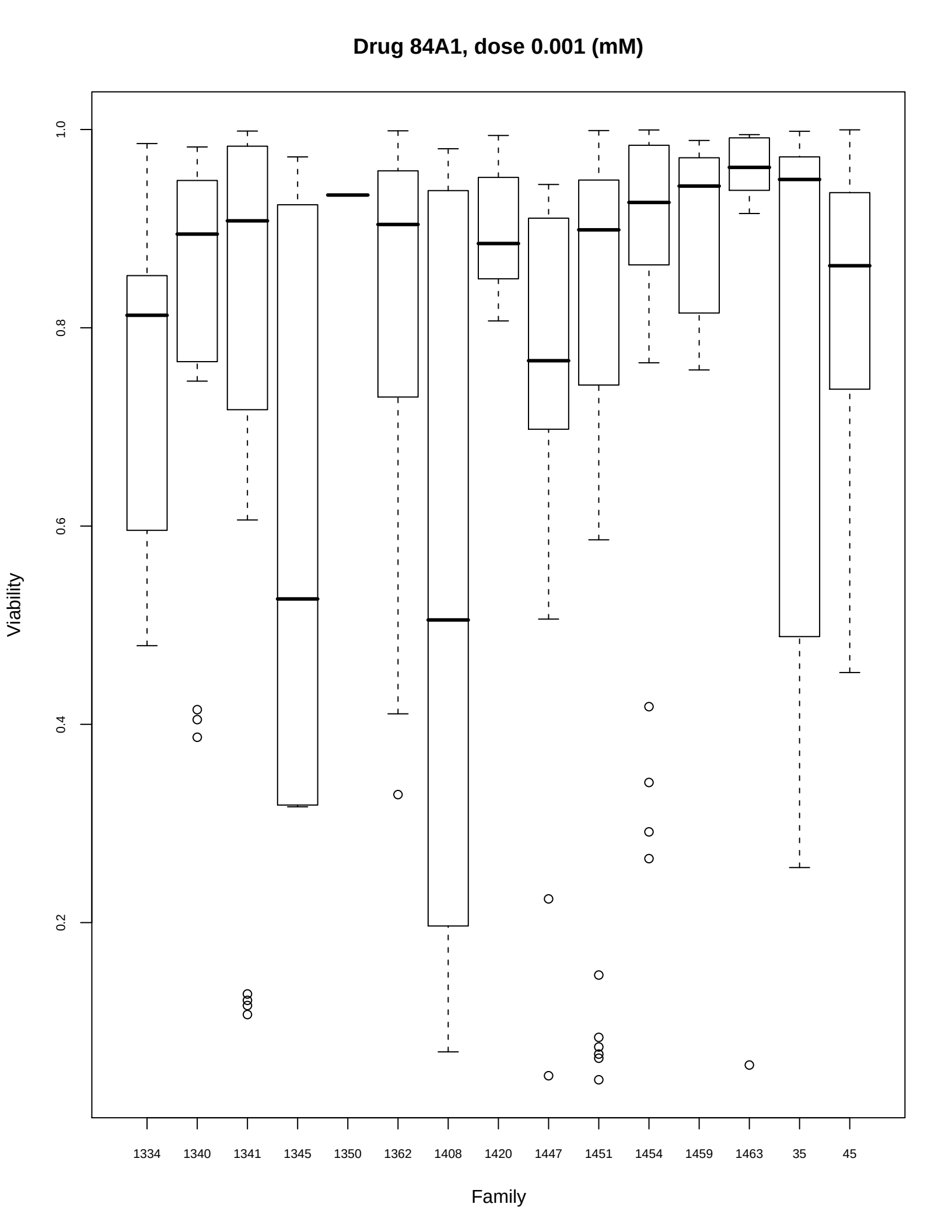

Drug 84A1, dose 0.3 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

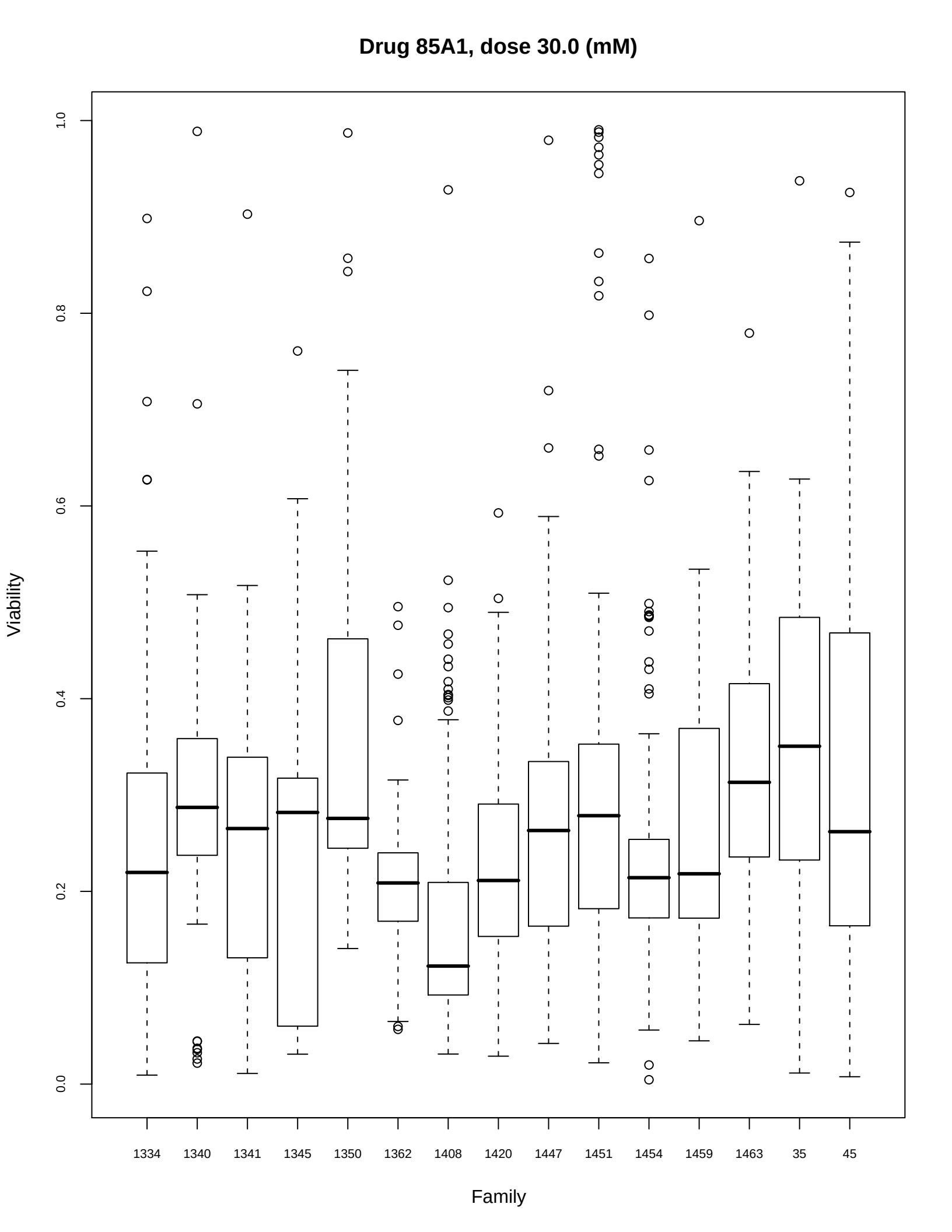

Drug 84A1, dose 0.2 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

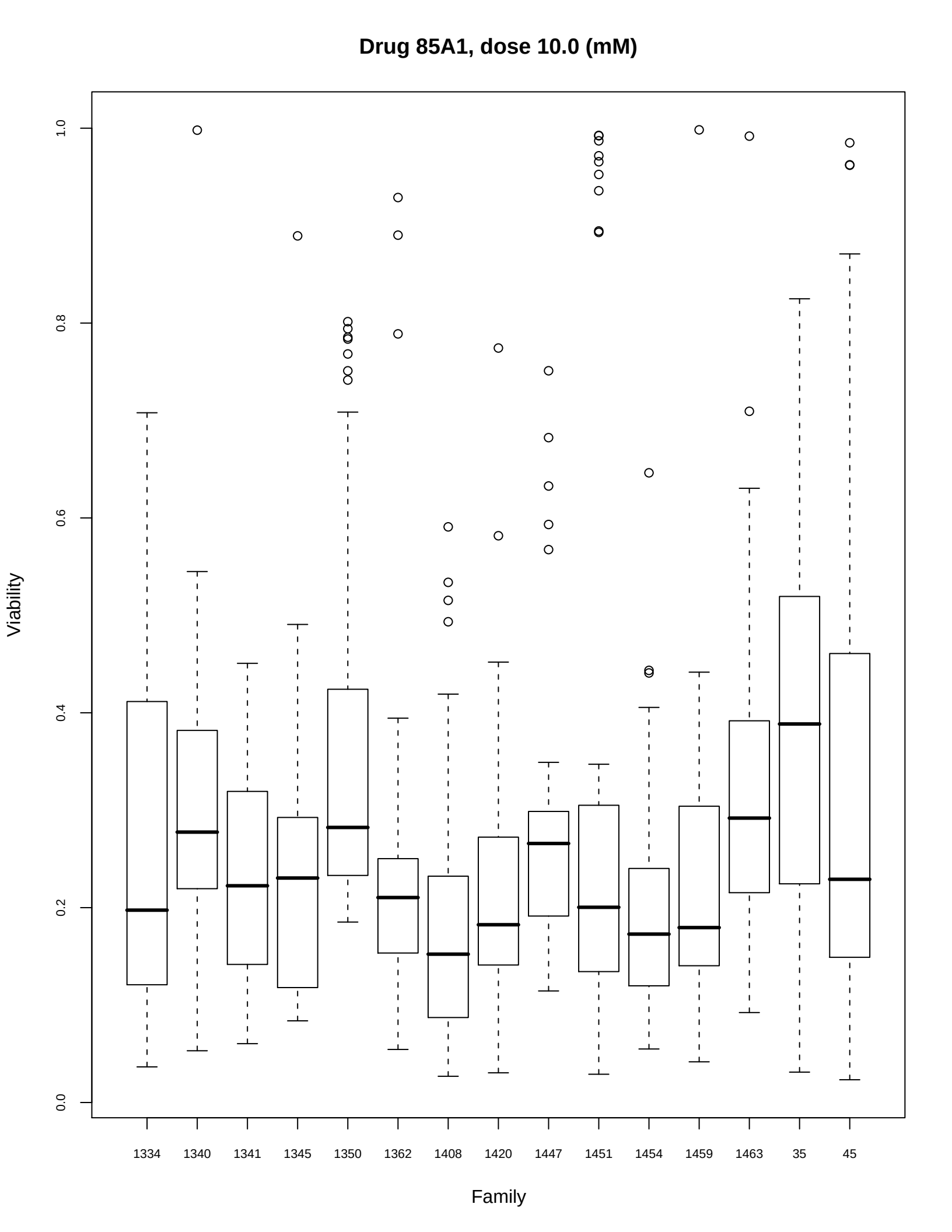

Drug 84A1, dose 0.1 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

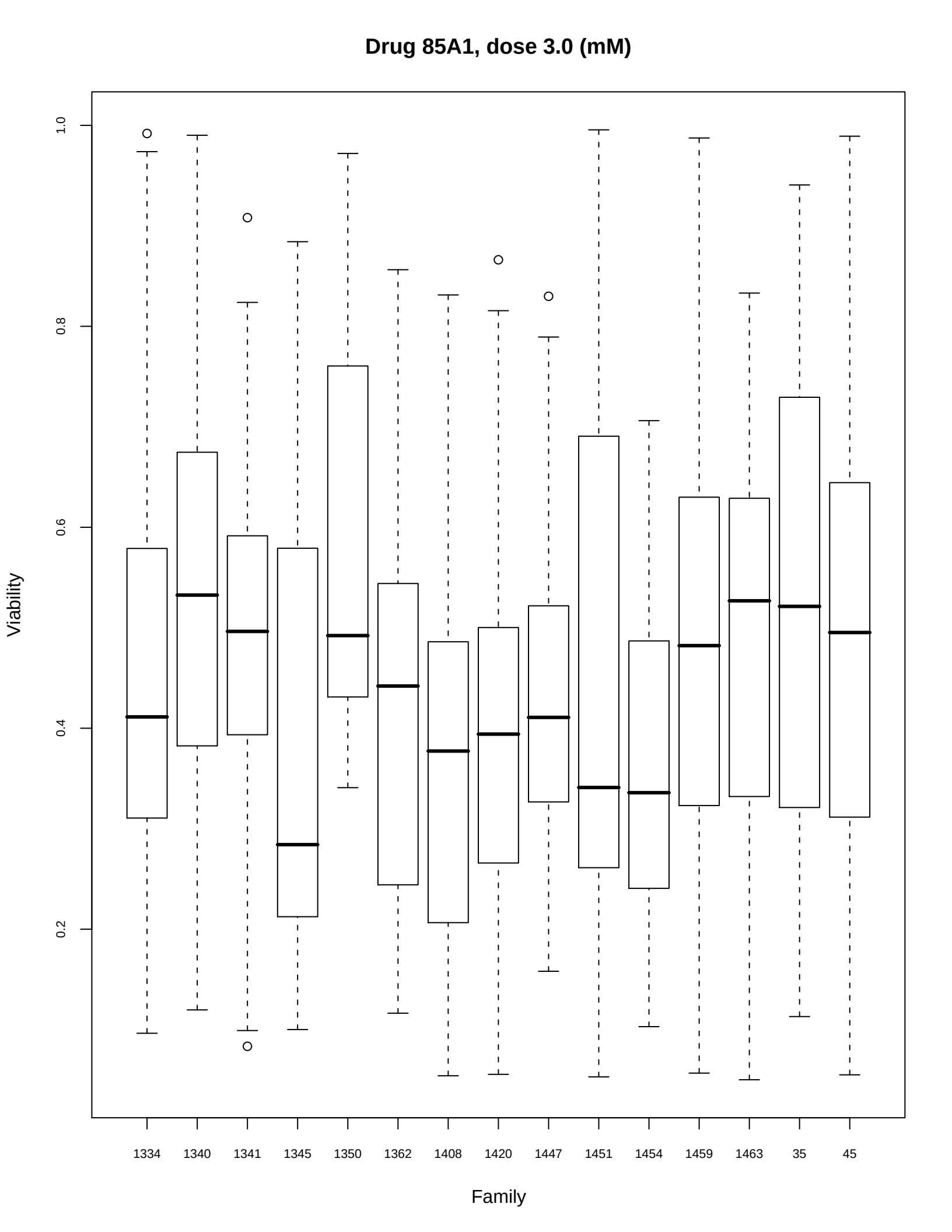

Drug 84A1, dose 0.05 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

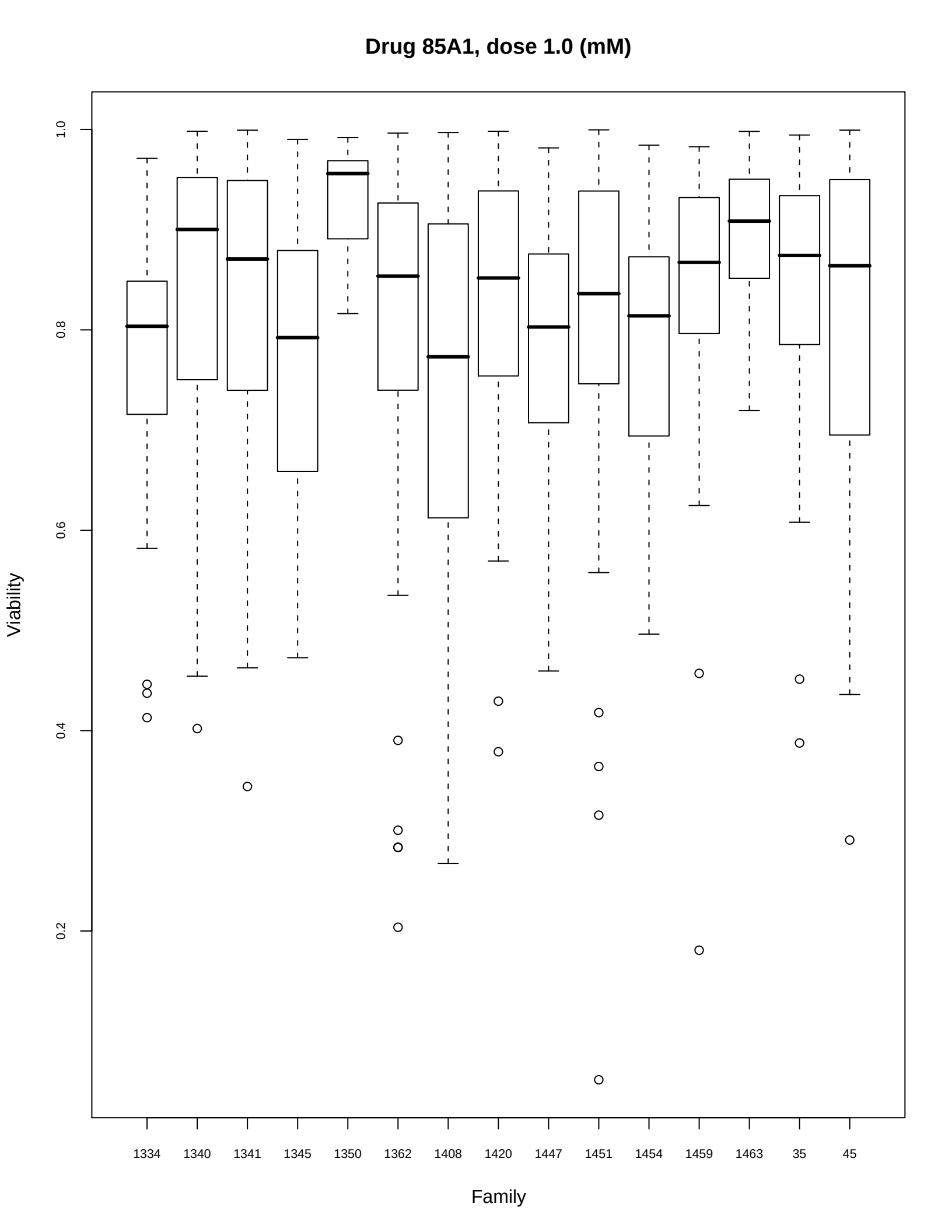

Drug 84A1, dose 0.03 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

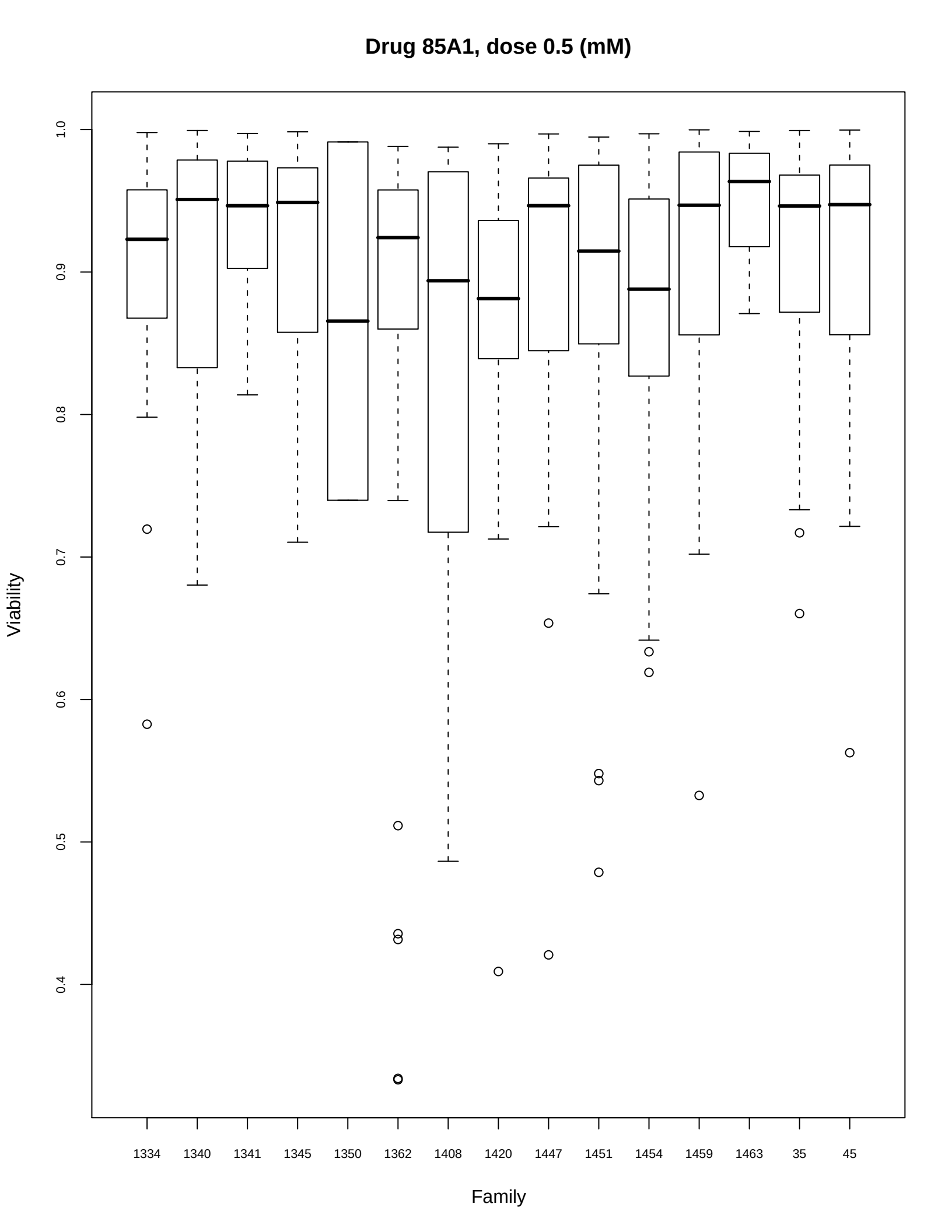

Drug 84A1, dose 0.001 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

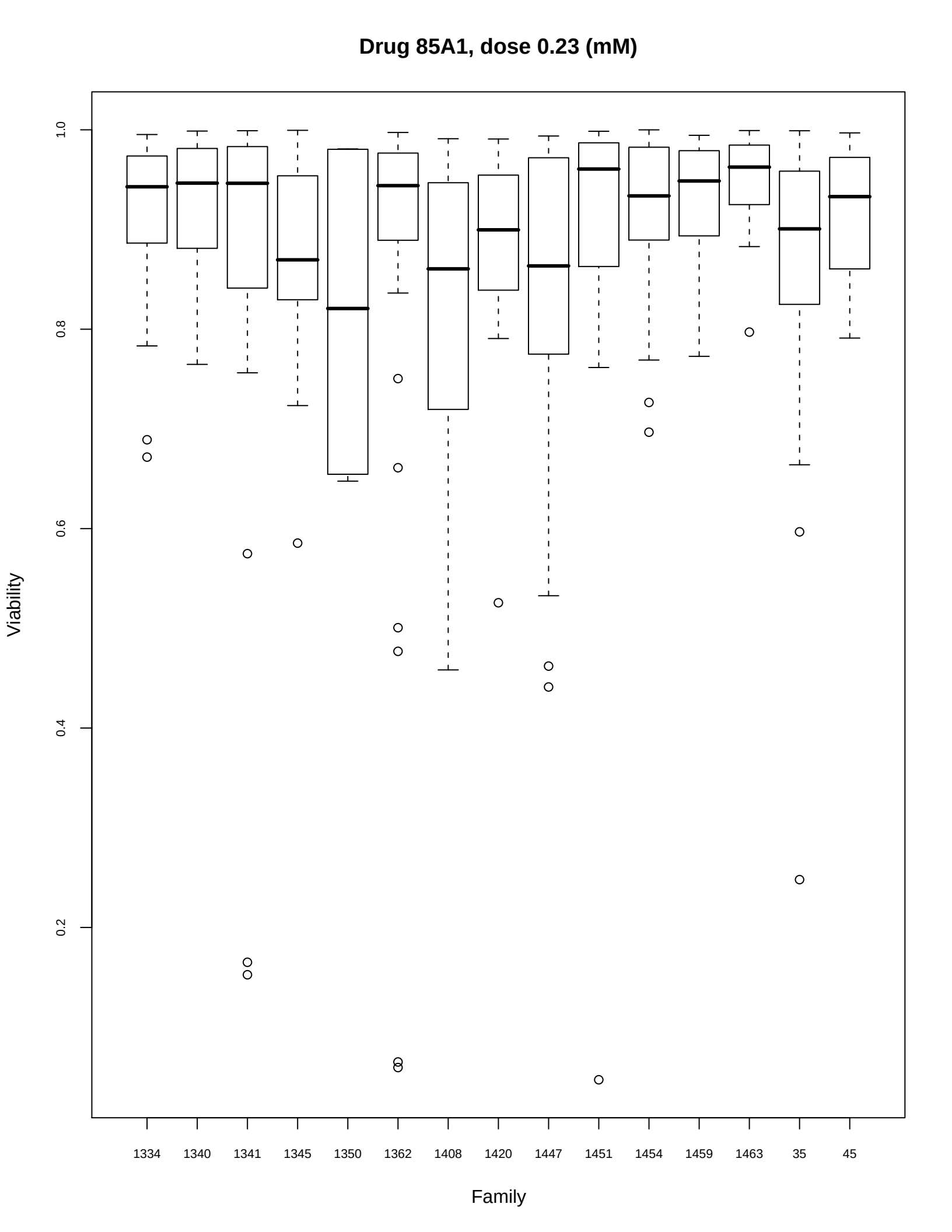

Drug 85A1, dose 30.0 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

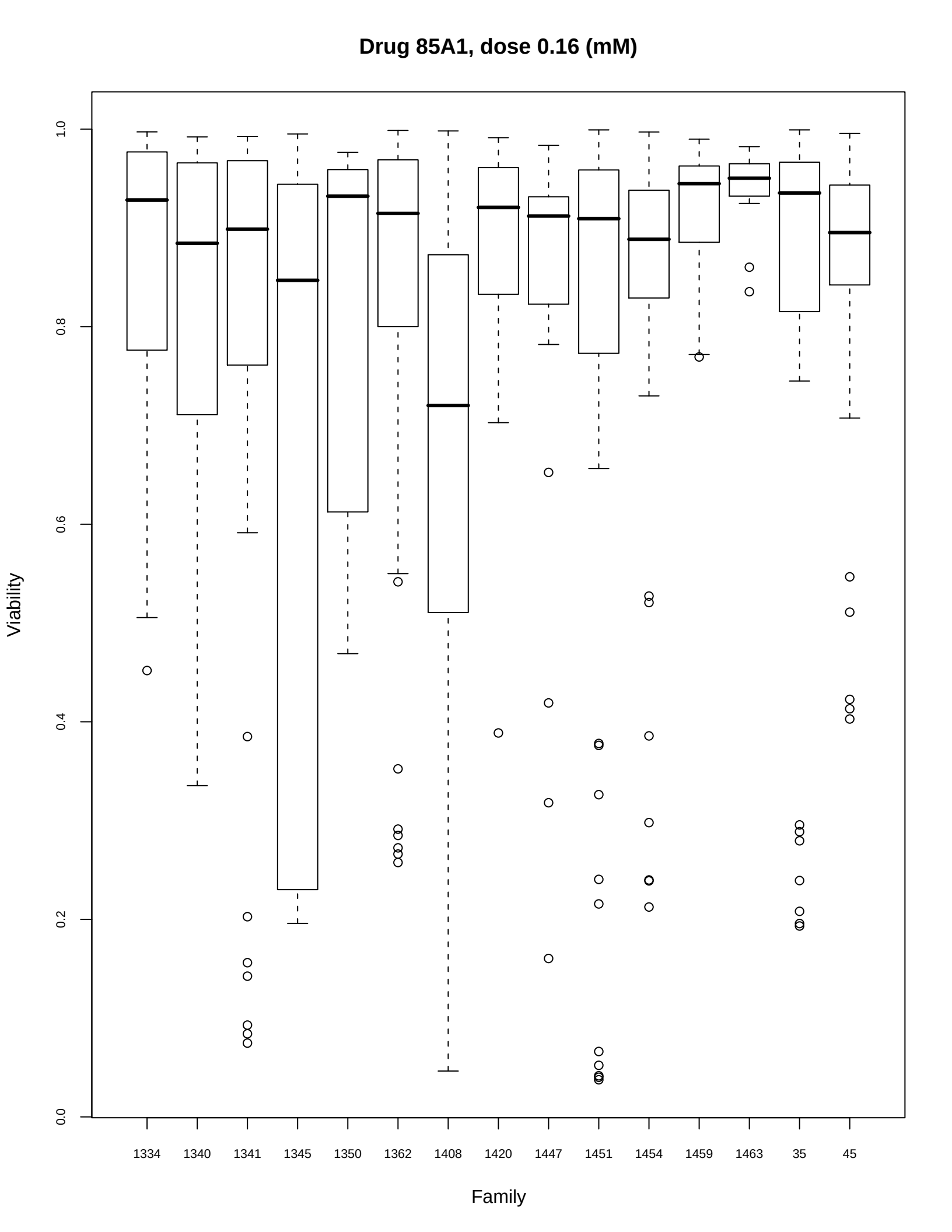

Drug 85A1, dose 10.0 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

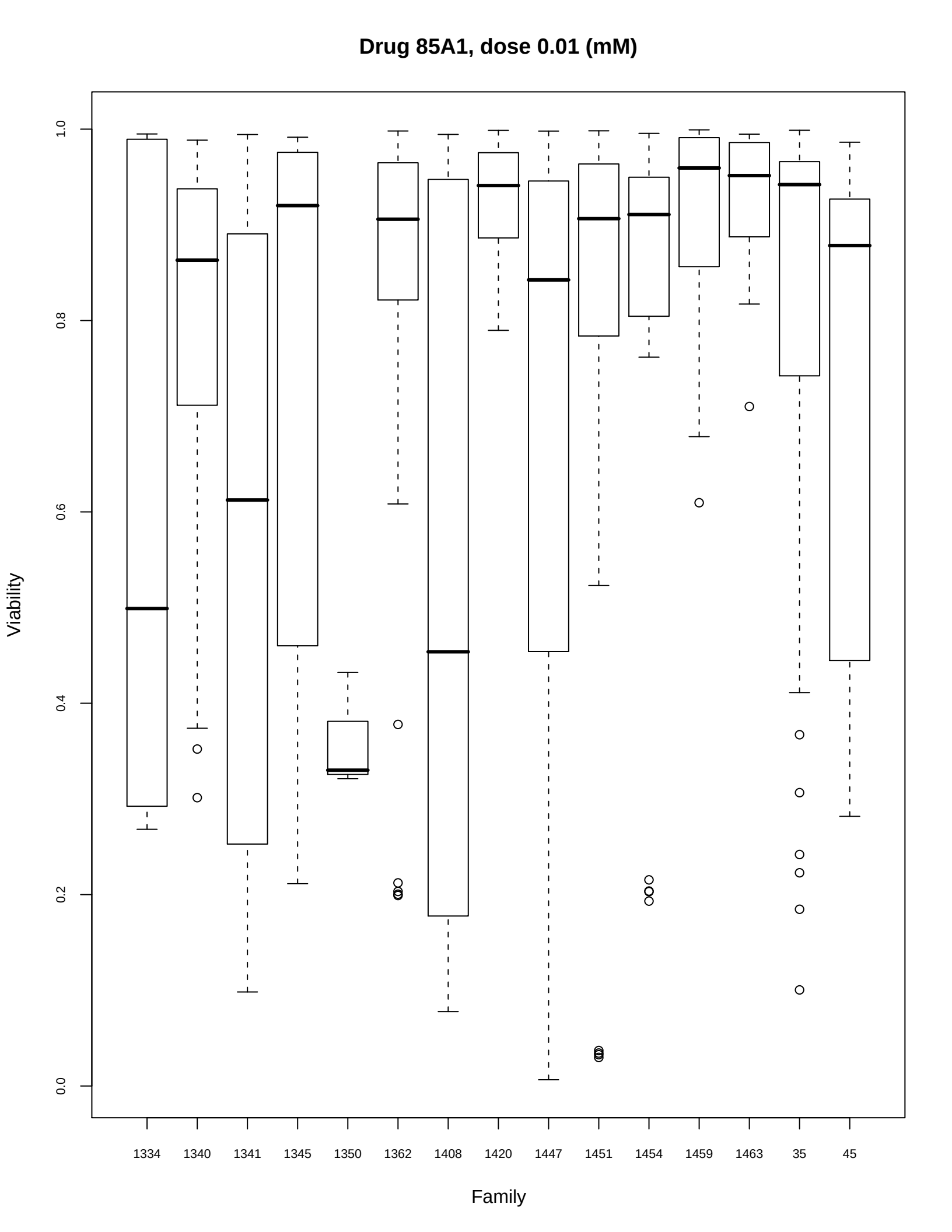

Drug 85A1, dose 3.0 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

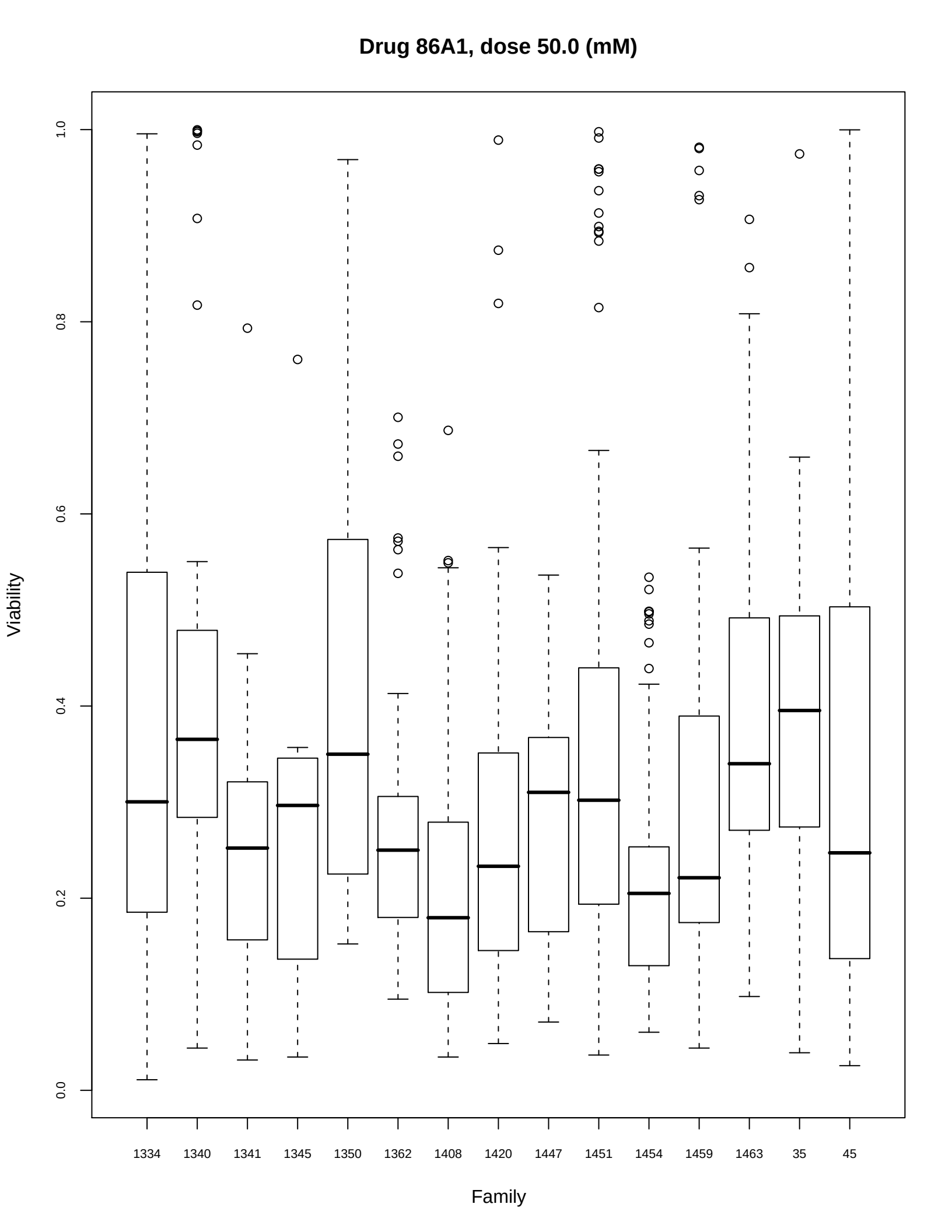

Drug 85A1, dose 1.0 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

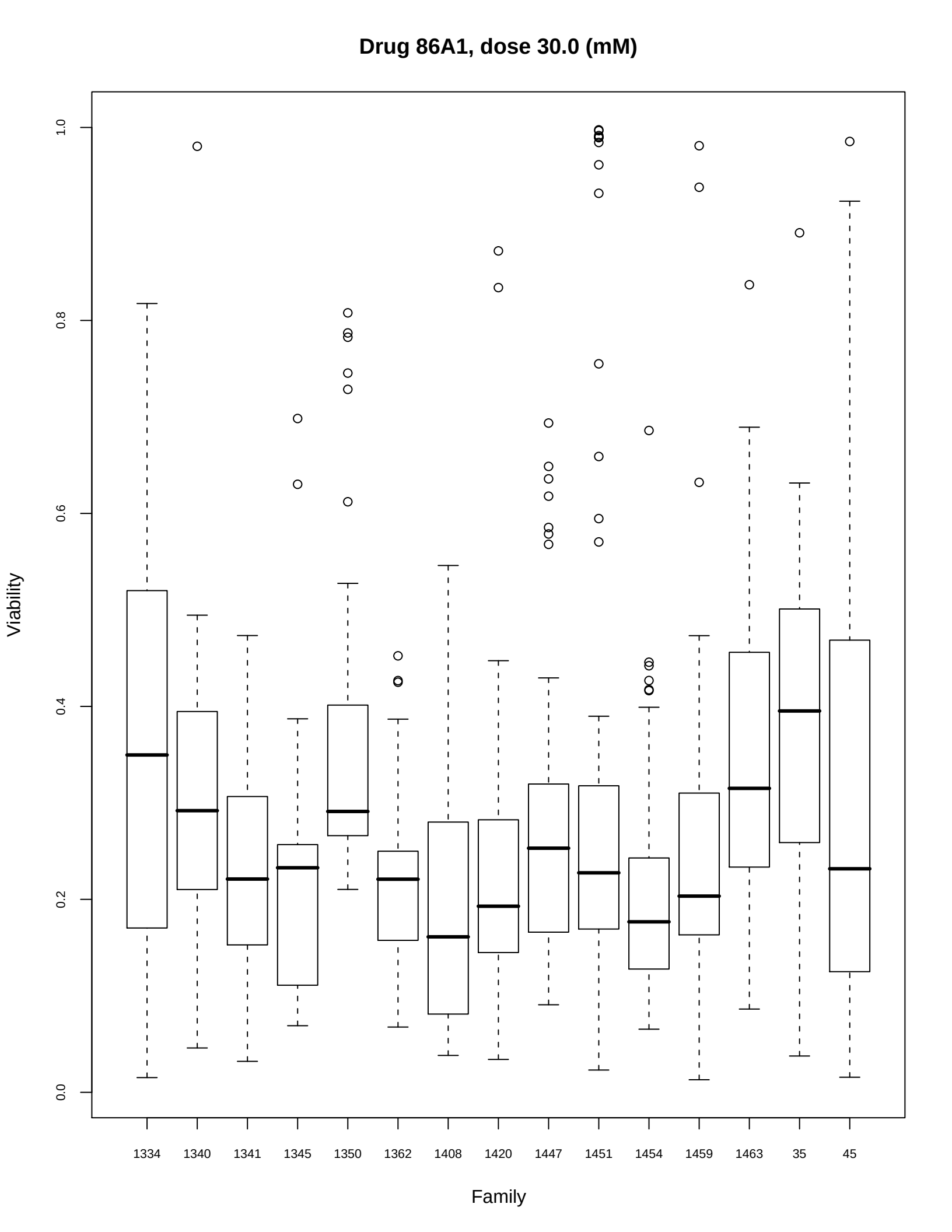

Drug 85A1, dose 0.5 (mM)
Viability
1.0
0.9
0.8
0.7
0.6
0.5
0.4
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

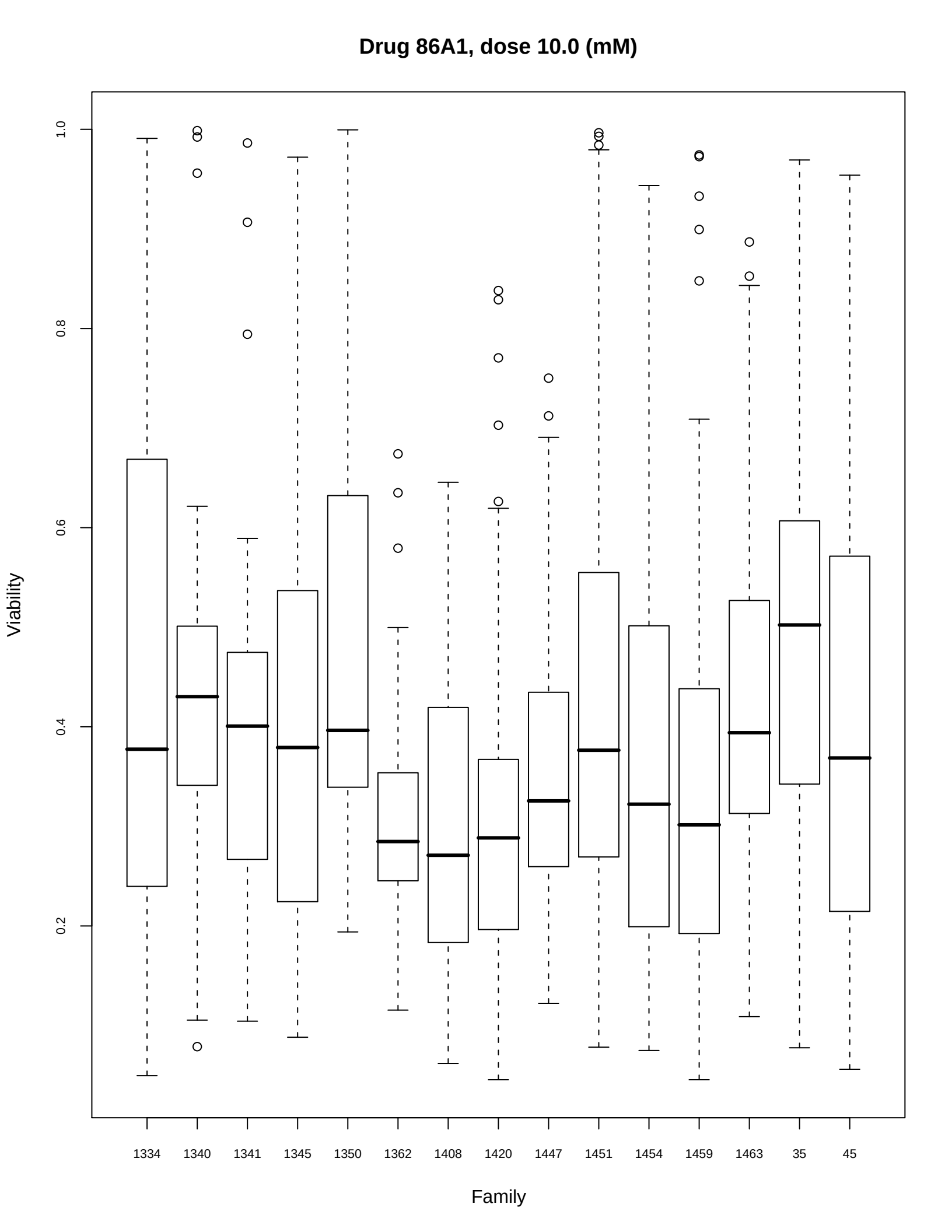

Drug 85A1, dose 0.23 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

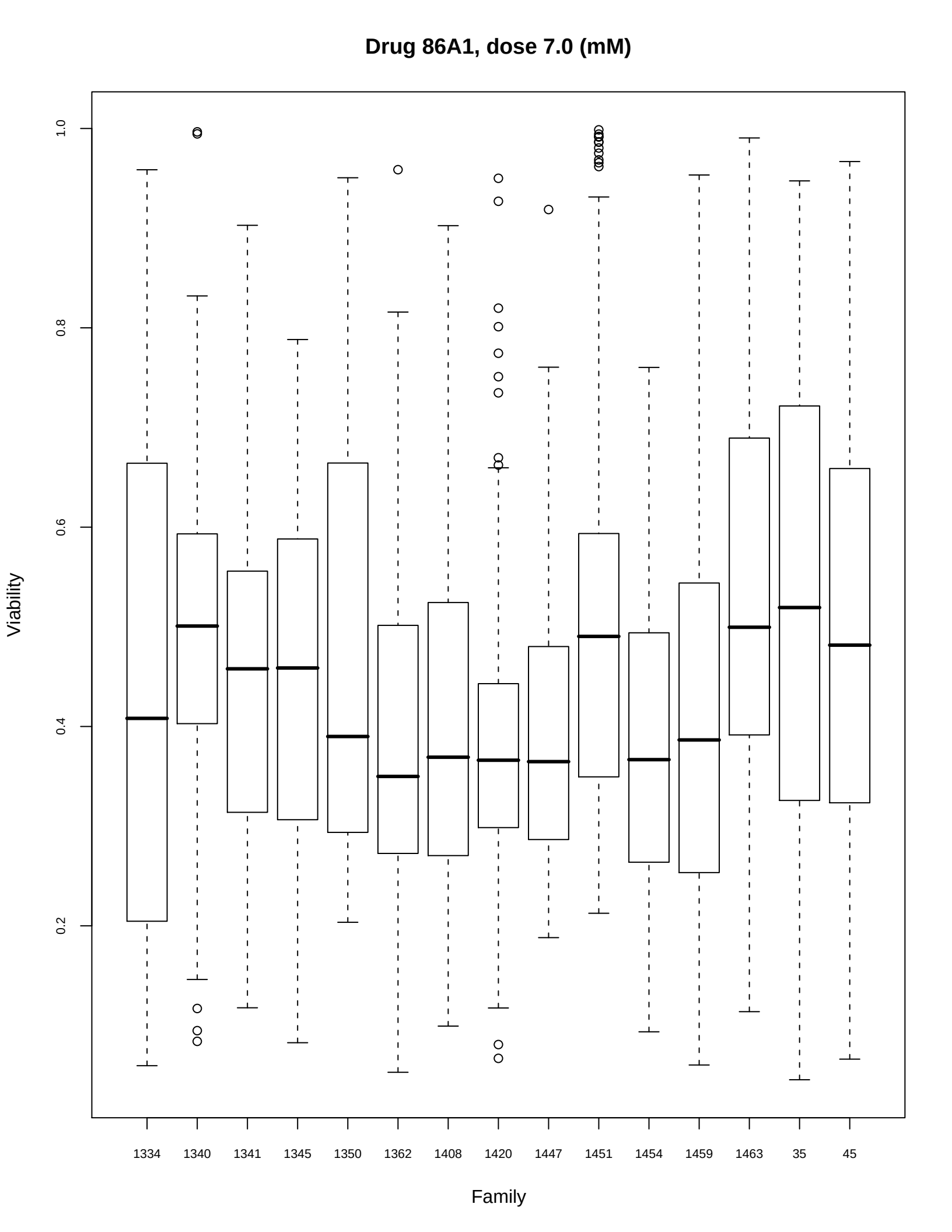

Drug 85A1, dose 0.16 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

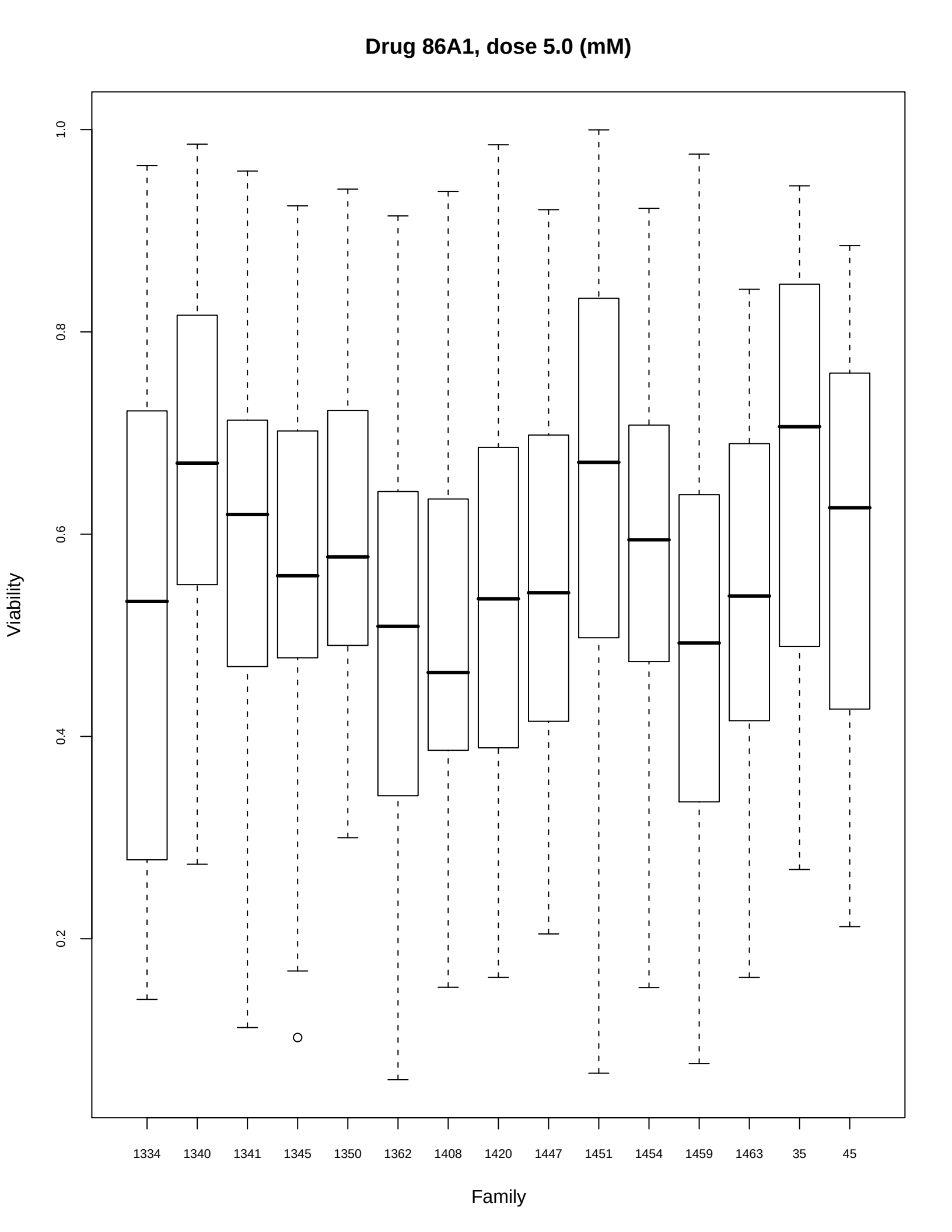

Drug 85A1, dose 0.01 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

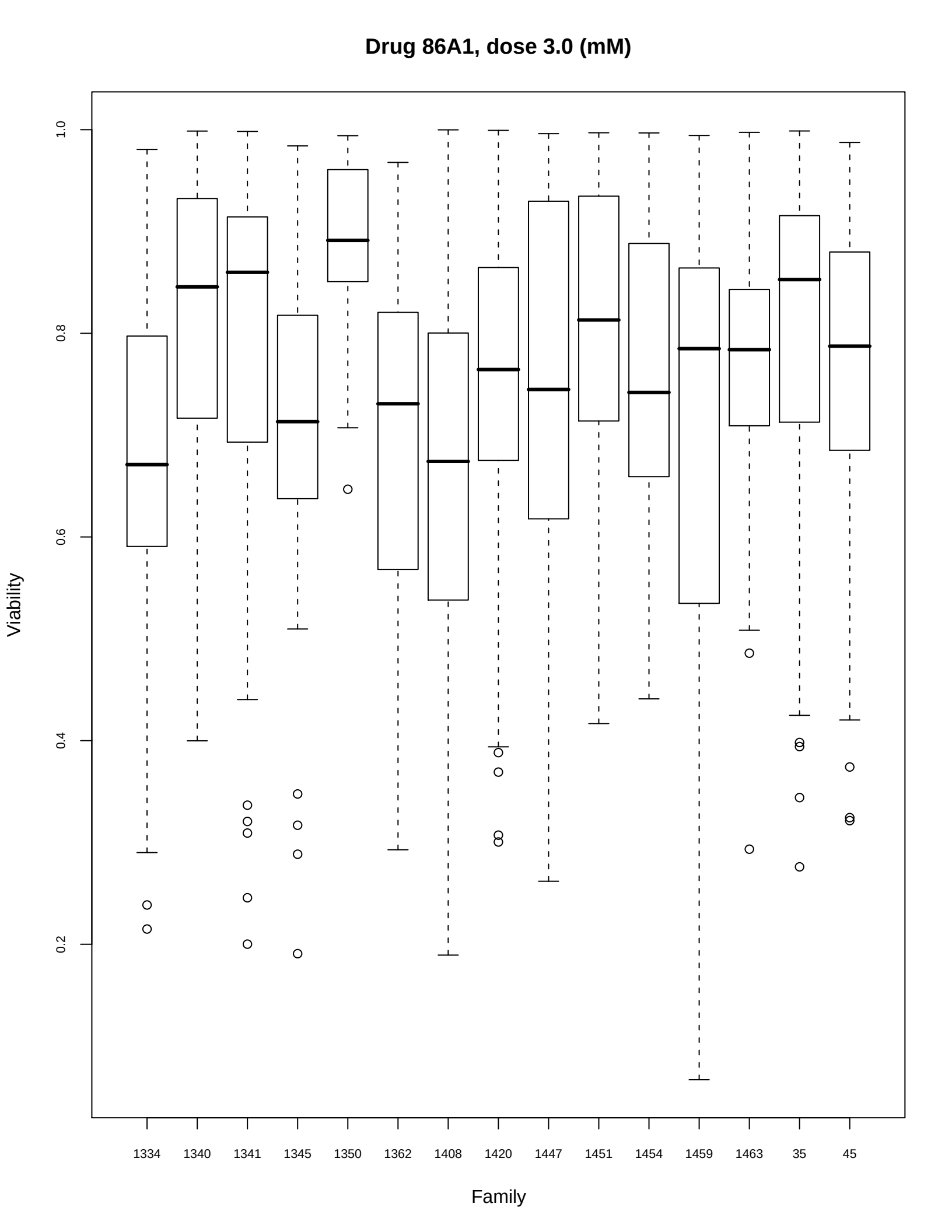

Drug 86A1, dose 50.0 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

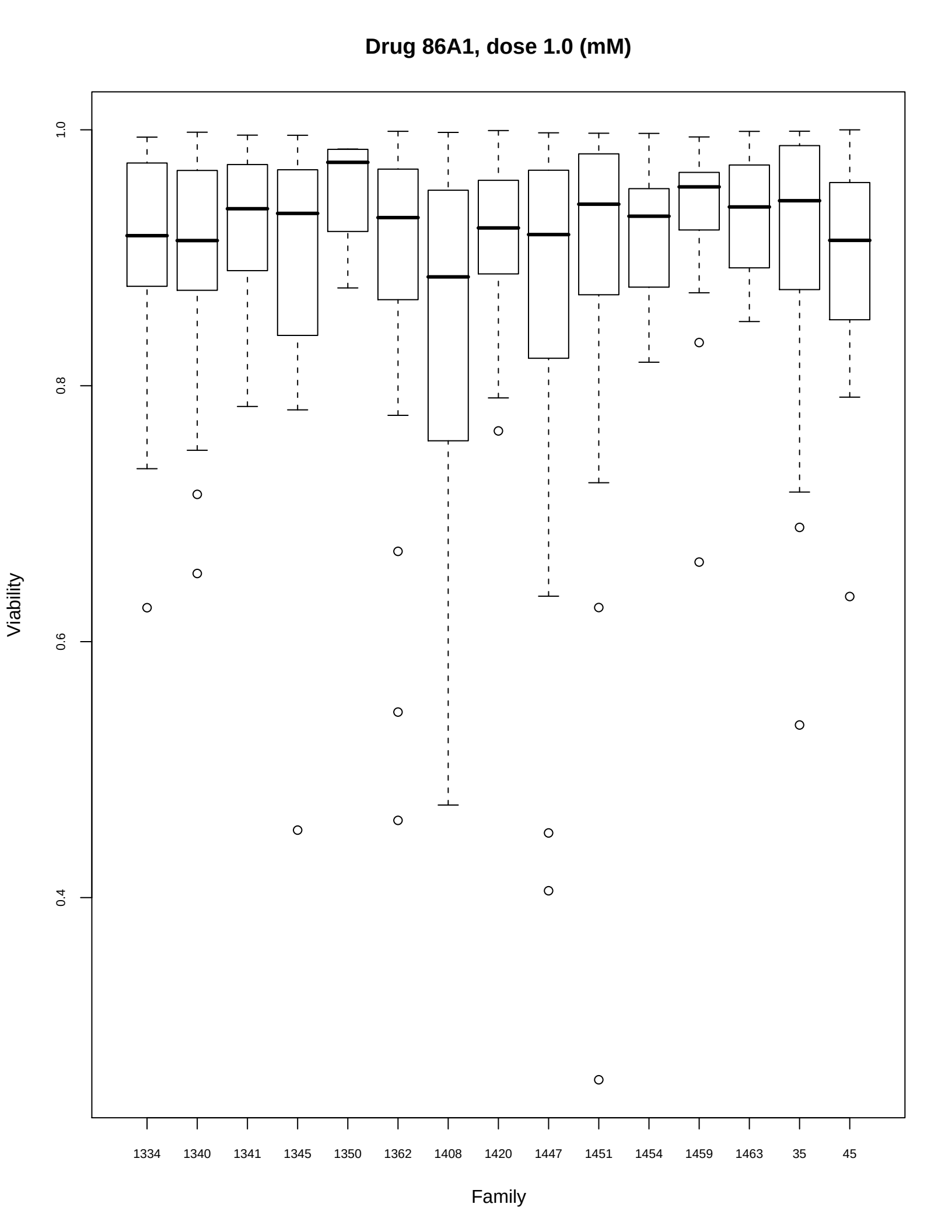

Drug 86A1, dose 30.0 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

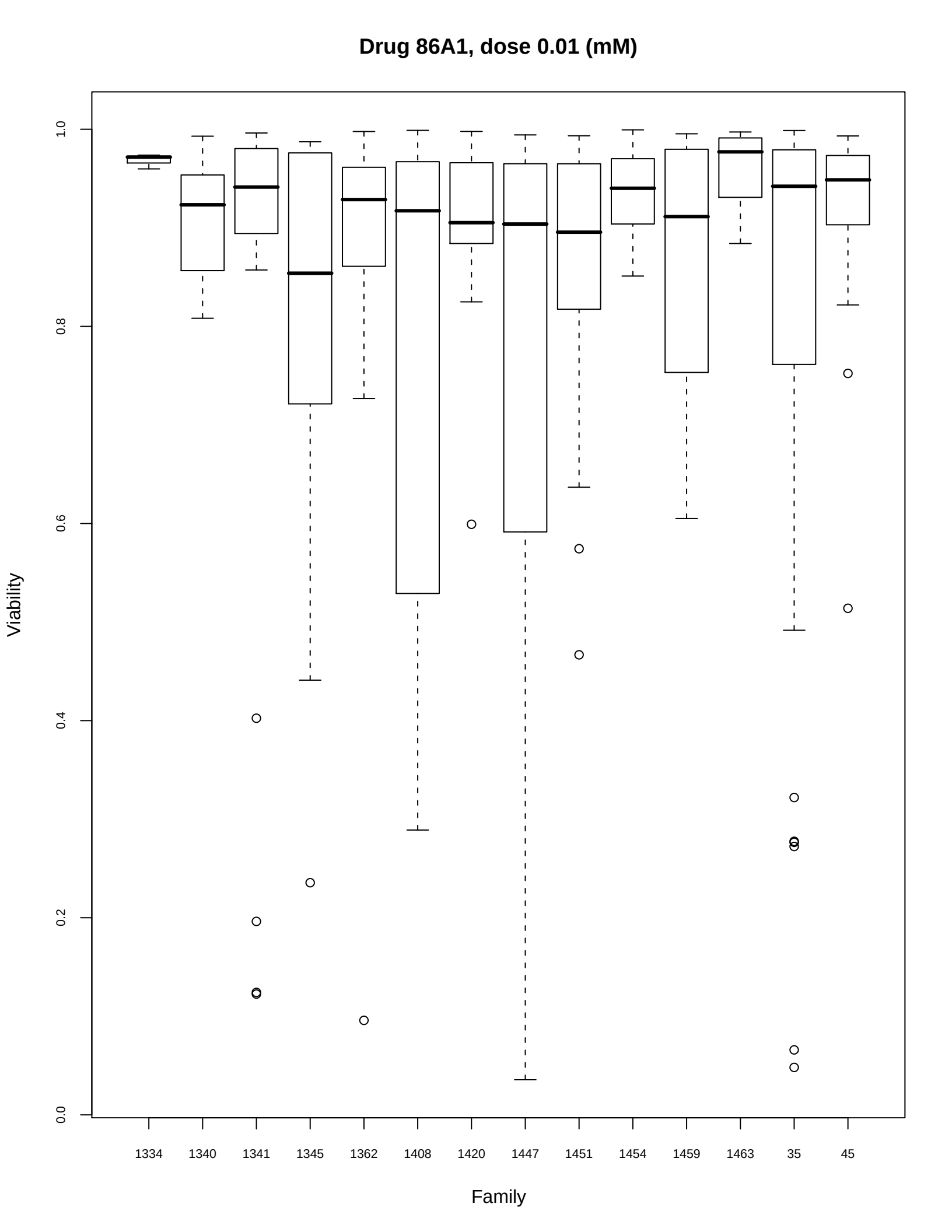

Drug 86A1, dose 10.0 (mM)
Viability
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family


Drug 86A1, dose 7.0 (mM)
Viability
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

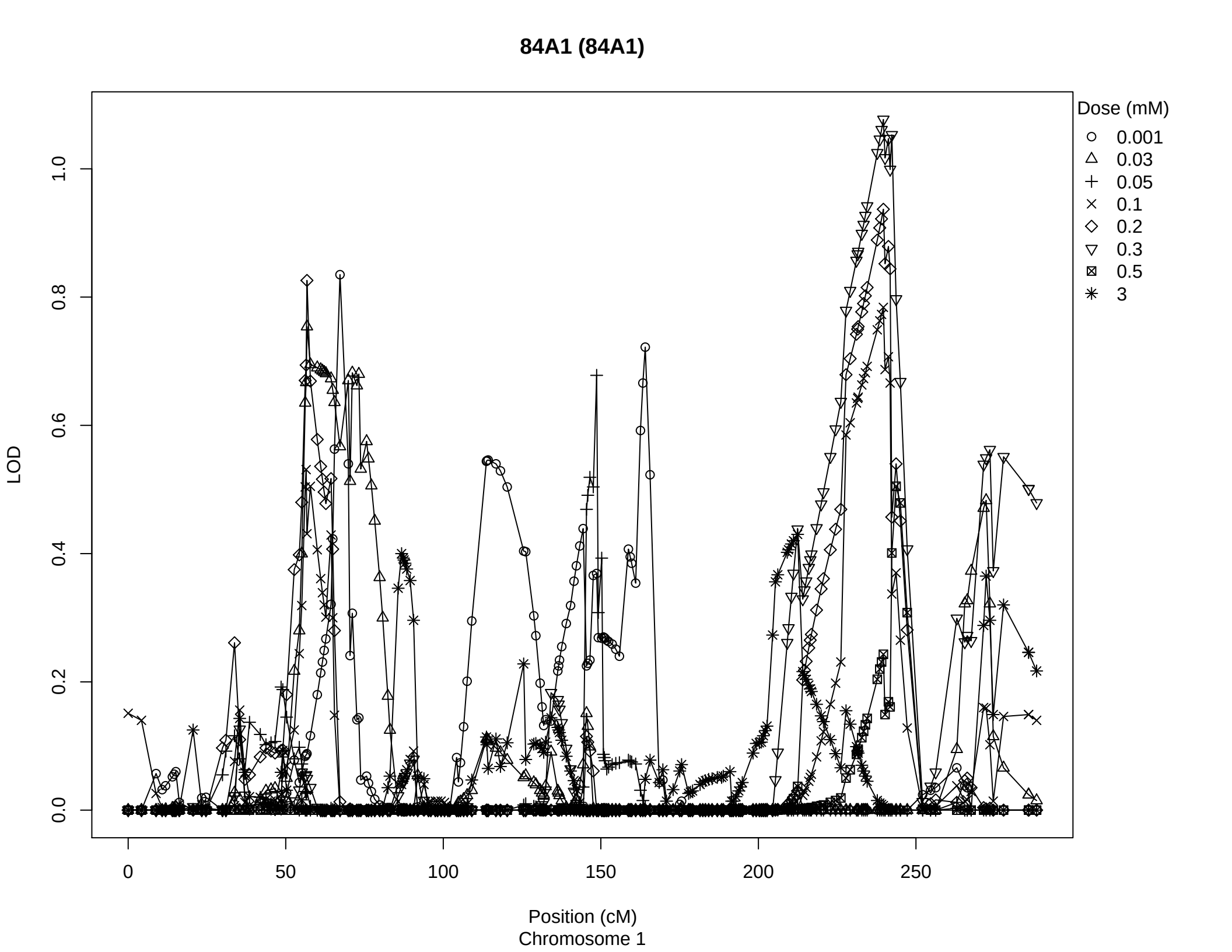

Drug 86A1, dose 5.0 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

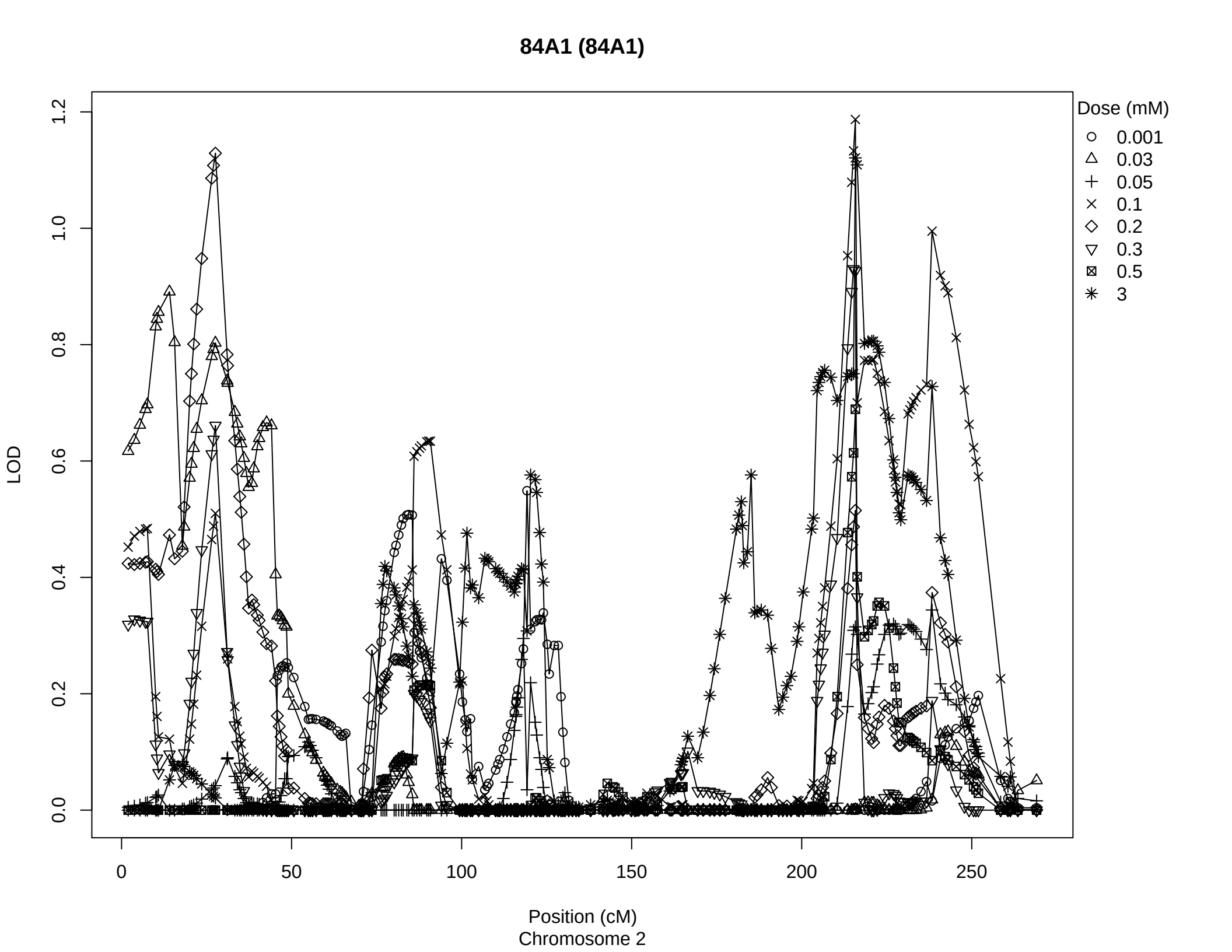

Drug 86A1, dose 3.0 (mM)
Viability
1.0
0.8
0.6
0.4
0.2
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

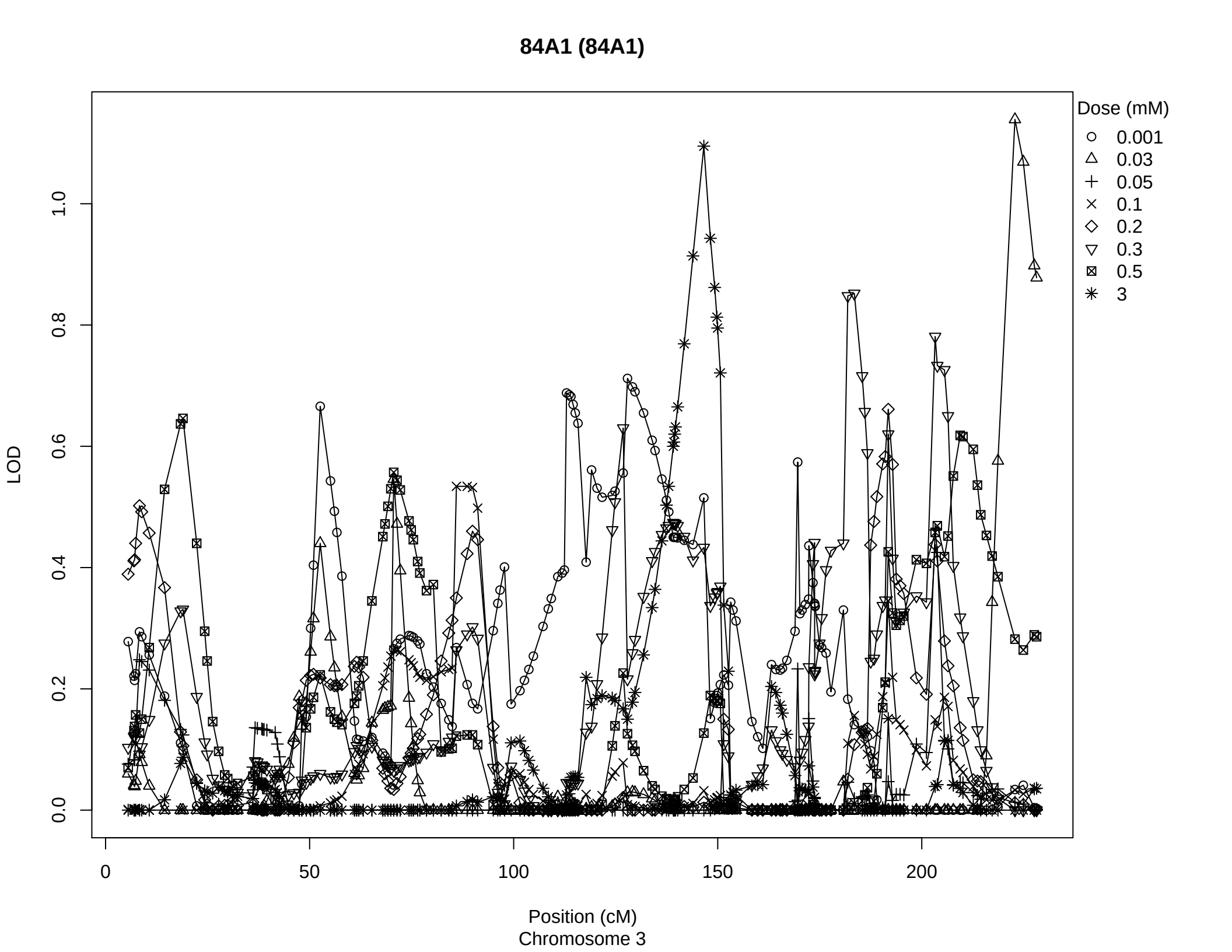

Drug 86A1, dose 1.0 (mM)
Viability
1.0
0.8
0.6
0.4
1334
1340
1341
1345
1350
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

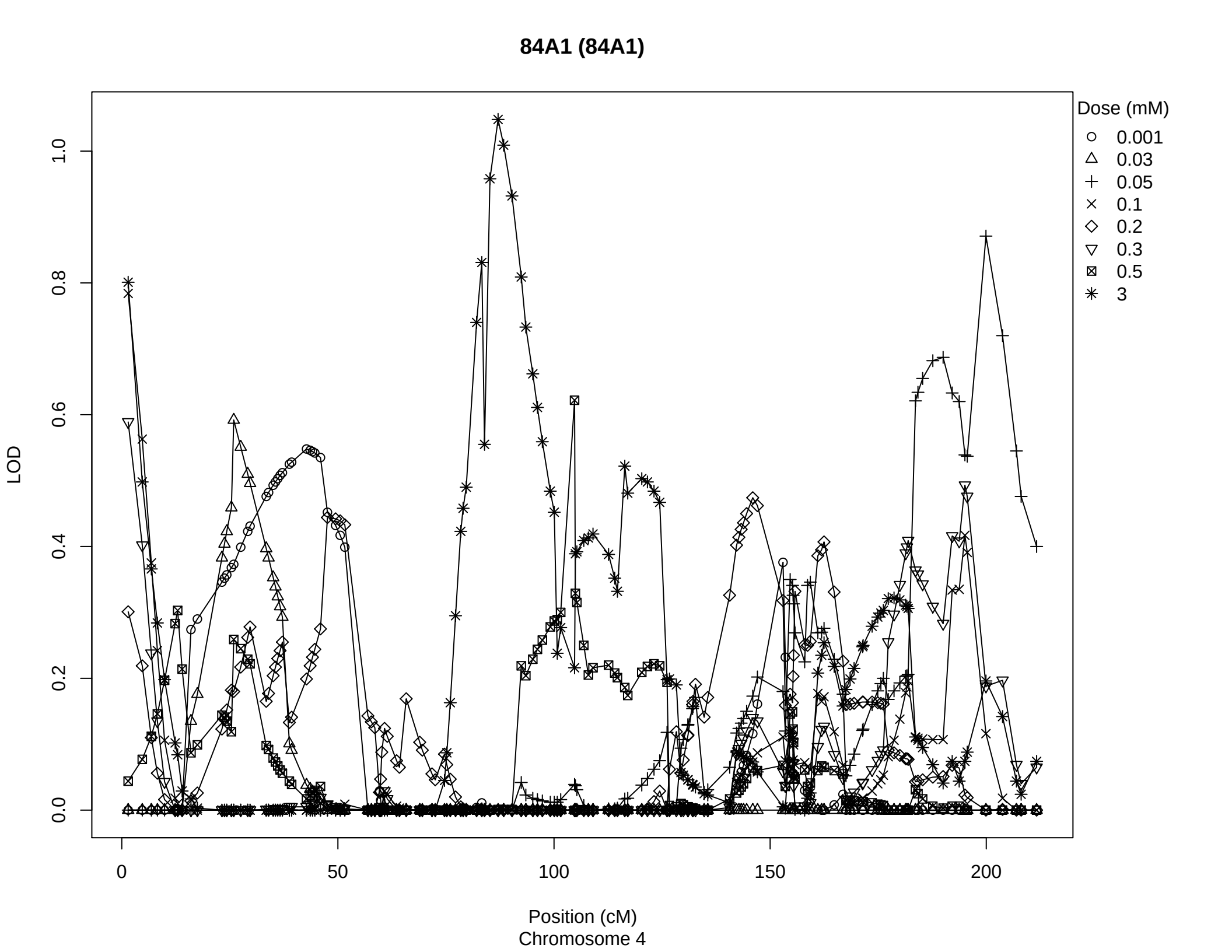

Drug 86A1, dose 0.01 (mM)
Viability
0.0
0.2
0.4
0.6
0.8
1.0
1334
1340
1341
1345
1362
1408
1420
1447
1451
1454
1459
1463
35
45
Family

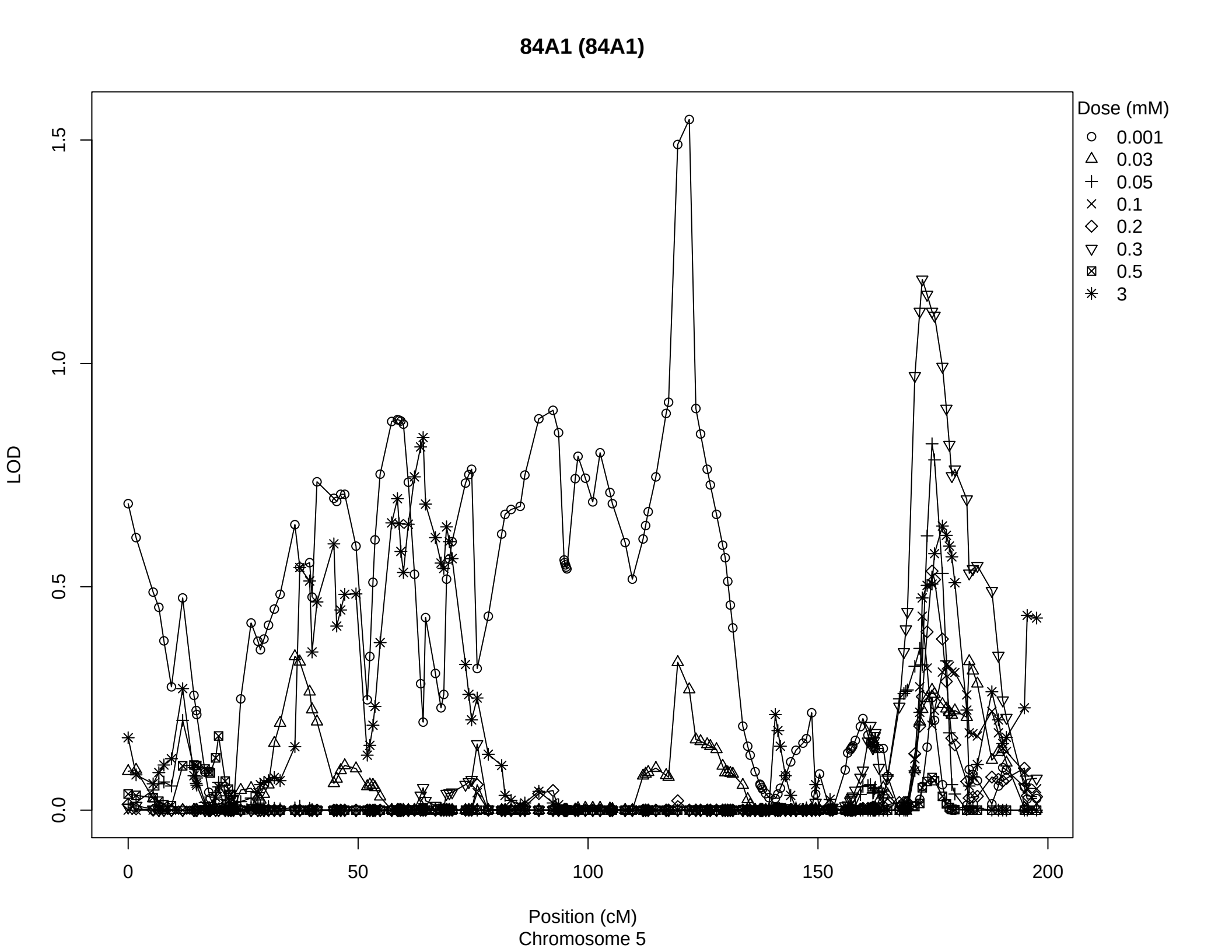
Supplemental Dataset 3. Genomewide QTL maps for each drug. For each compound-concentration combination, LOD scores are shown across each chromosome. QTL maps for different concentrations of the same compound are overlaid. Drug abbreviations are as follows: Indenoisoquinoline 1 = 84A1, Indenoisoquinoline 2 = 85A1, and Indenoisoquinoline 3 = 86A1.

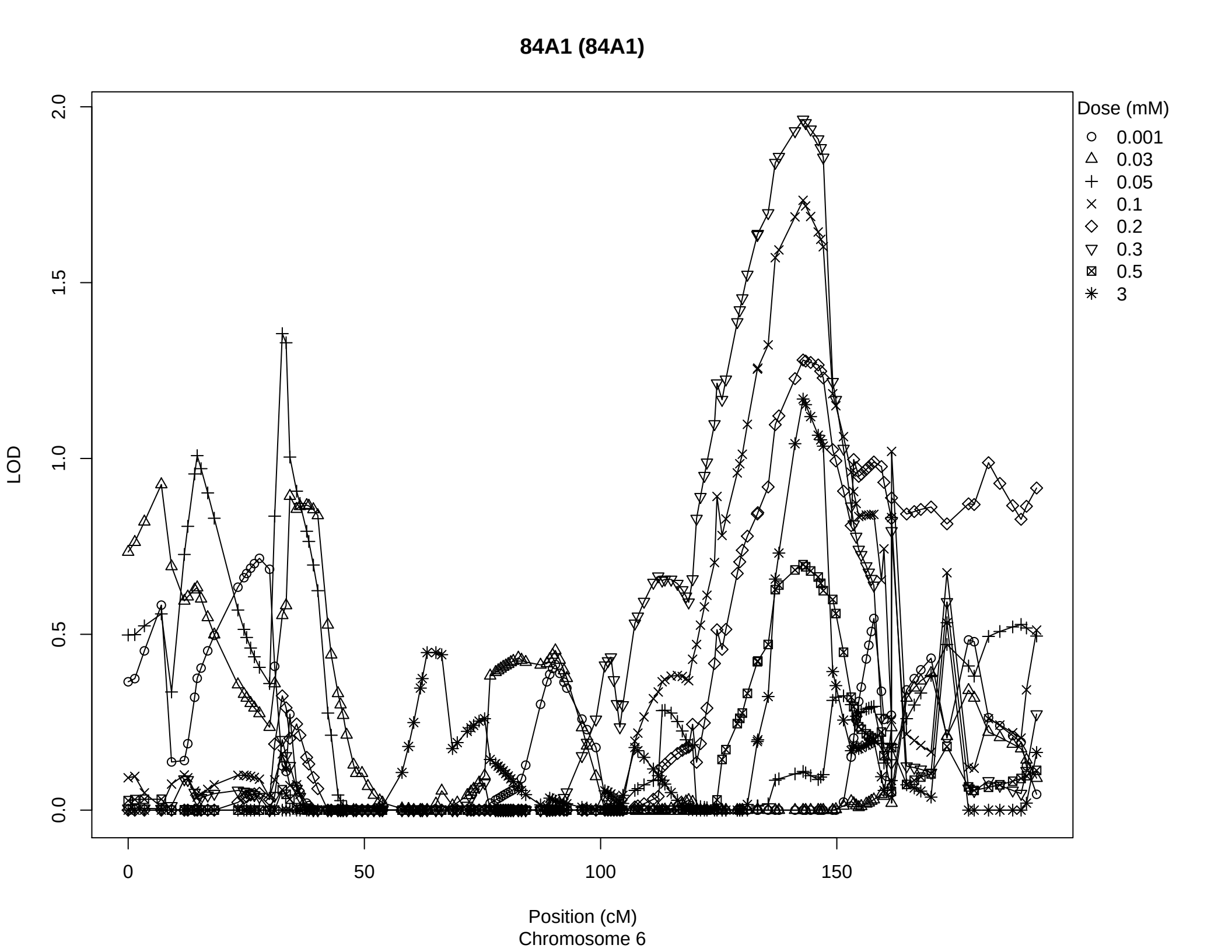

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
250
Position (cM)
Chromosome 1
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

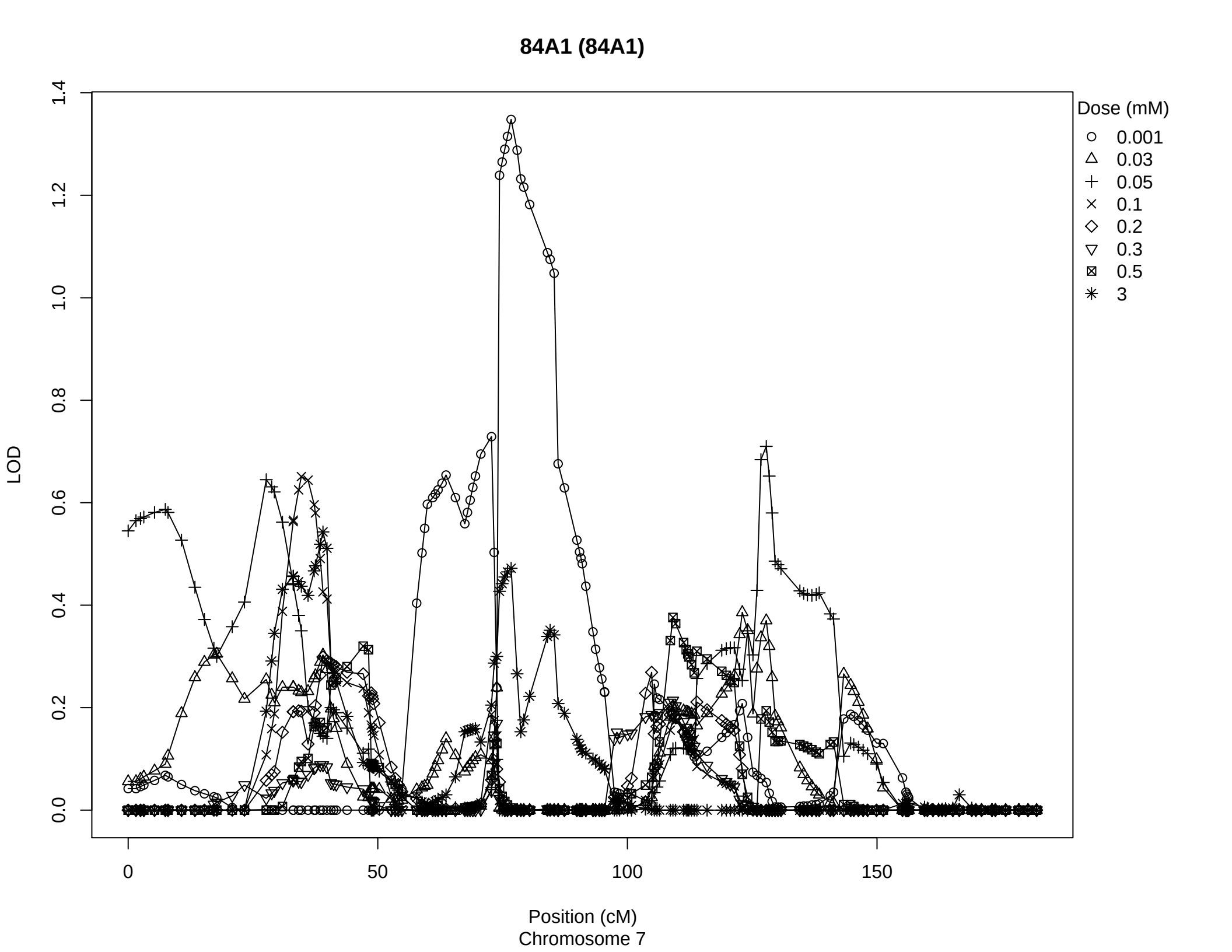

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
200
250
Position (cM)
Chromosome 2
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

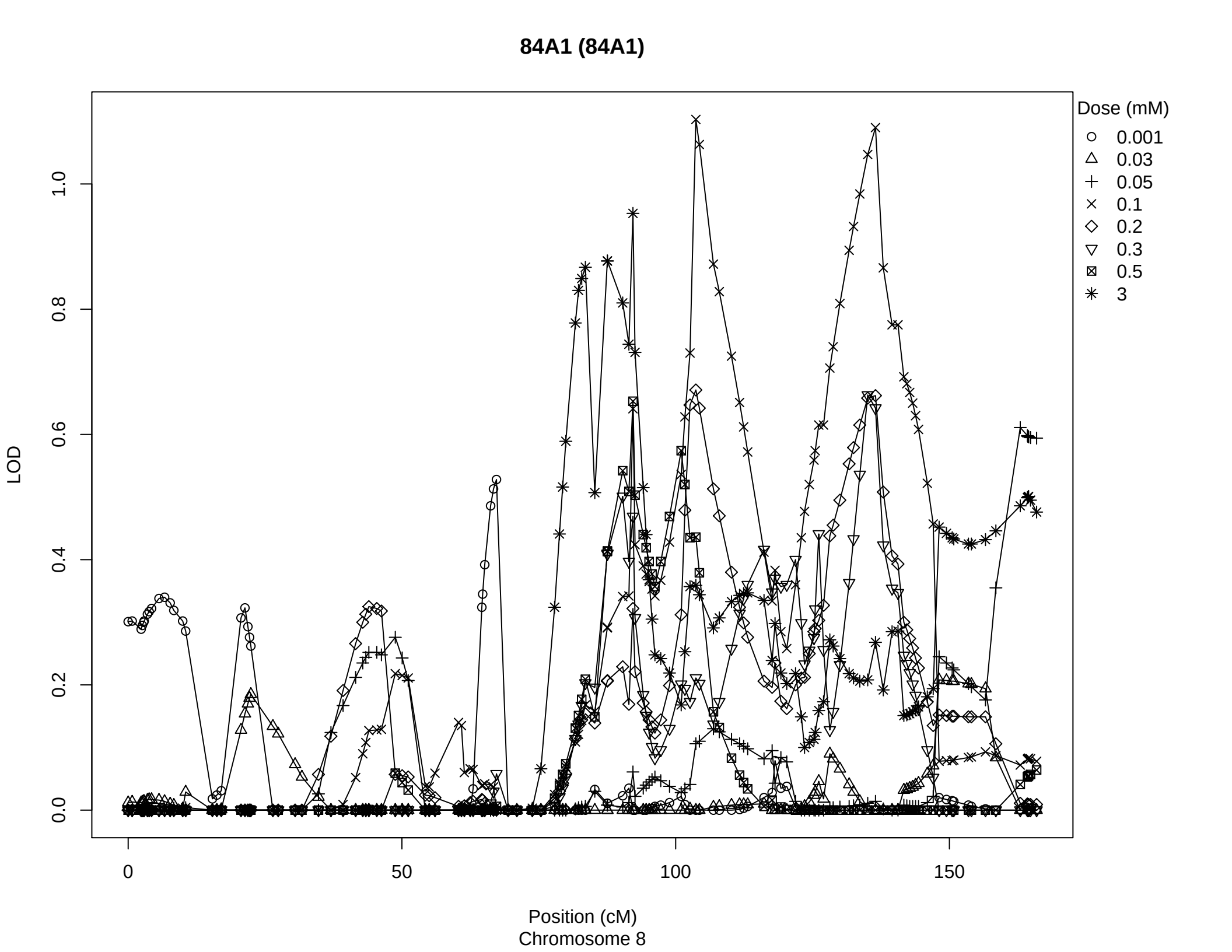

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
Position (cM)
Chromosome 3
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

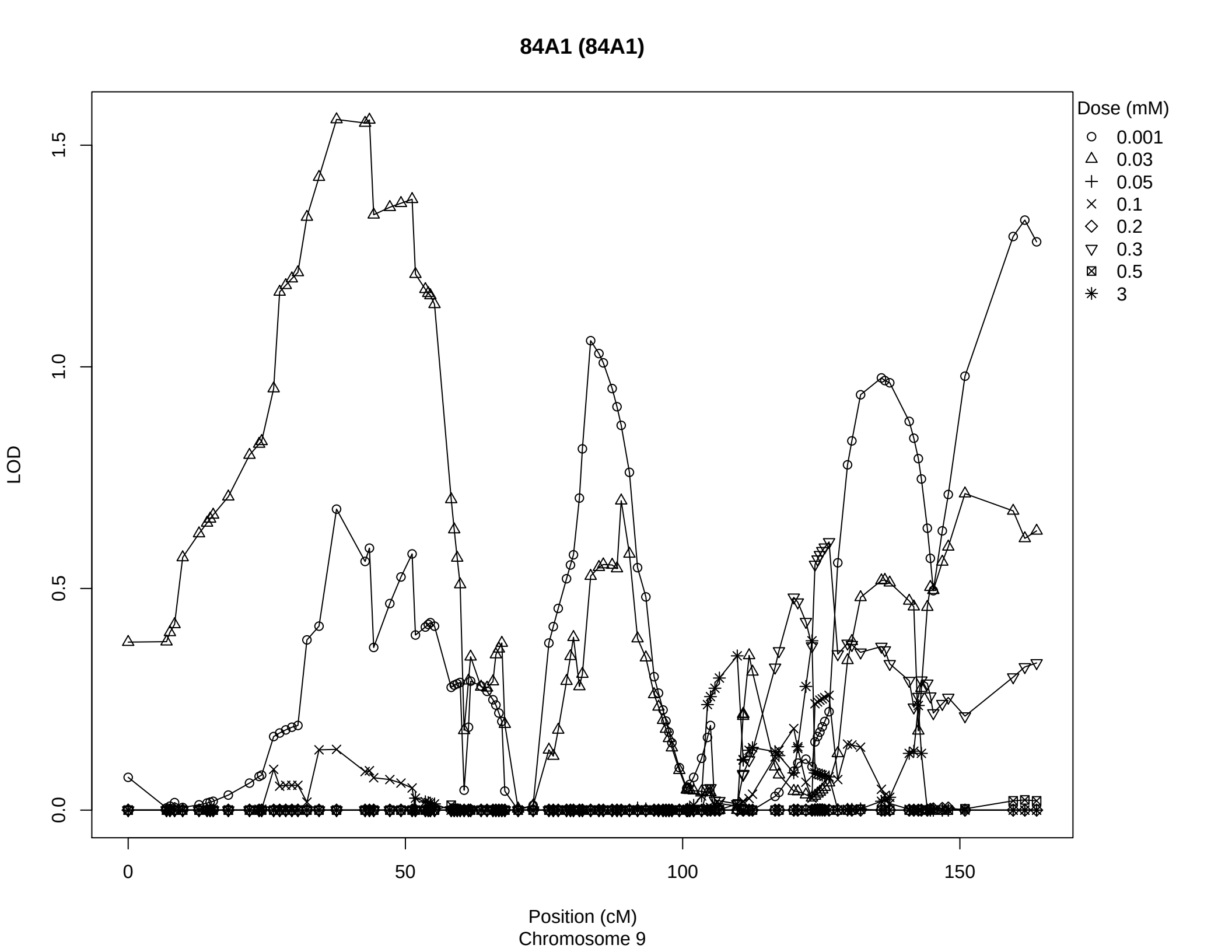

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
Position (cM)
Chromosome 4
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

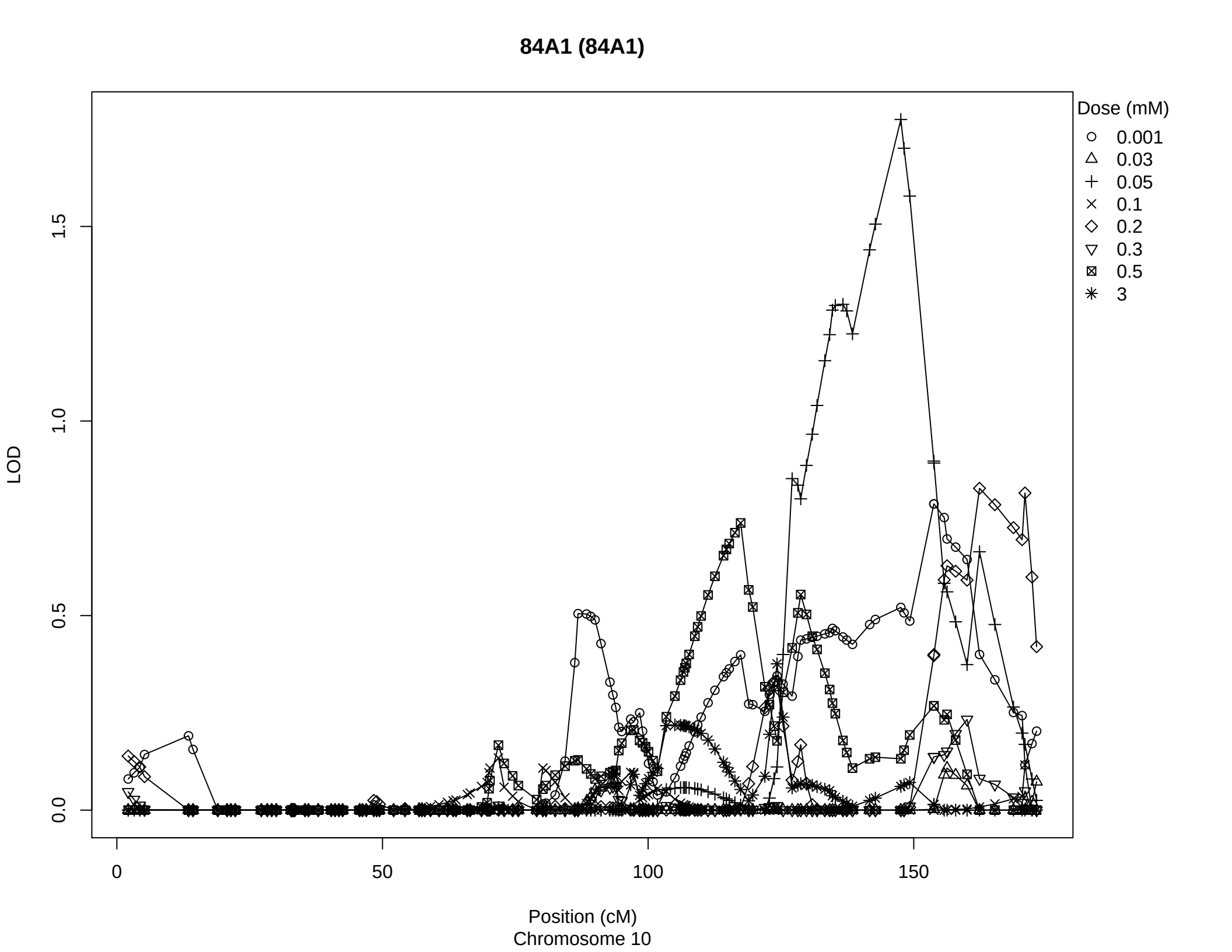

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
200
Position (cM)
Chromosome 5
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

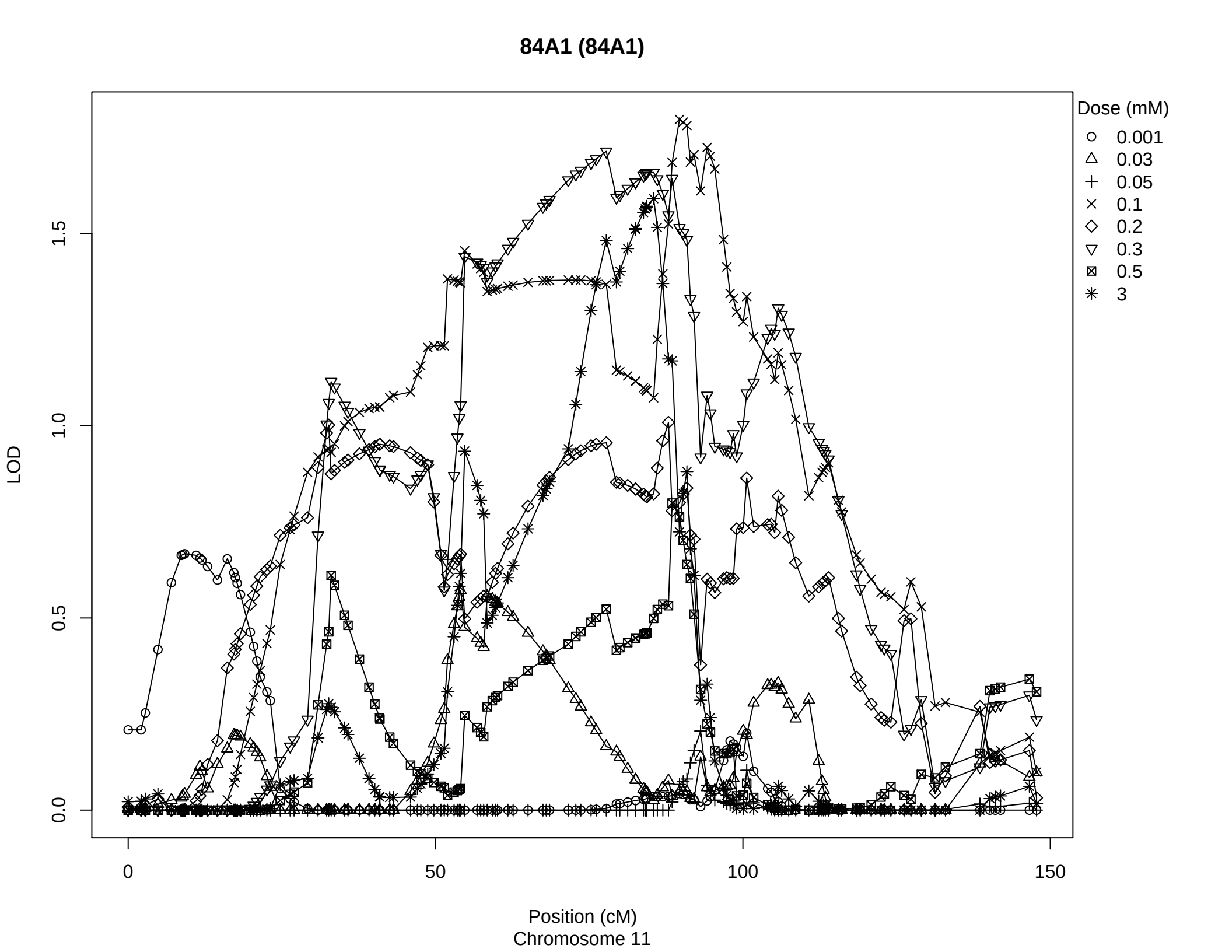

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
2.0
0
50
100
150
Position (cM)
Chromosome 6
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

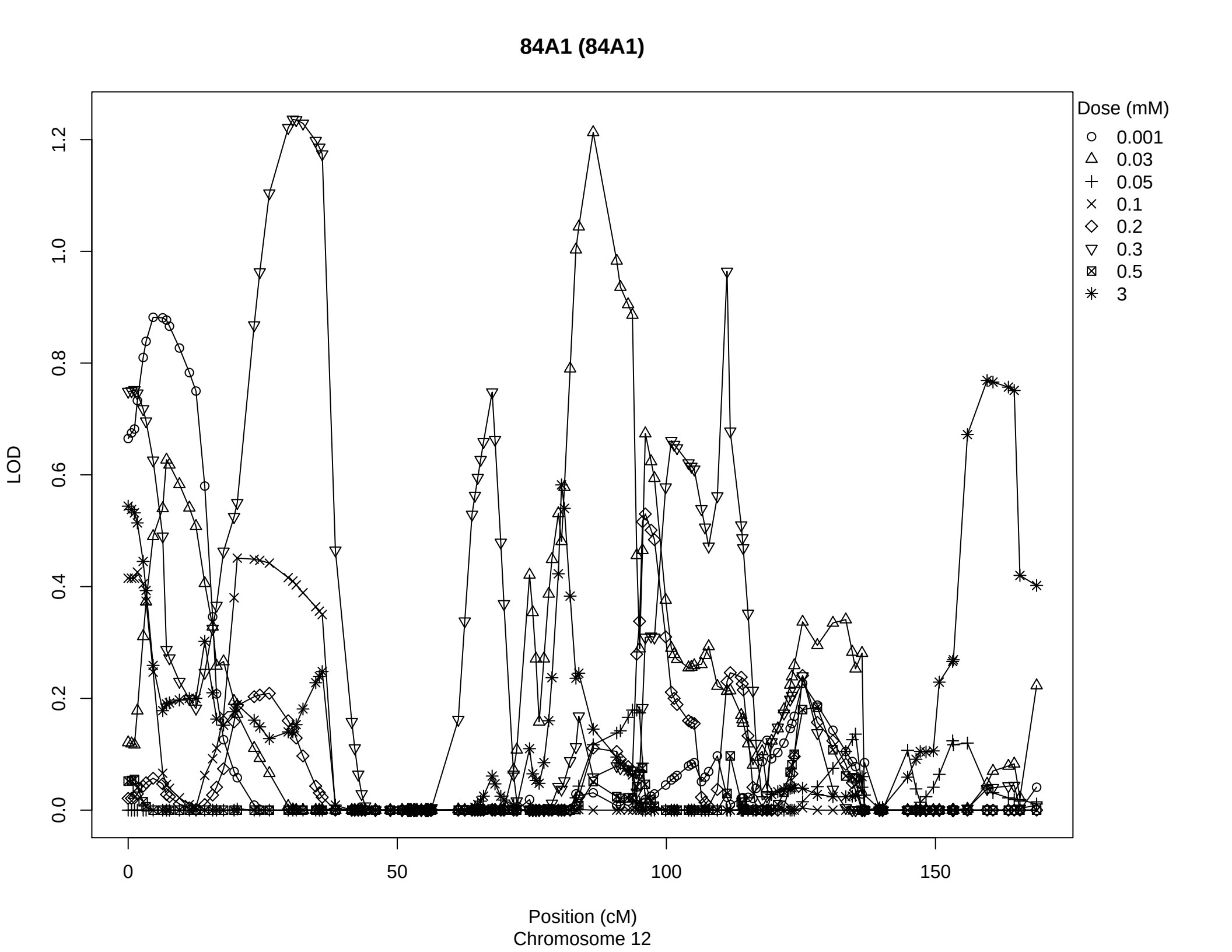

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
50
100
150
Position (cM)
Chromosome 7
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

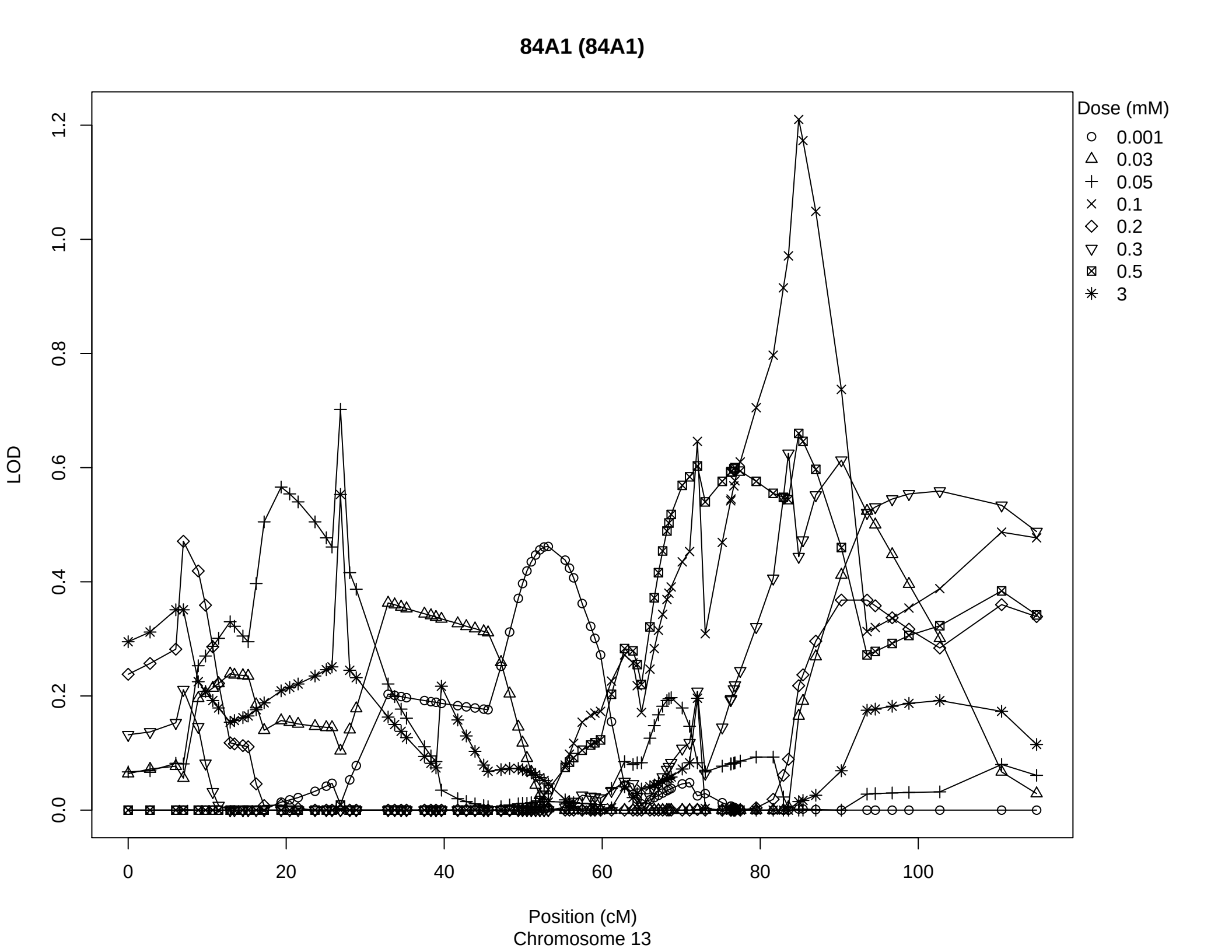

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
Position (cM)
Chromosome 8
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

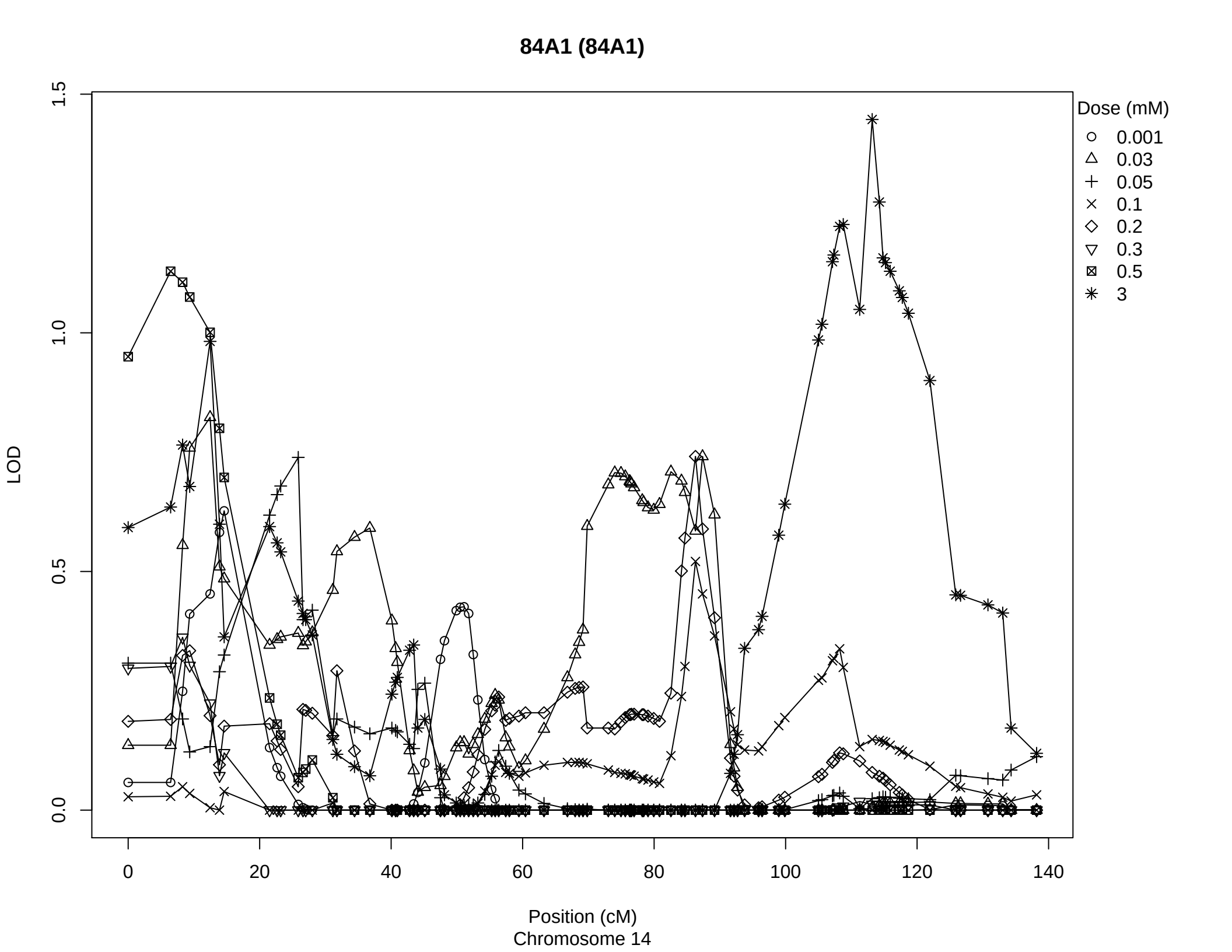

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 9
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

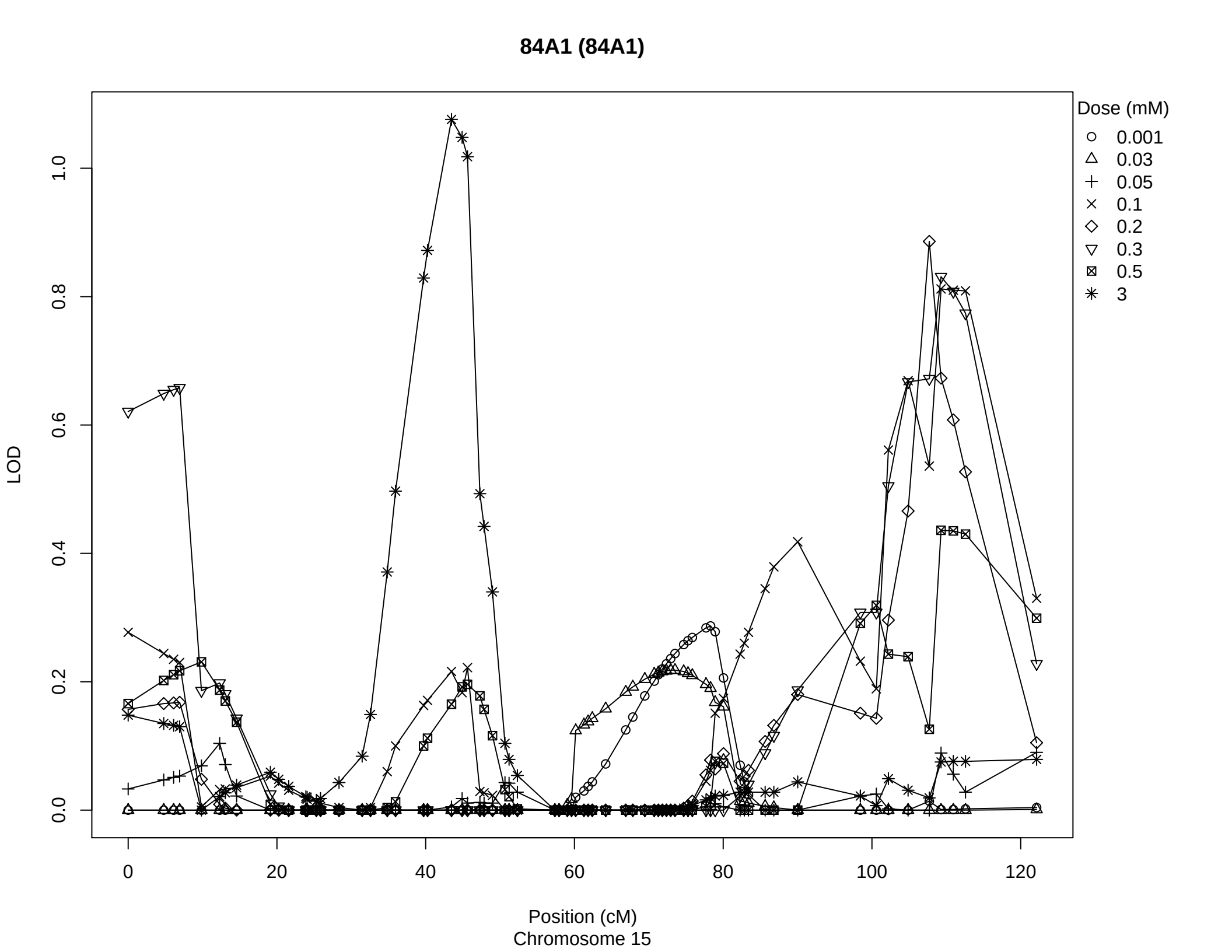

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 10
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

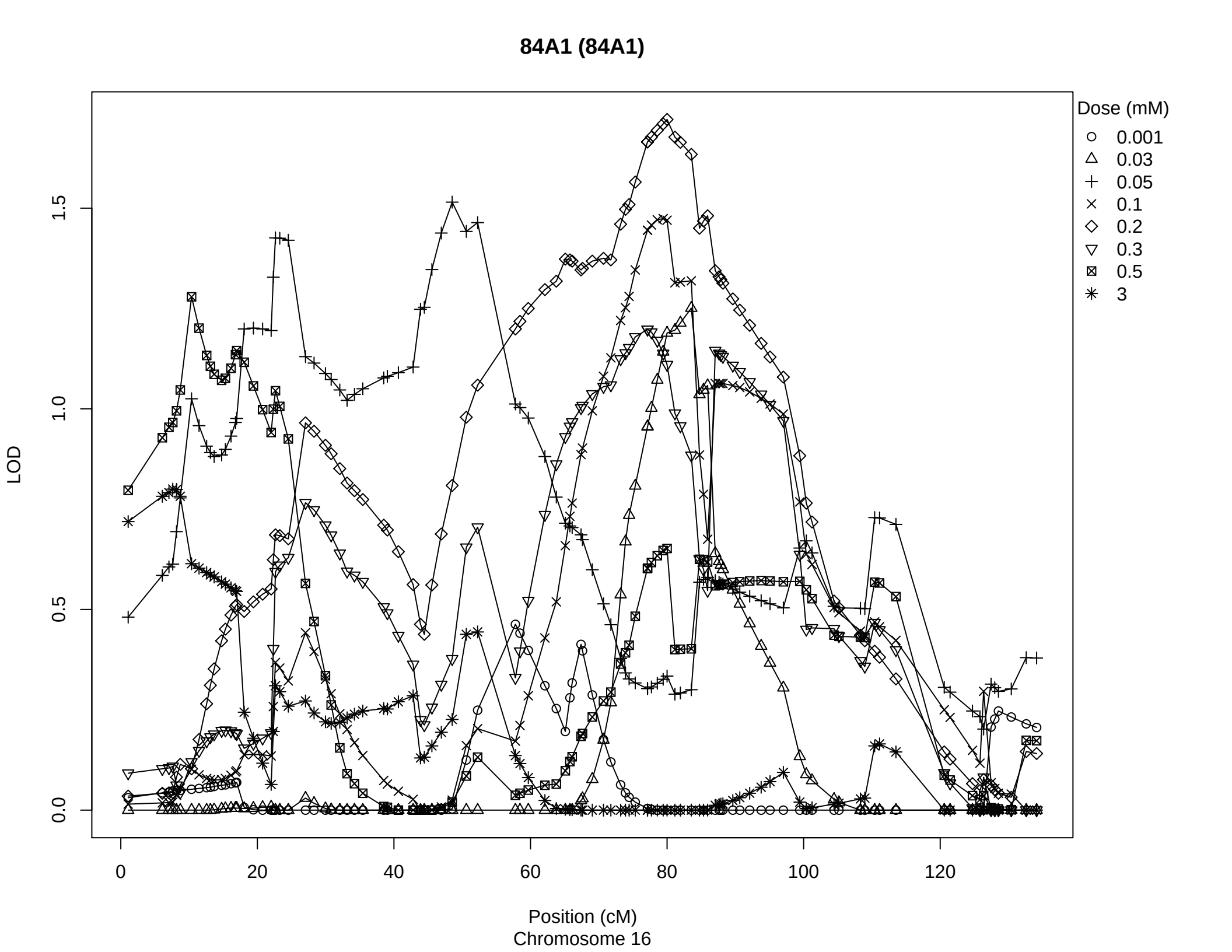

84A1 (84A1)
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 11

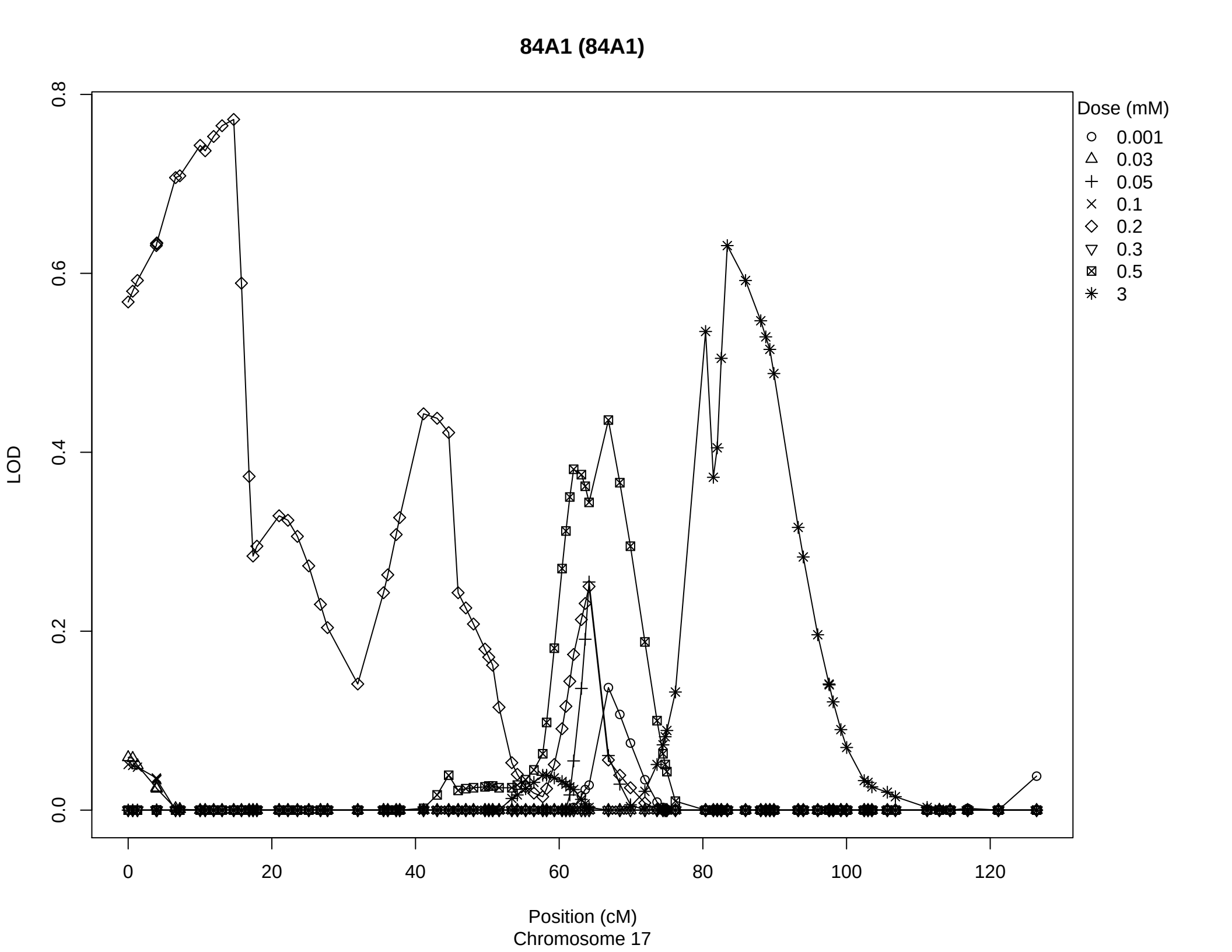

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
Position (cM)
Chromosome 12
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

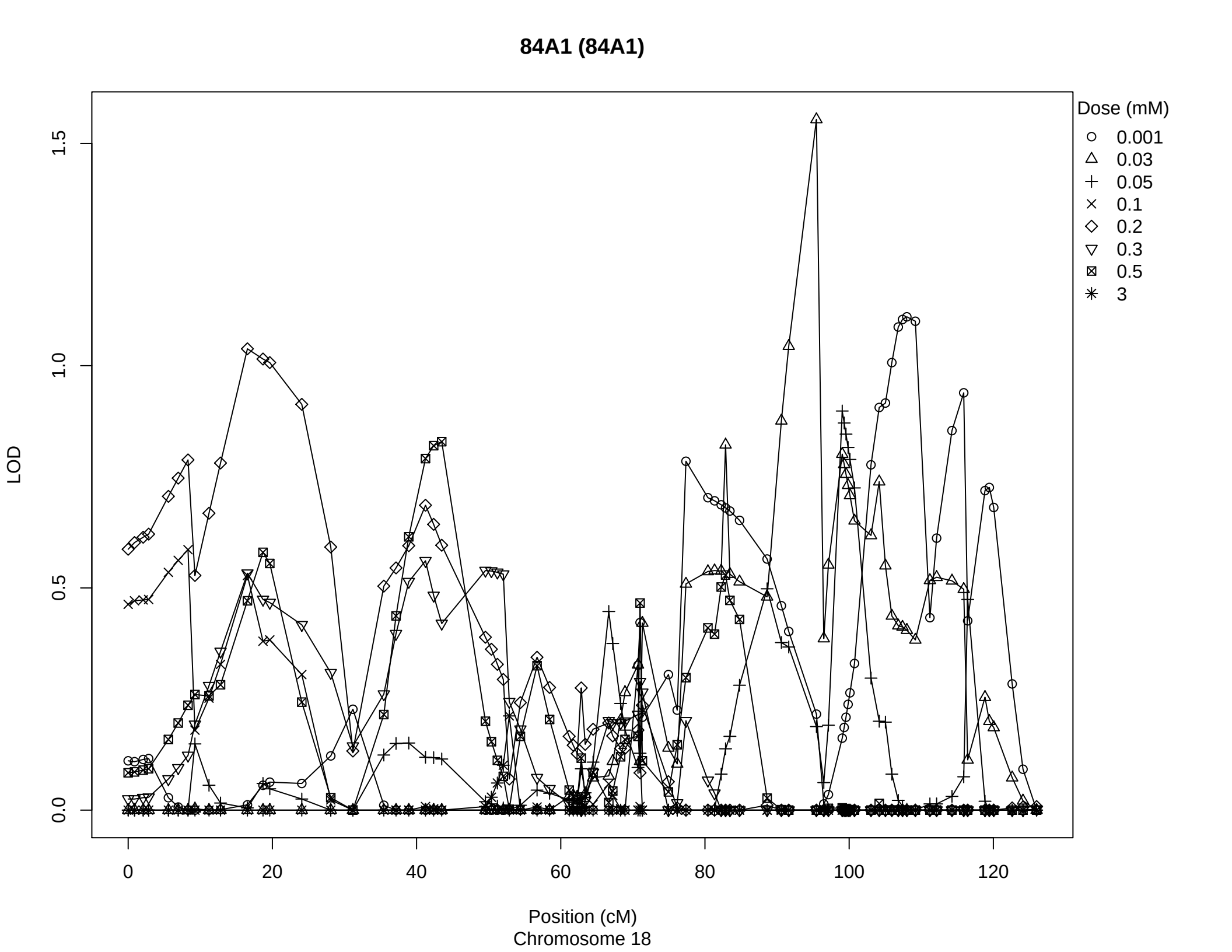

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
20
40
60
80
100
Position (cM)
Chromosome 13
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

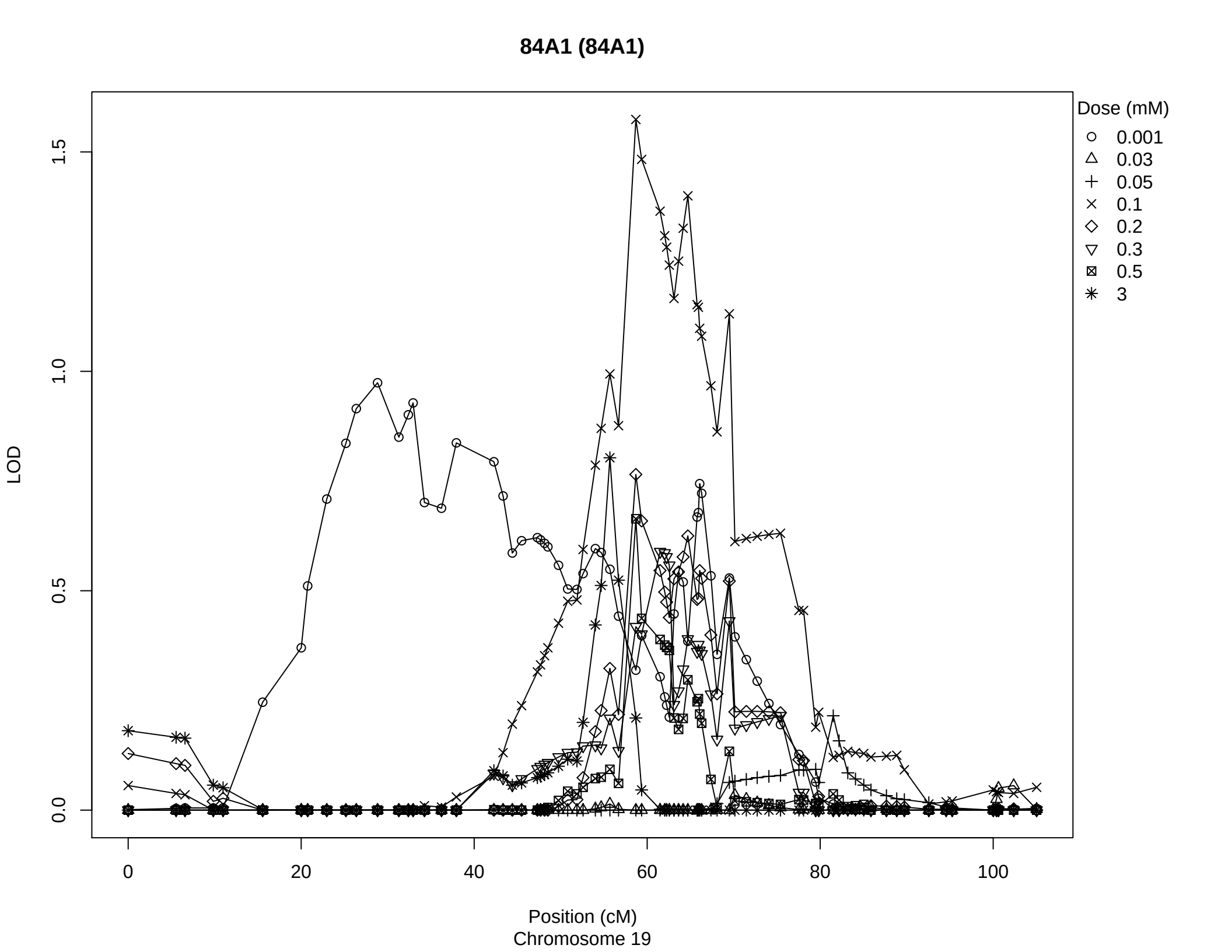

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
20
40
60
80
100
120
140
Position (cM)
Chromosome 14
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

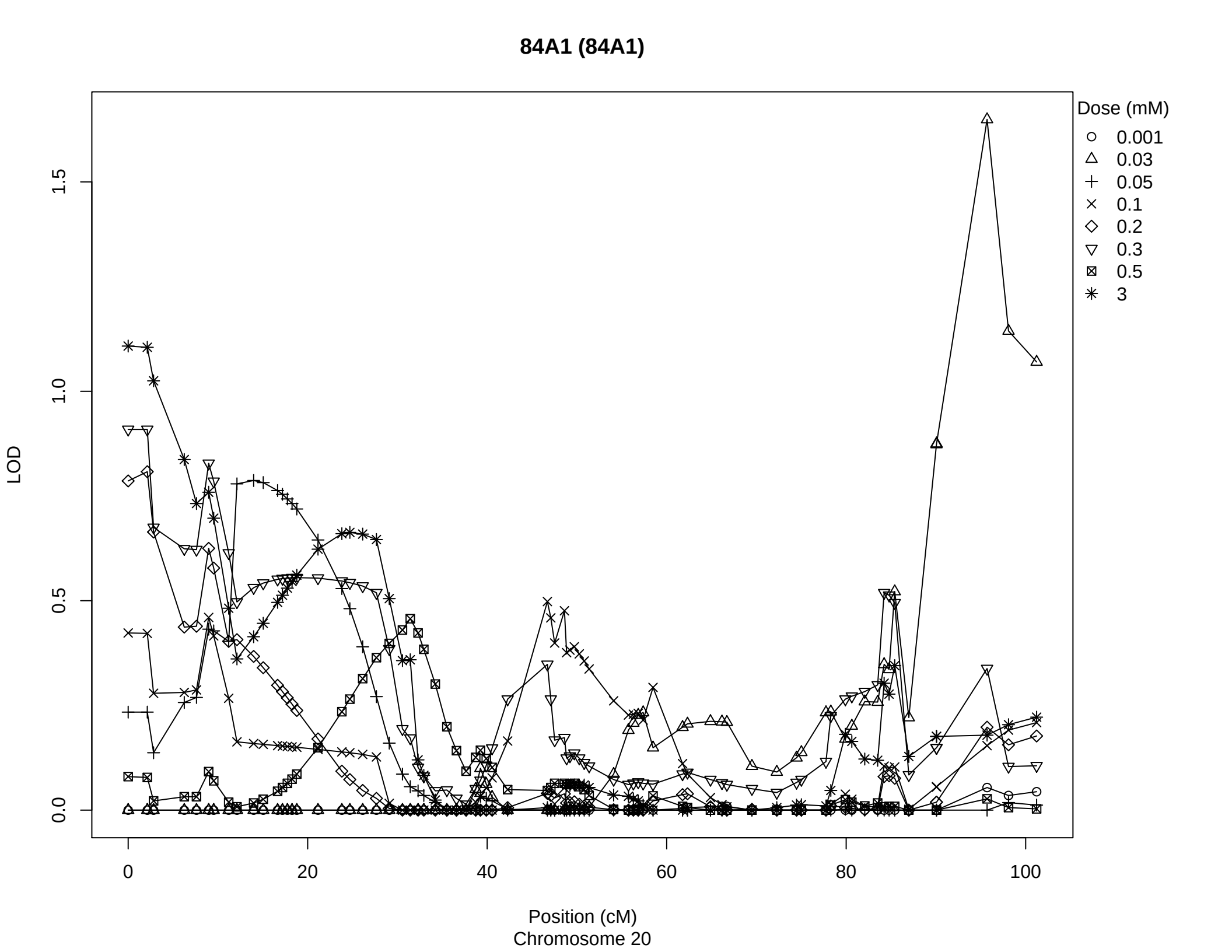

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
120
Position (cM)
Chromosome 15
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

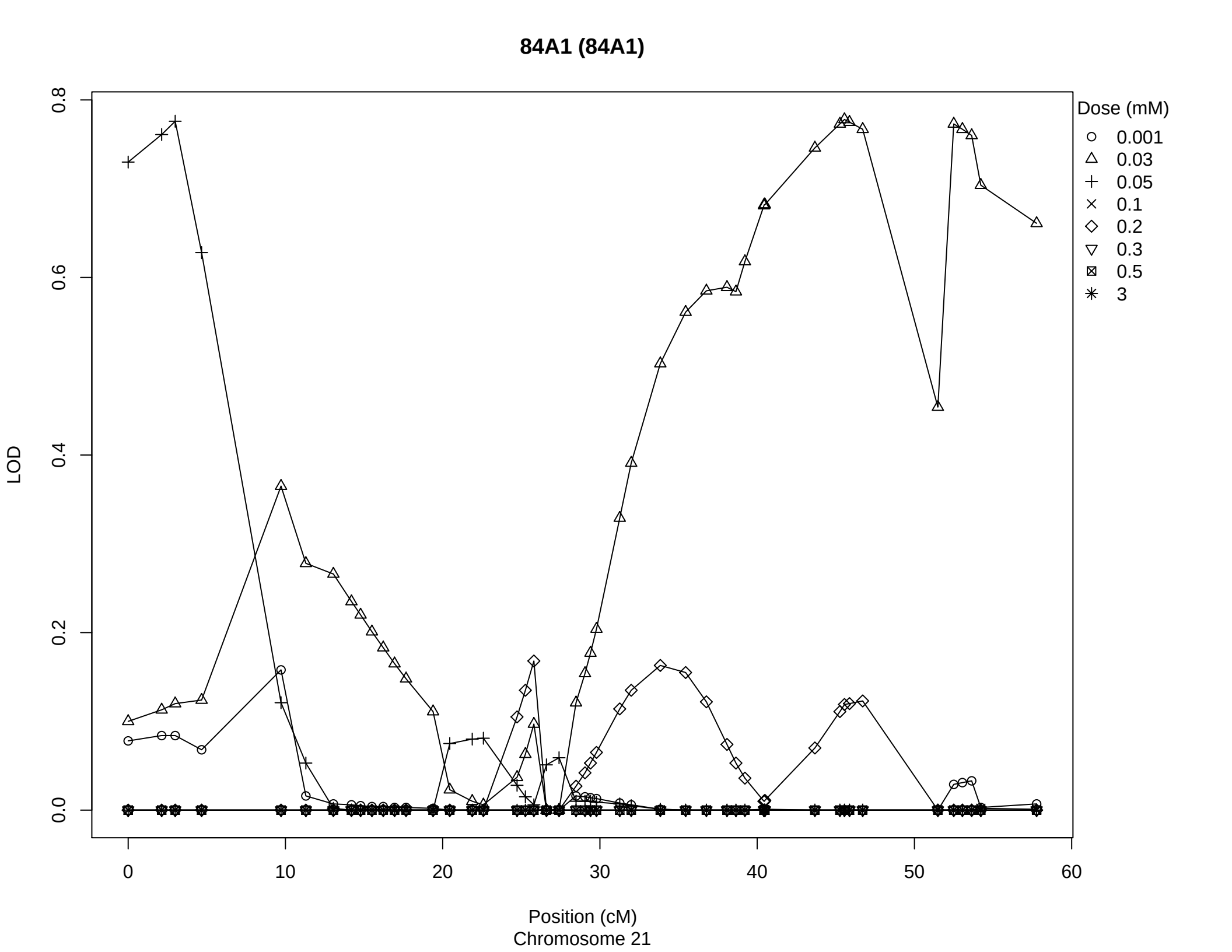

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
20
40
60
80
100
120
Position (cM)
Chromosome 16
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

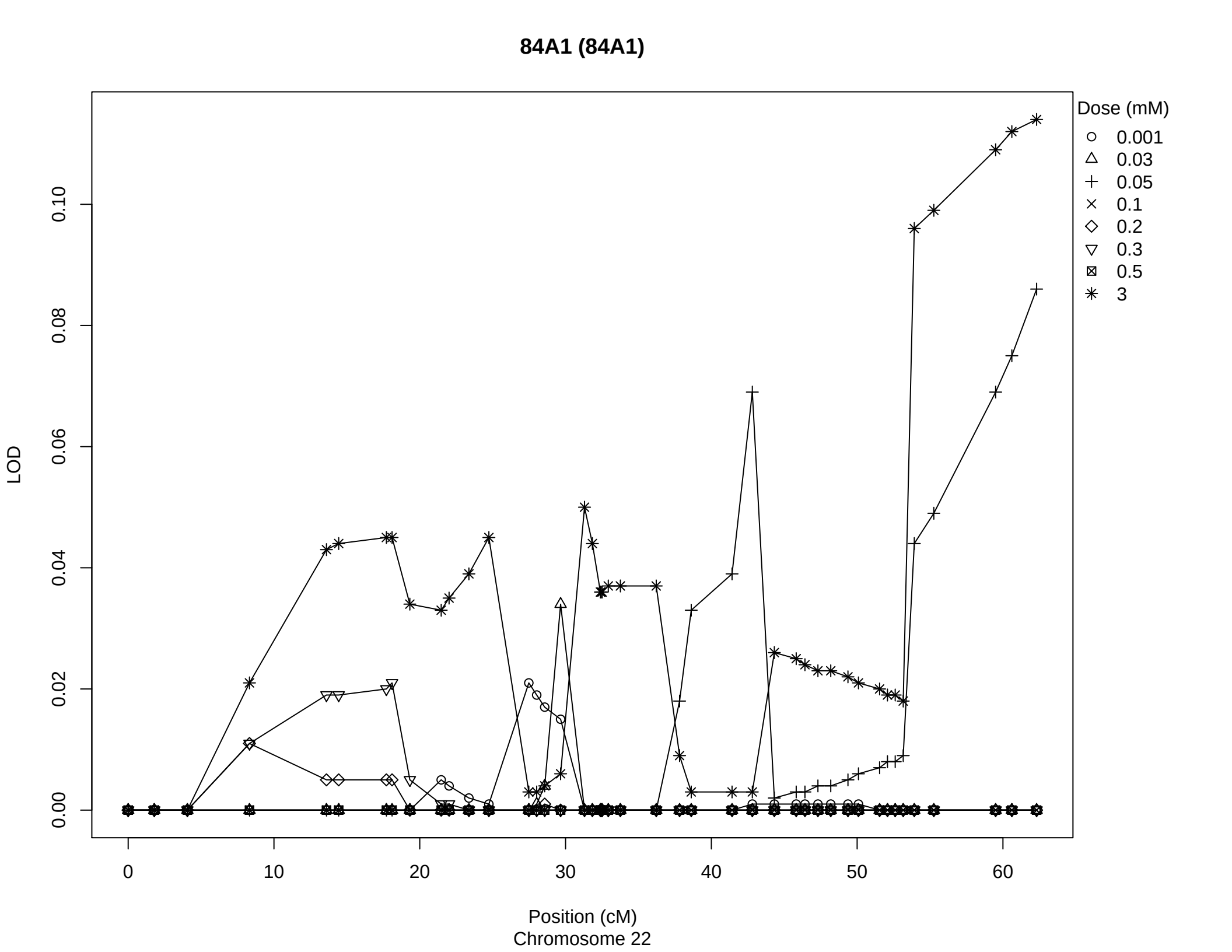

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
120
Position (cM)
Chromosome 17
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

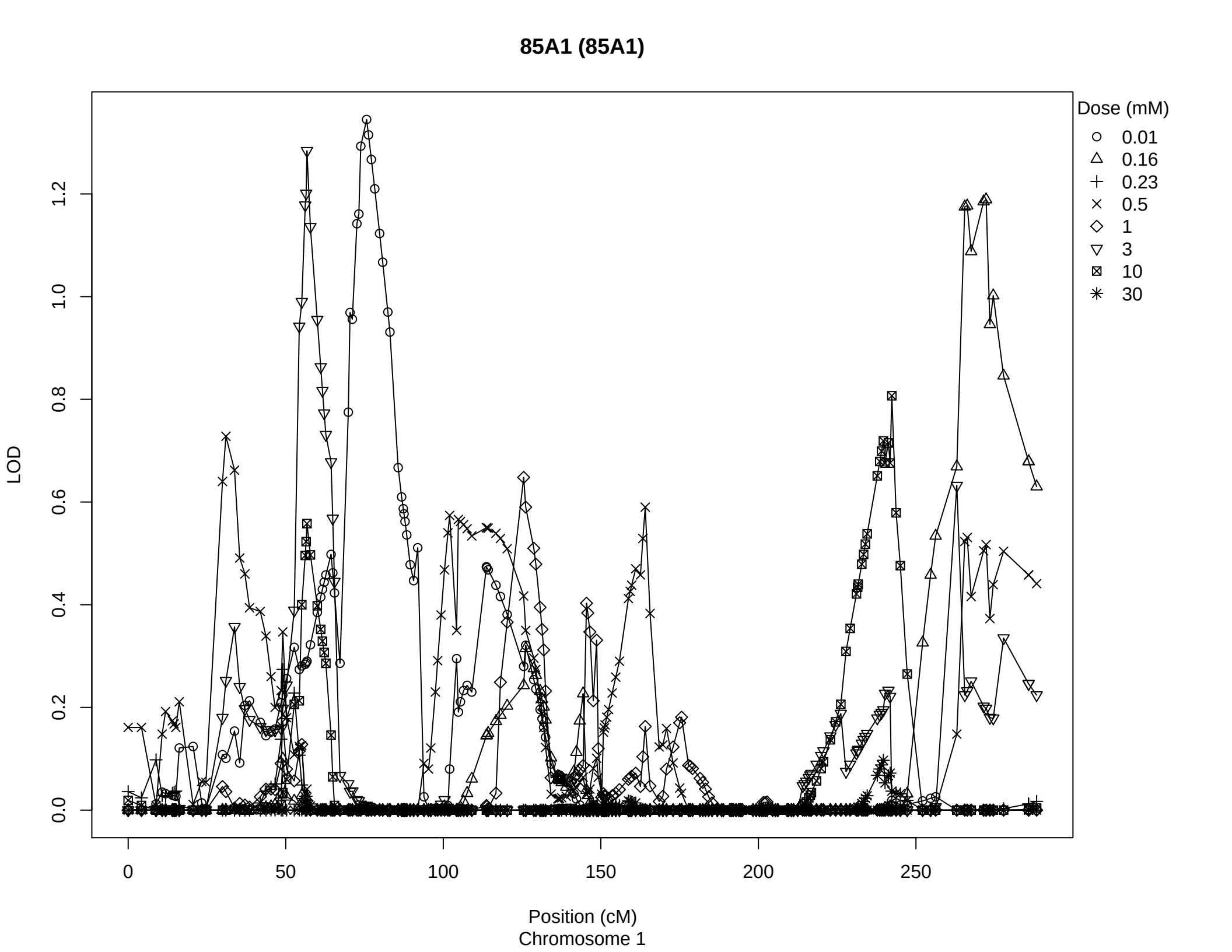

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
20
40
60
80
100
120
Position (cM)
Chromosome 18
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

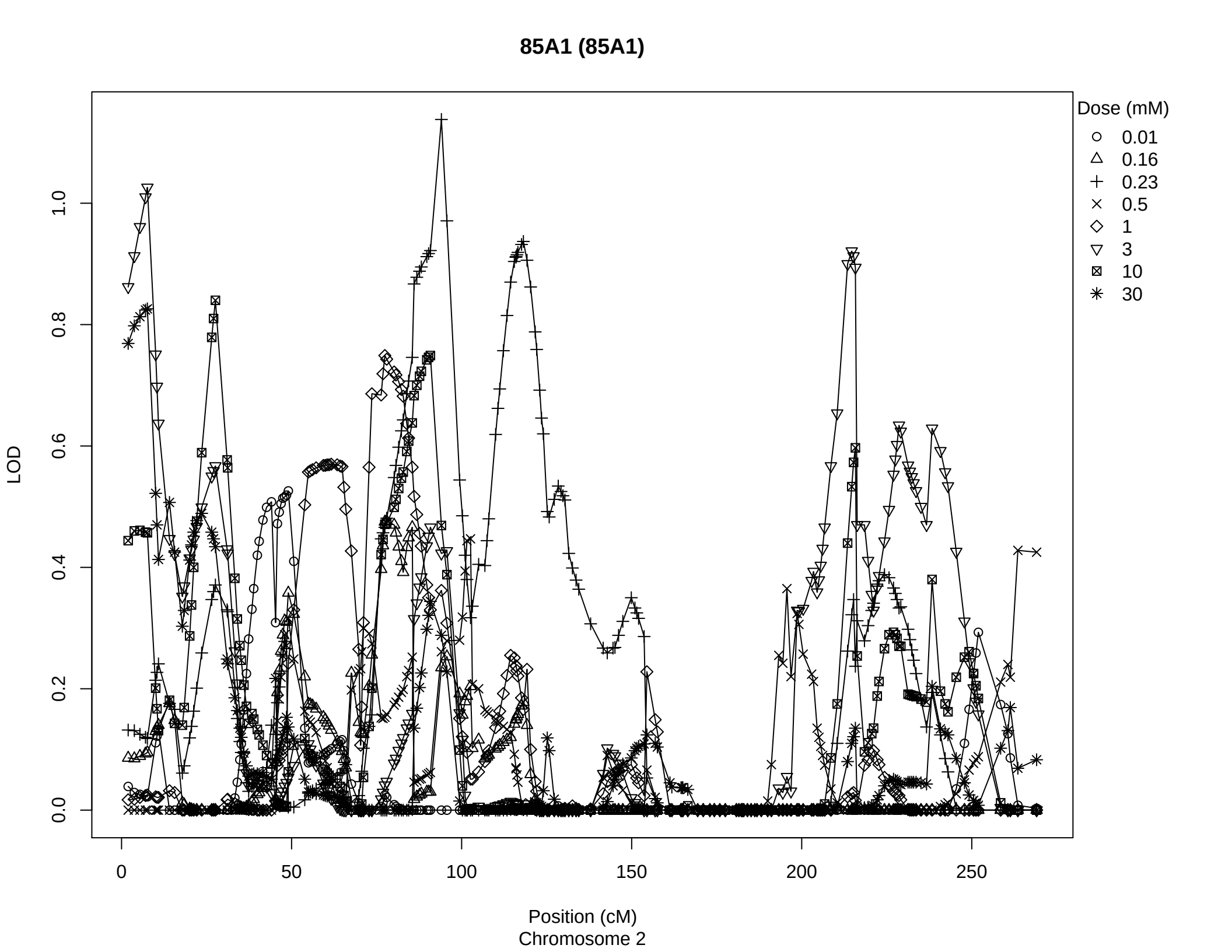

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
20
40
60
80
100
Position (cM)
Chromosome 19
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

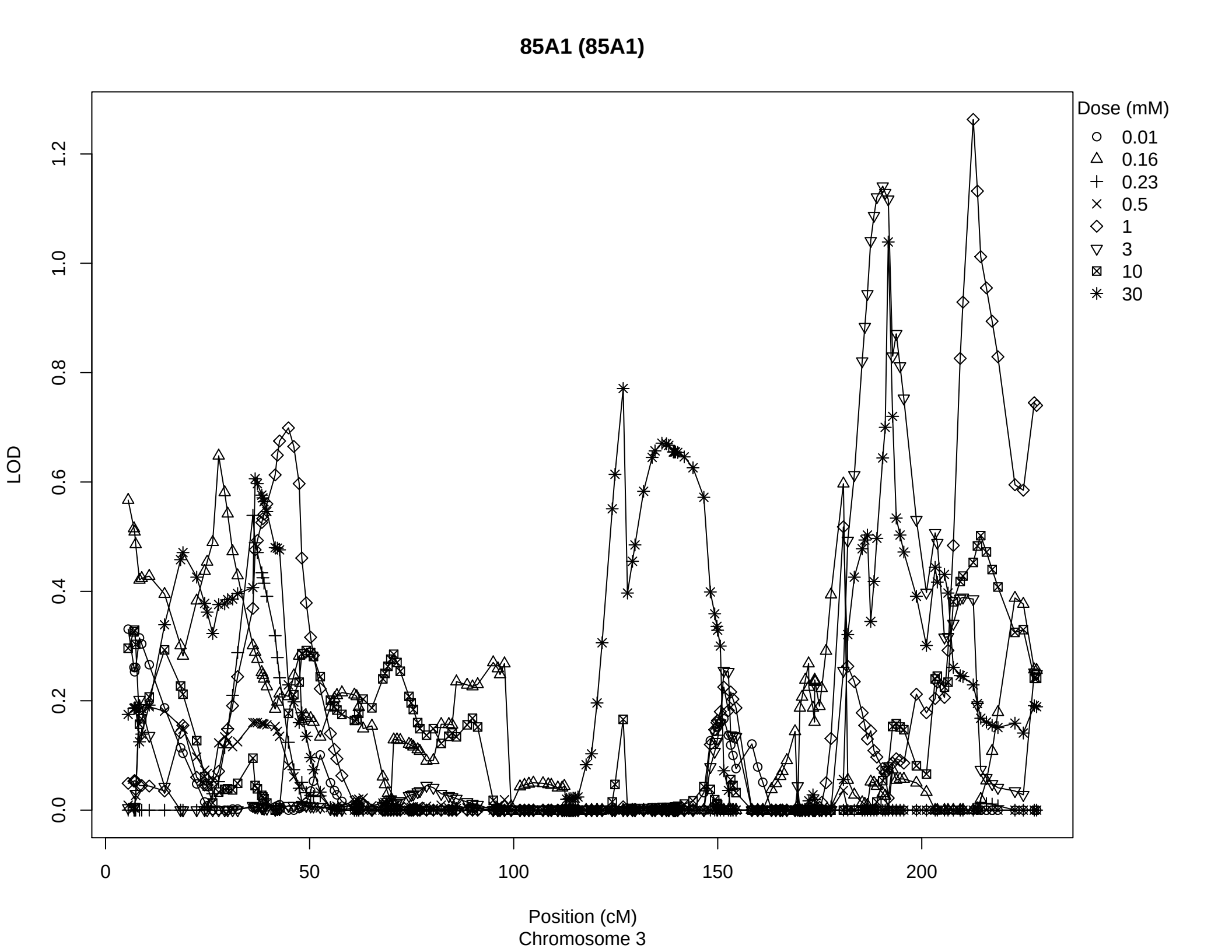

84A1 (84A1)
LOD
0.0
0.5
1.0
1.5
0
20
40
60
80
100
Position (cM)
Chromosome 20
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

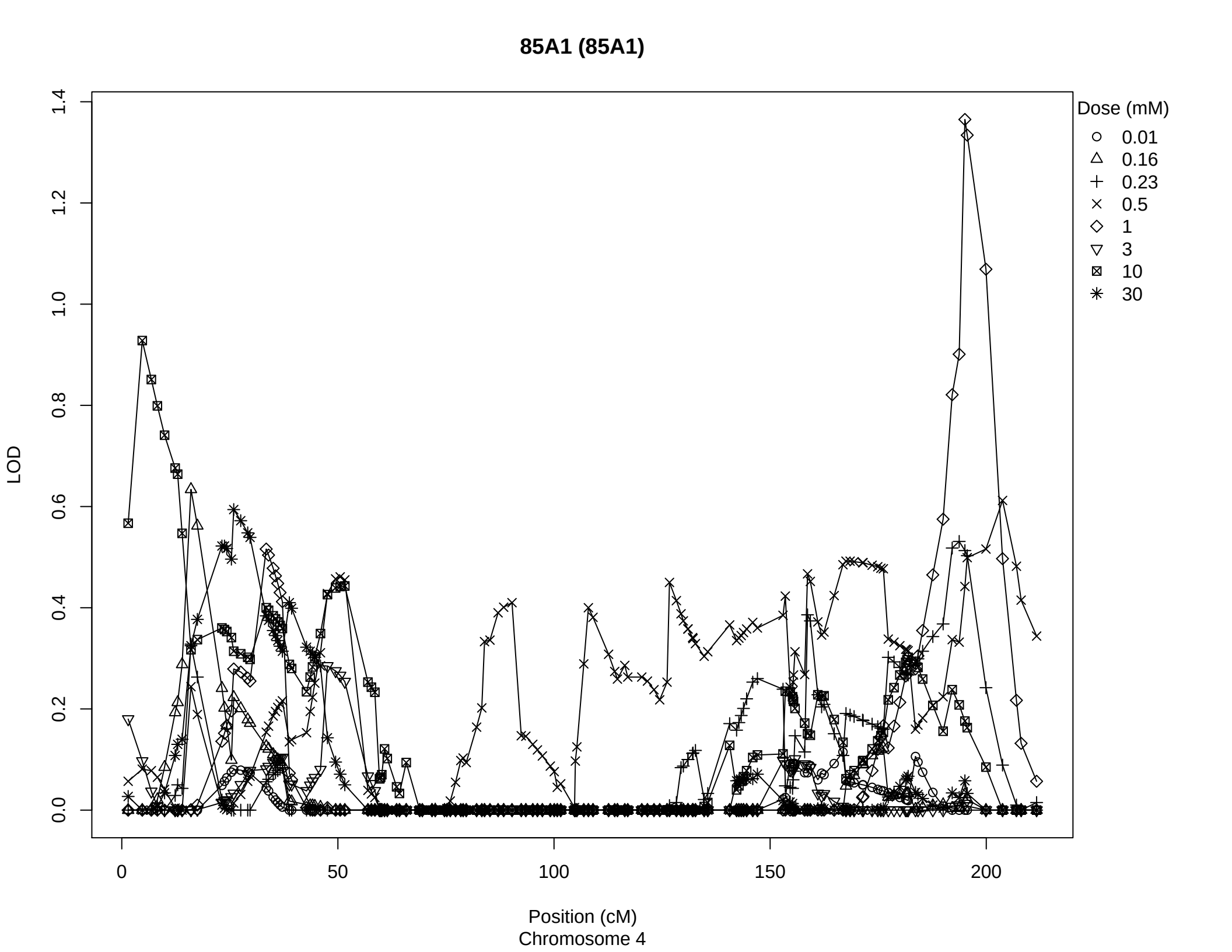

84A1 (84A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
10
20
30
40
50
60
Position (cM)
Chromosome 21
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

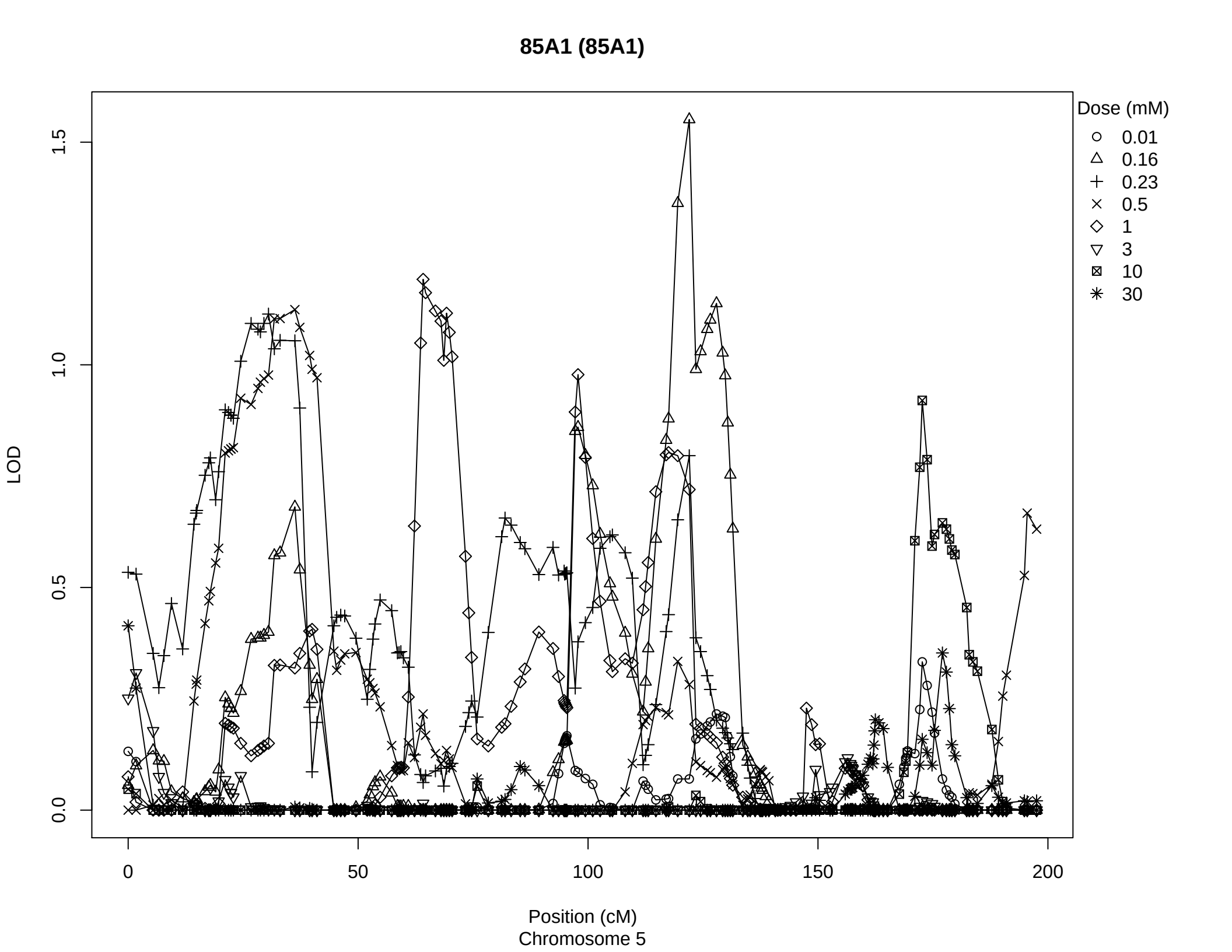

84A1 (84A1)
LOD
0.00
0.02
0.04
0.06
0.08
0.10
0
10
20
30
40
50
60
Position (cM)
Chromosome 22
Dose (mM)
0.001
0.03
0.05
0.1
0.2
0.3
0.5
3

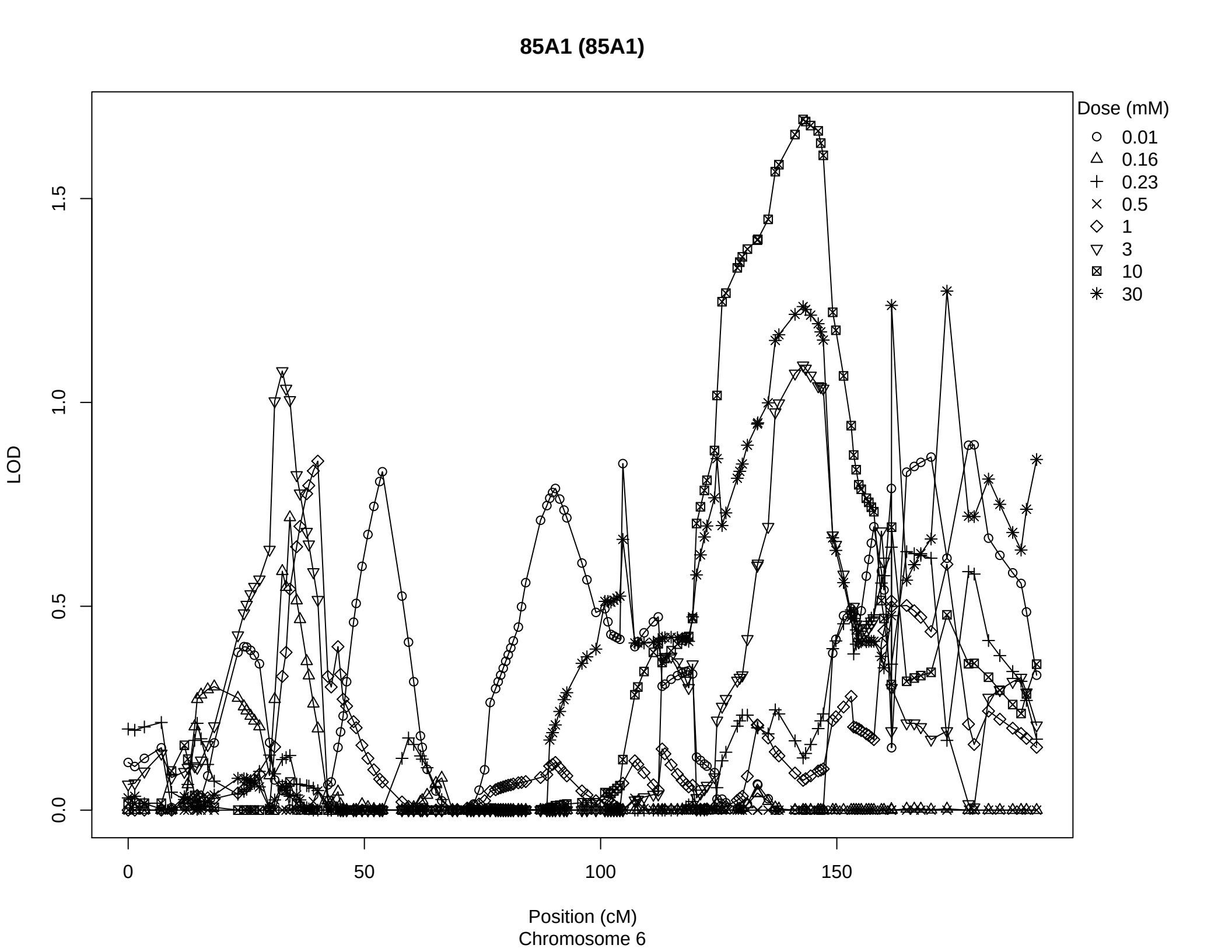

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
200
250
Position (cM)
Chromosome 1
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

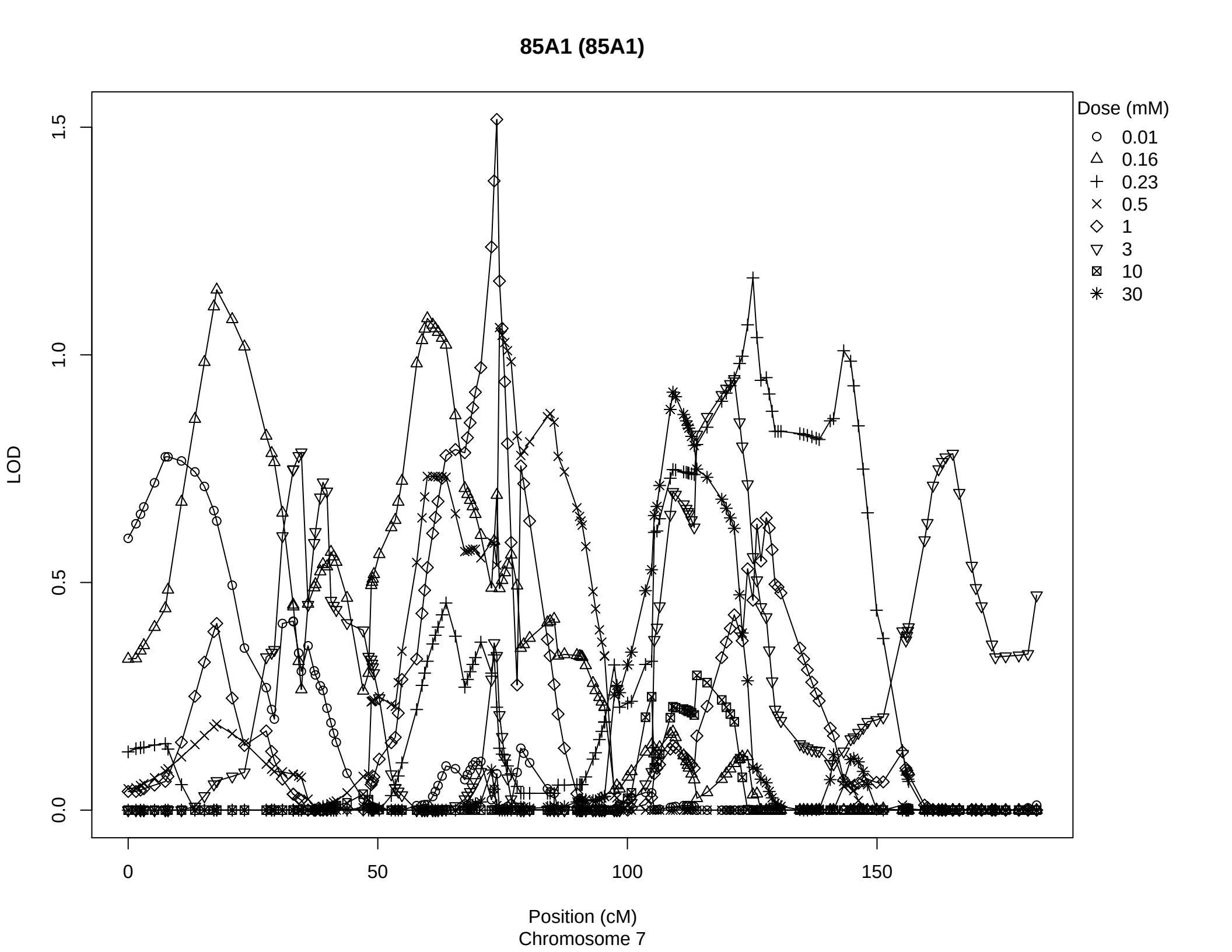

85A1 (85A1)
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
250
Position (cM)
Chromosome 2

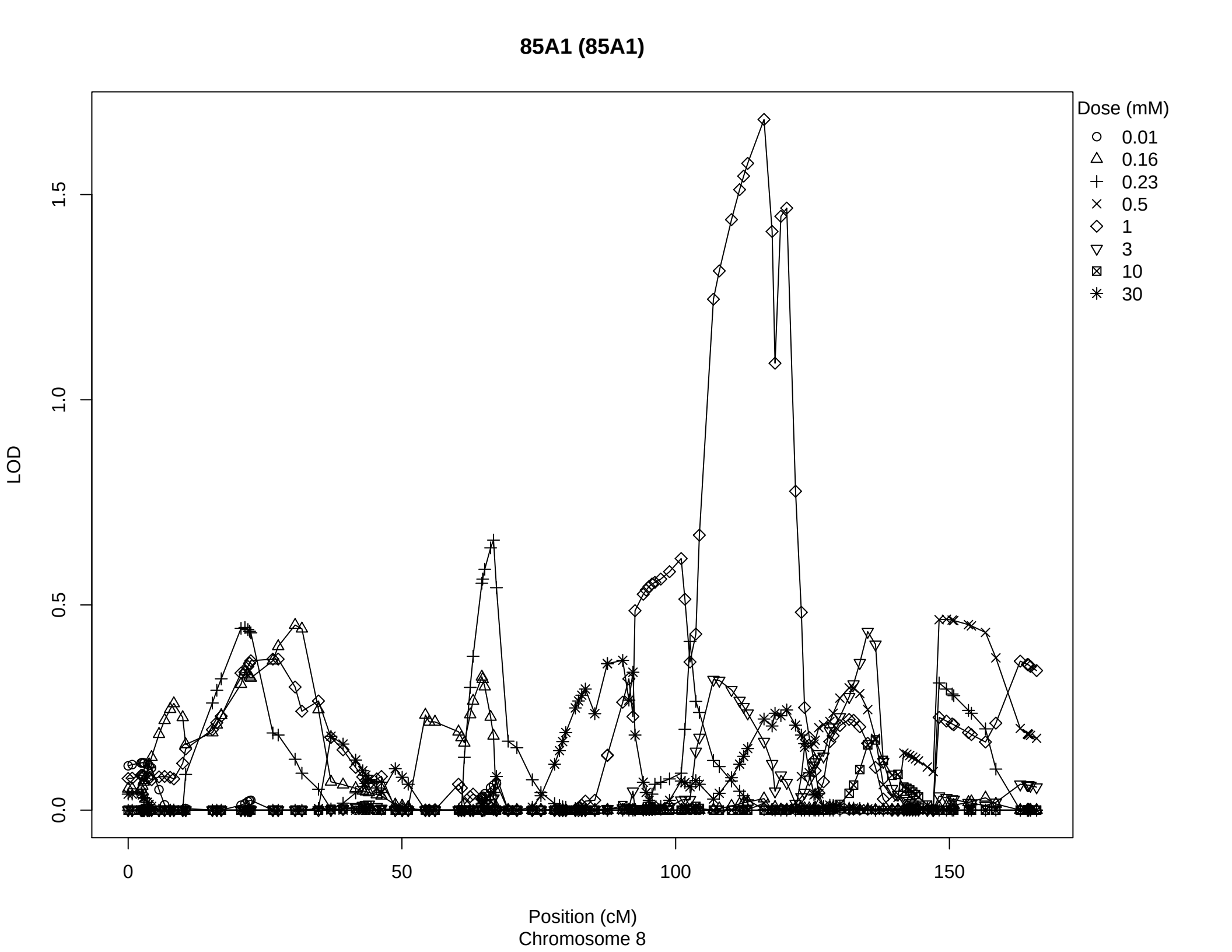

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
200
Position (cM)
Chromosome 3
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

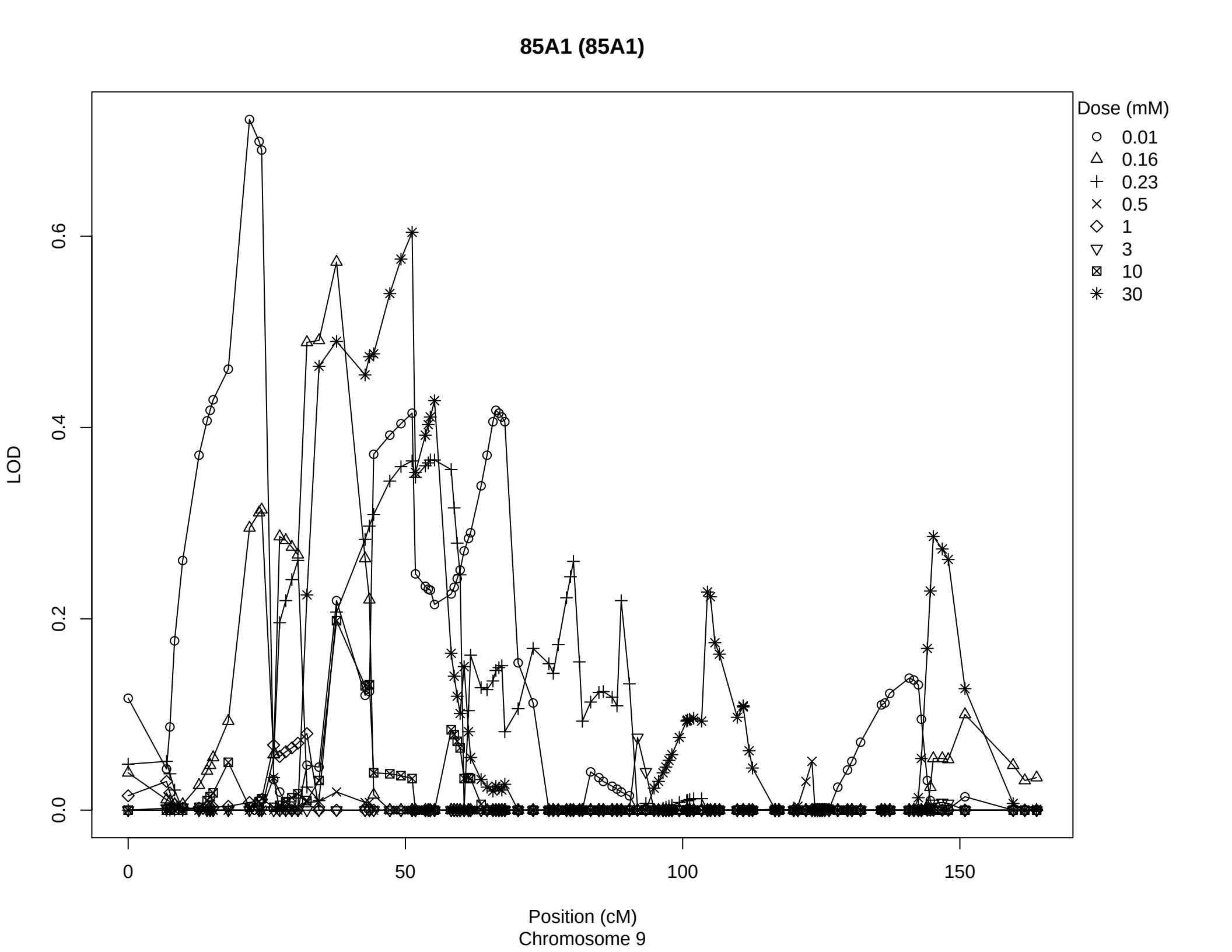

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
50
100
150
200
Position (cM)
Chromosome 4
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

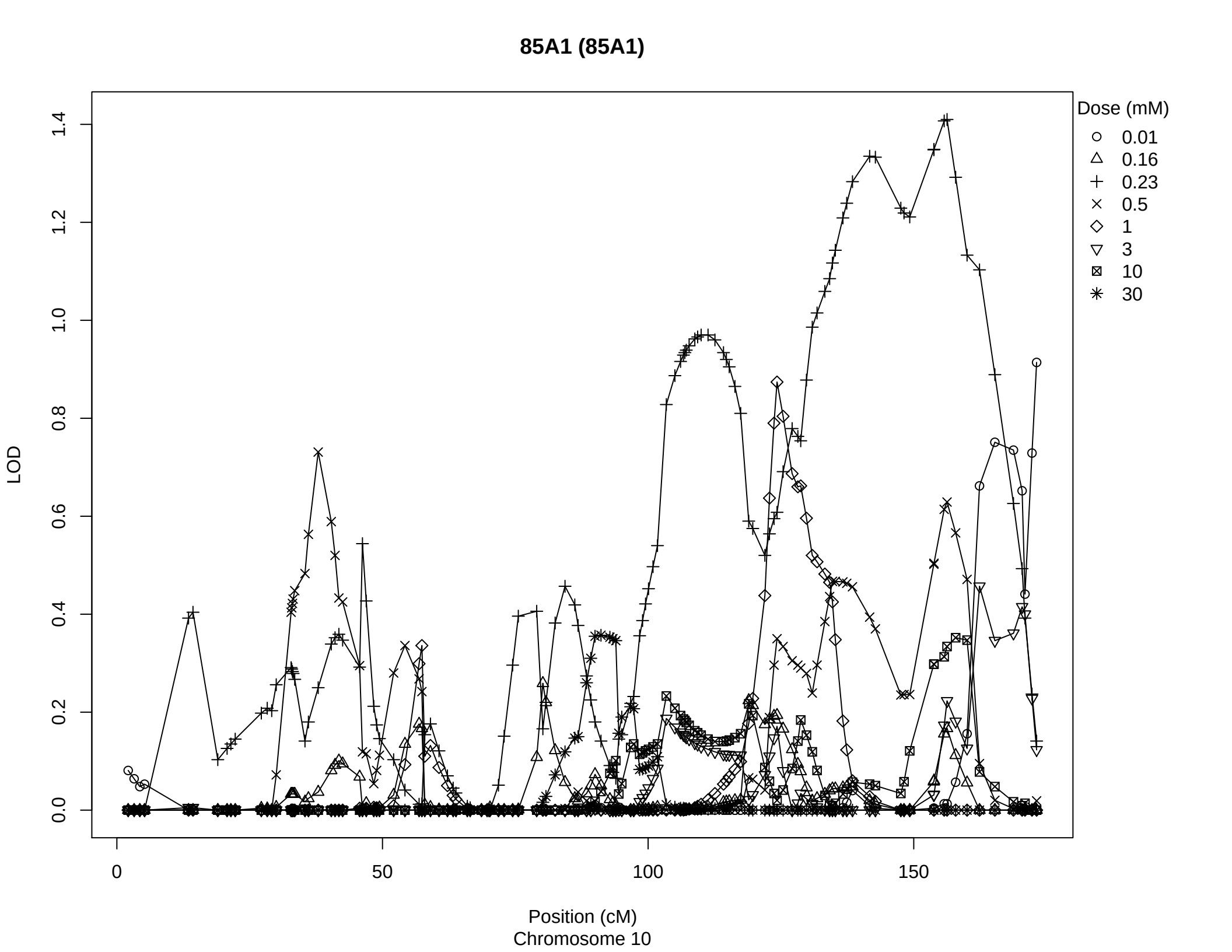

85A1 (85A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
200
Position (cM)
Chromosome 5
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

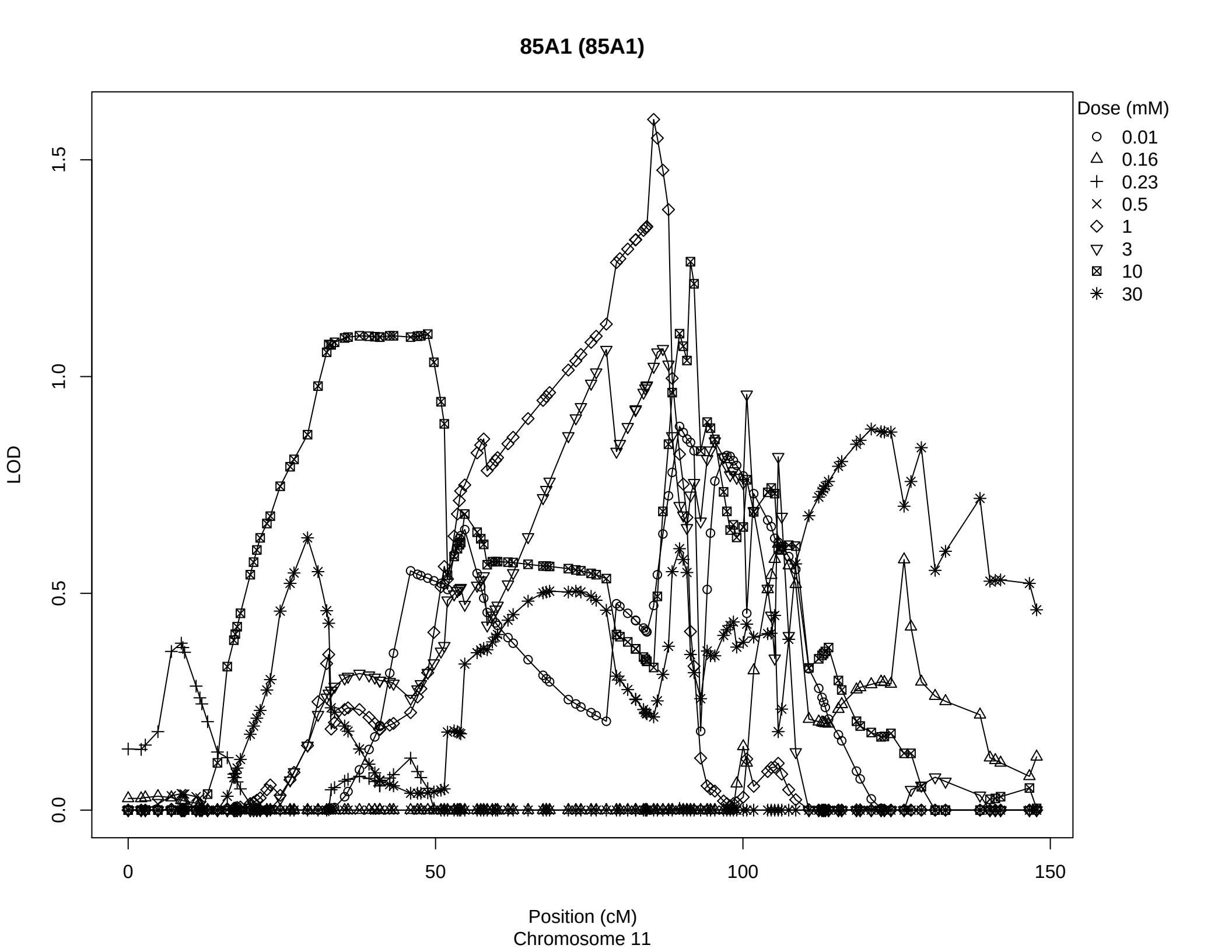

85A1 (85A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 6
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

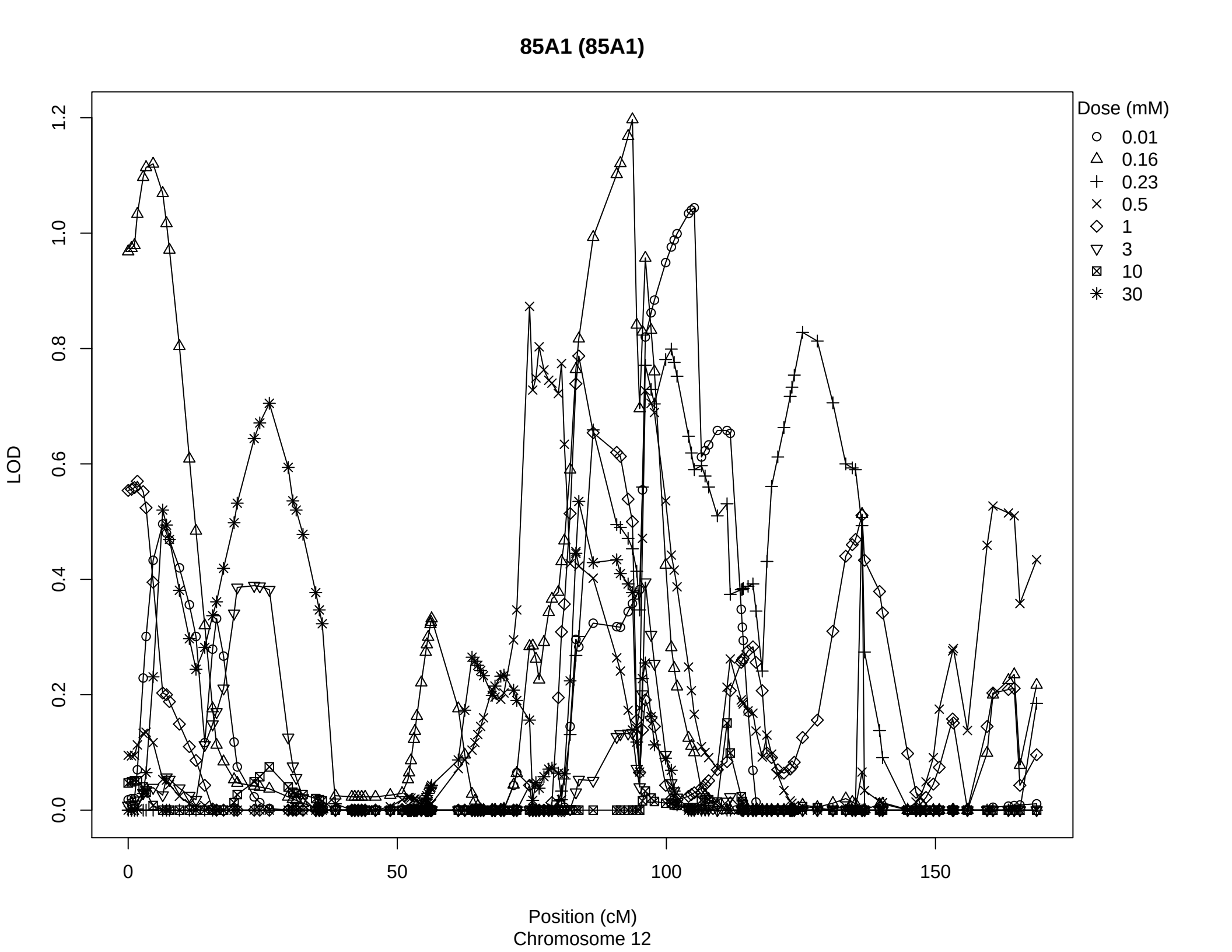

85A1 (85A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 7
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

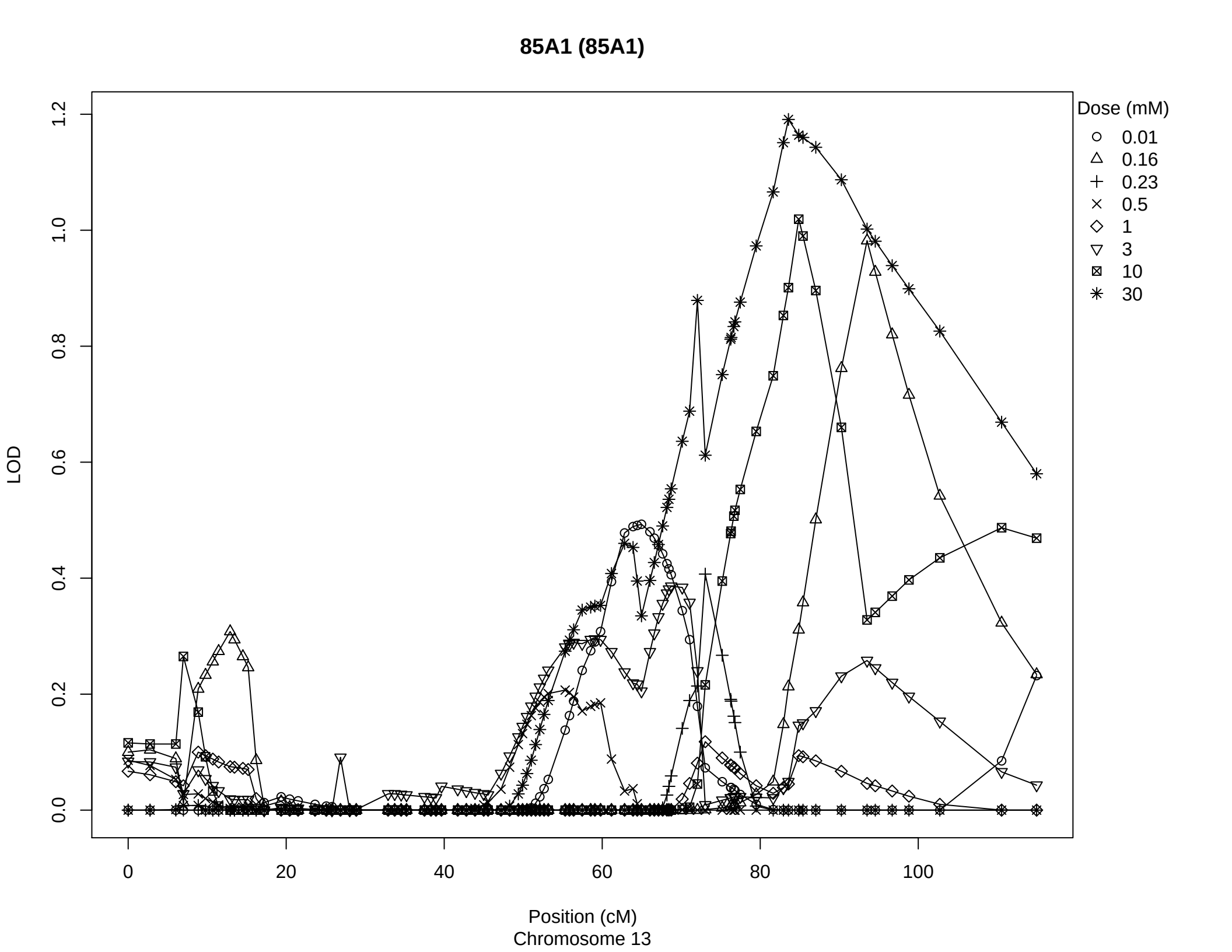

85A1 (85A1)
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 8

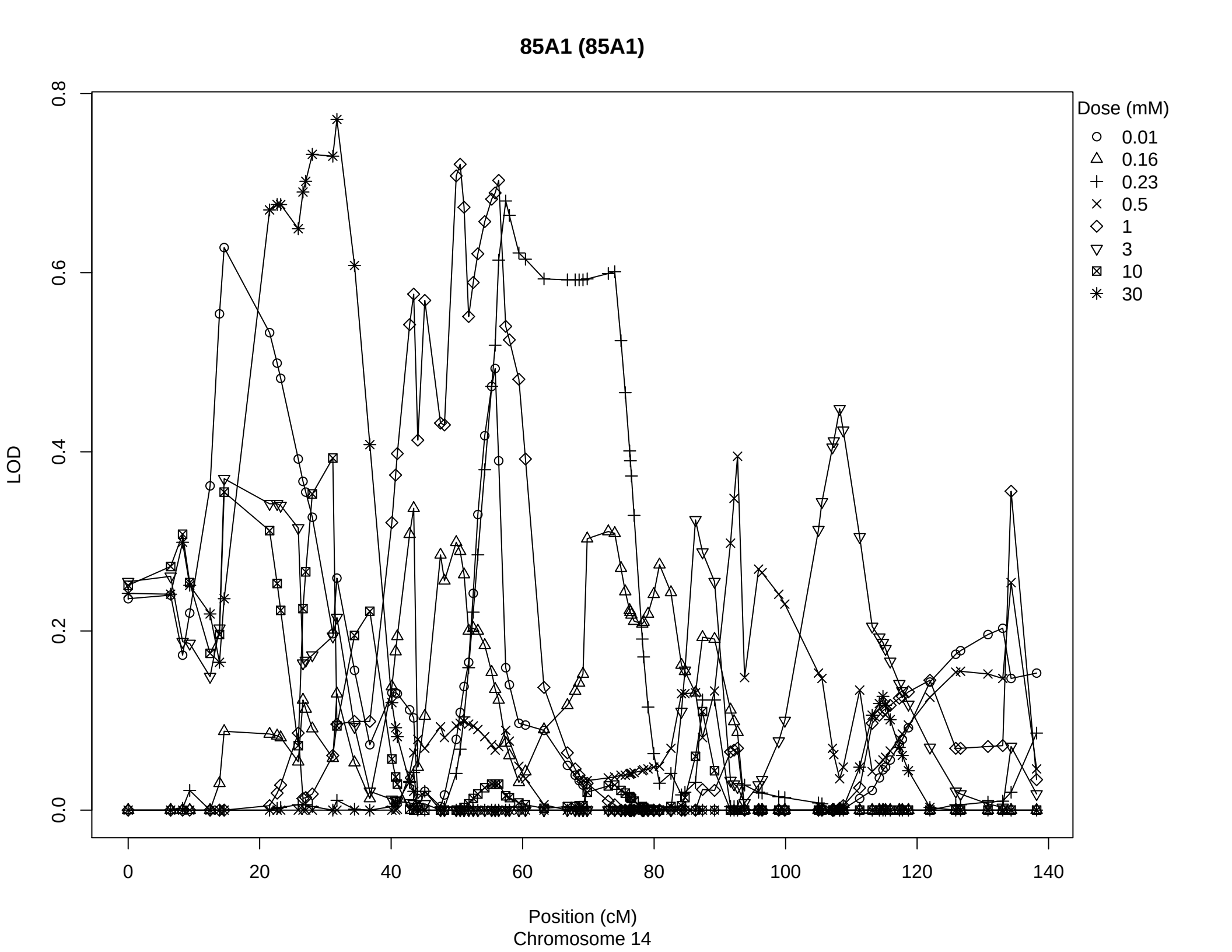

85A1 (85A1)
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30
LOD
0.0
0.2
0.4
0.6
0
50
100
150
Position (cM)
Chromosome 9

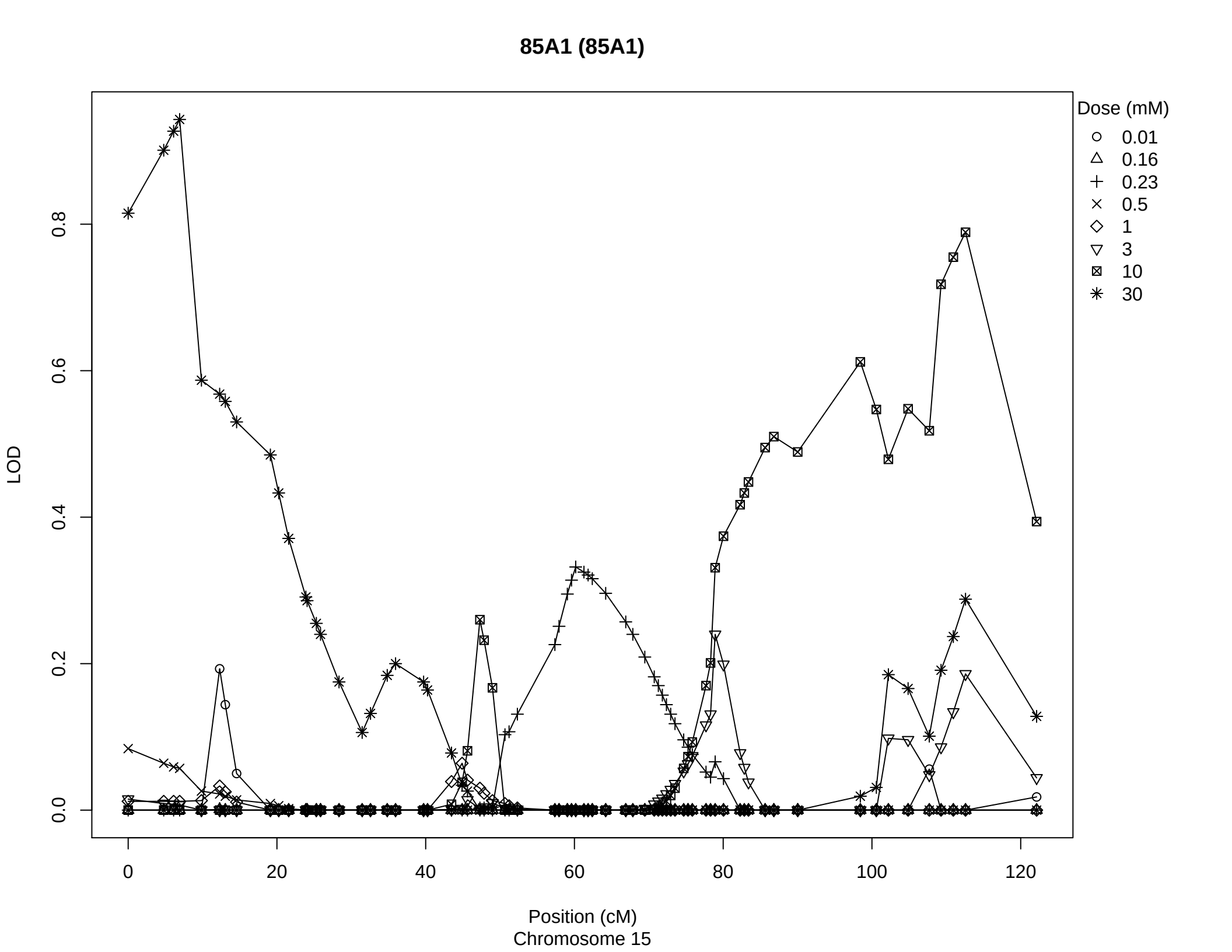

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
50
100
150
Position (cM)
Chromosome 10
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

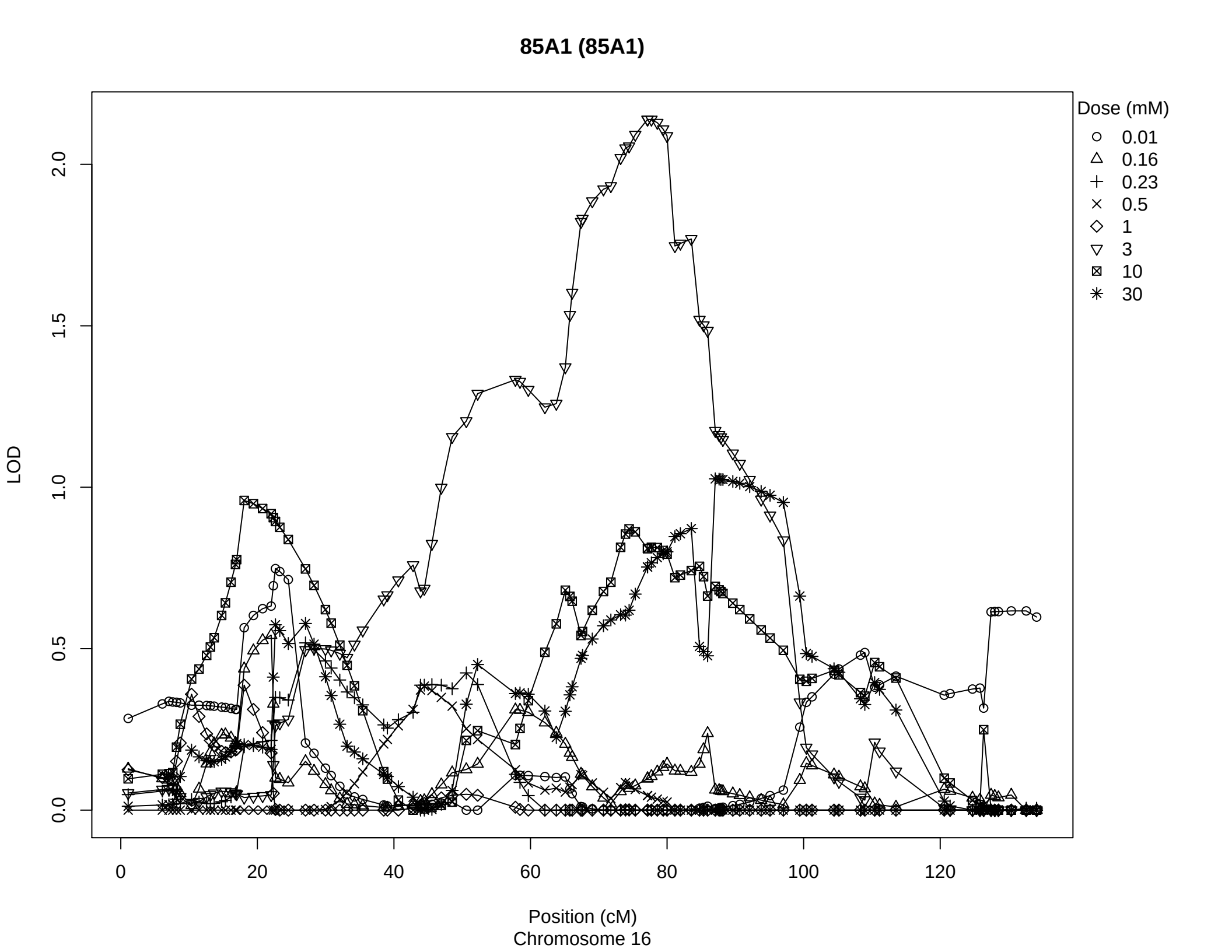

85A1 (85A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 11
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

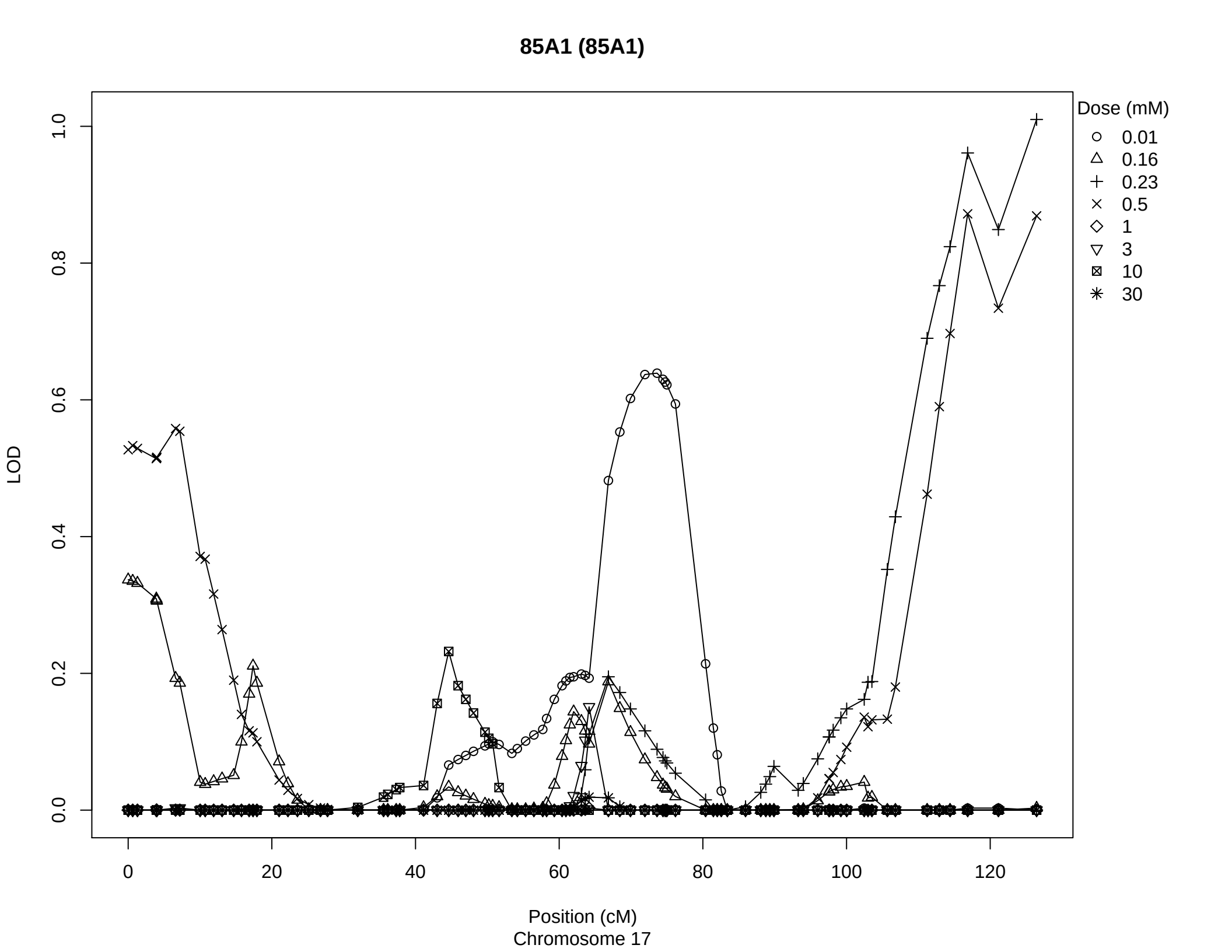

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
Position (cM)
Chromosome 12
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

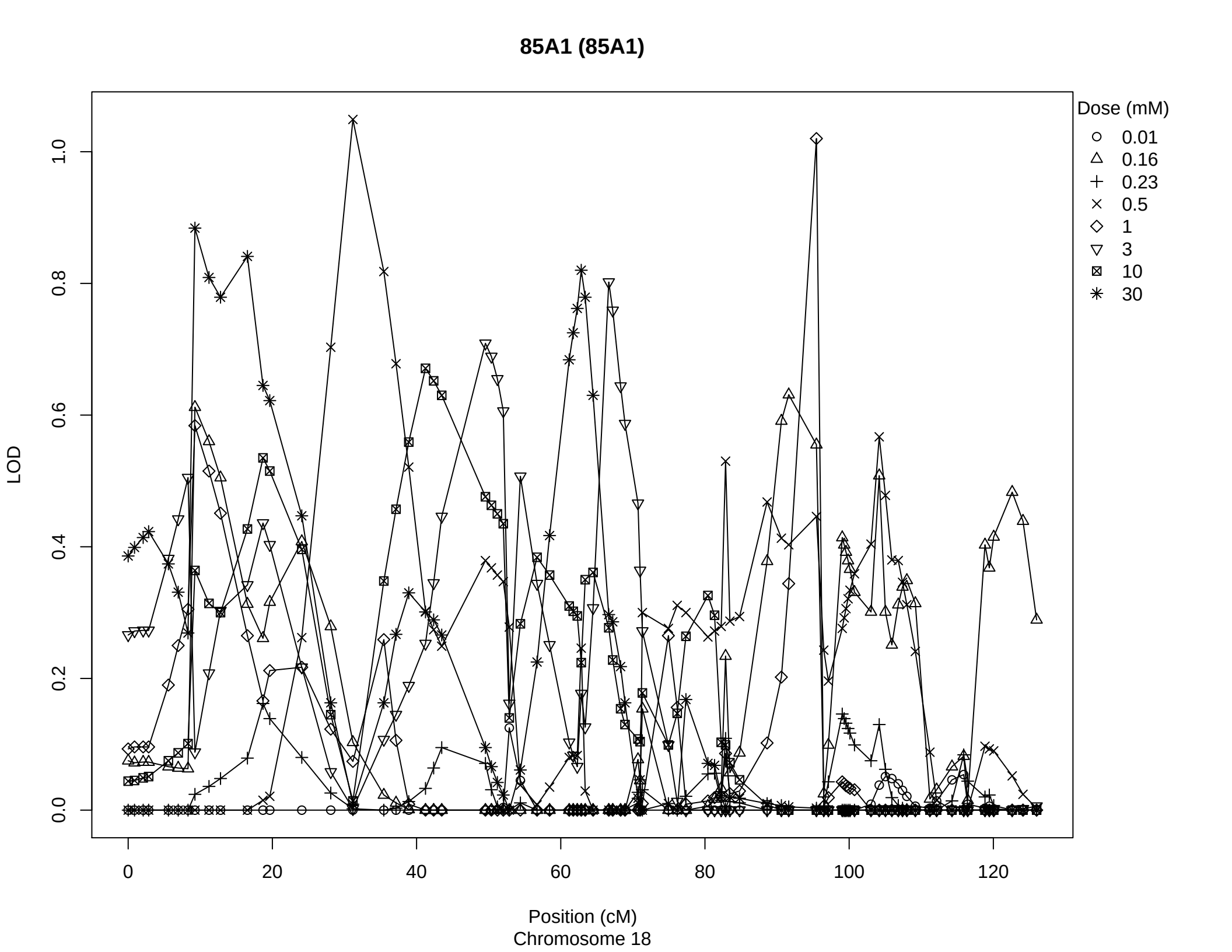

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
20
40
60
80
100
Position (cM)
Chromosome 13
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

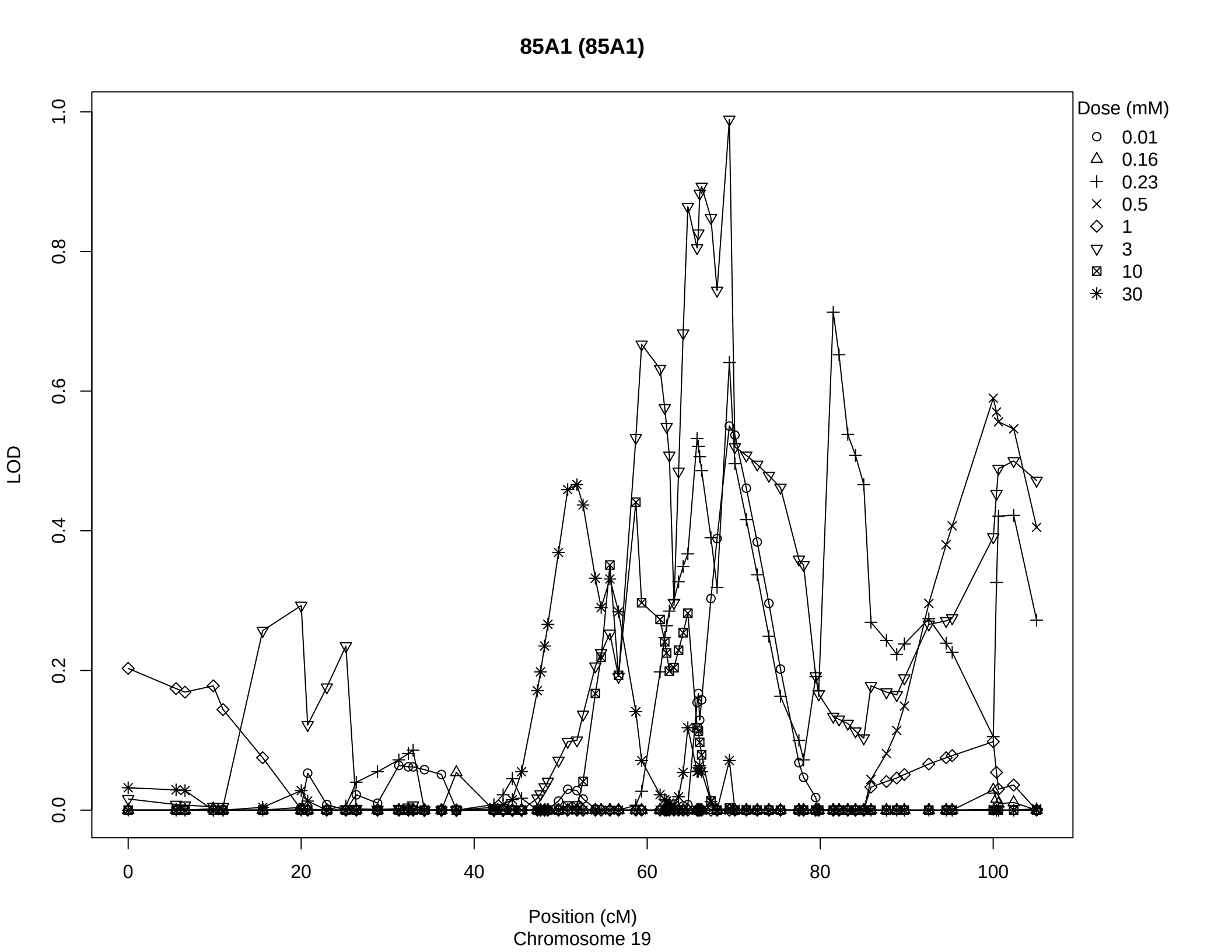

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
120
140
Position (cM)
Chromosome 14
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

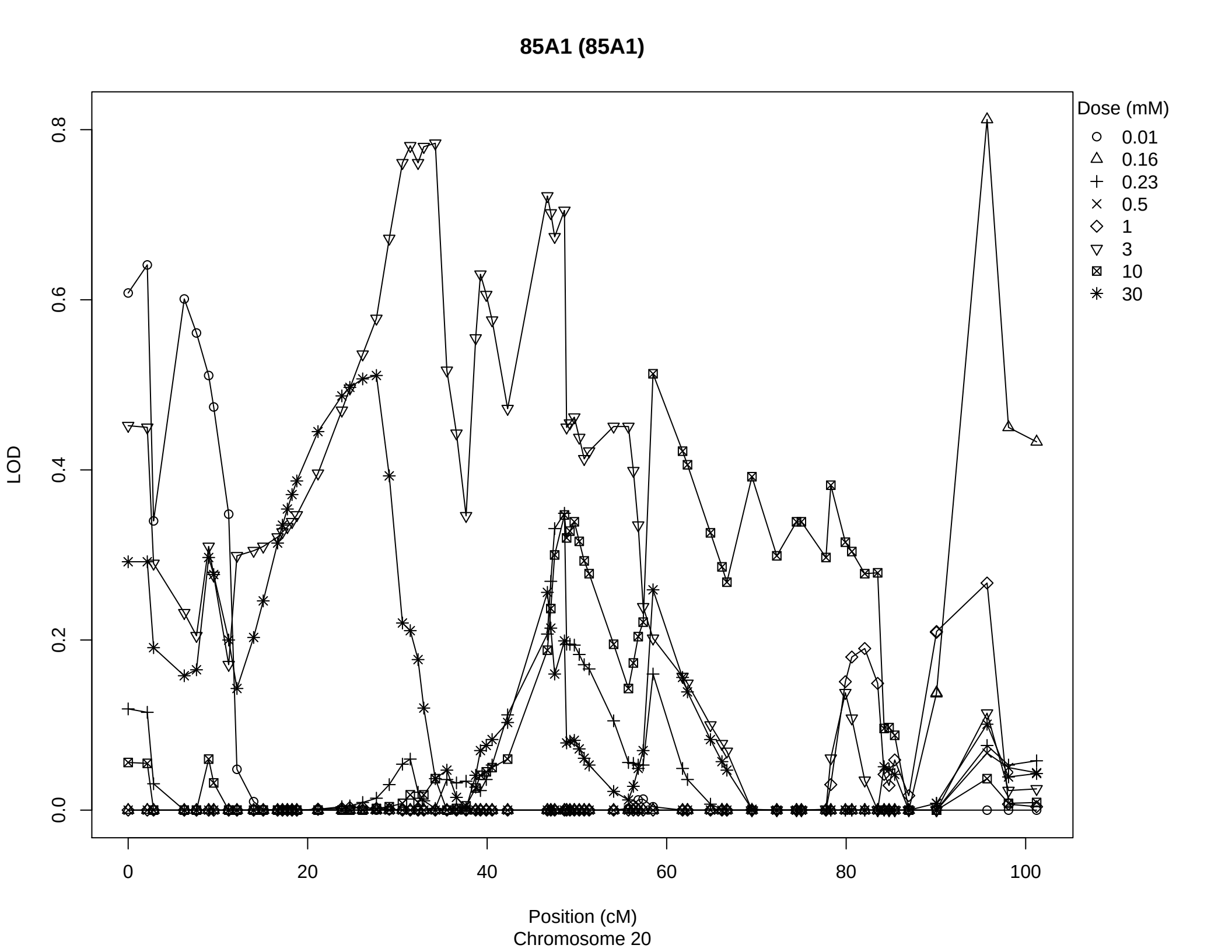

85A1 (85A1)
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
120
Position (cM)
Chromosome 15

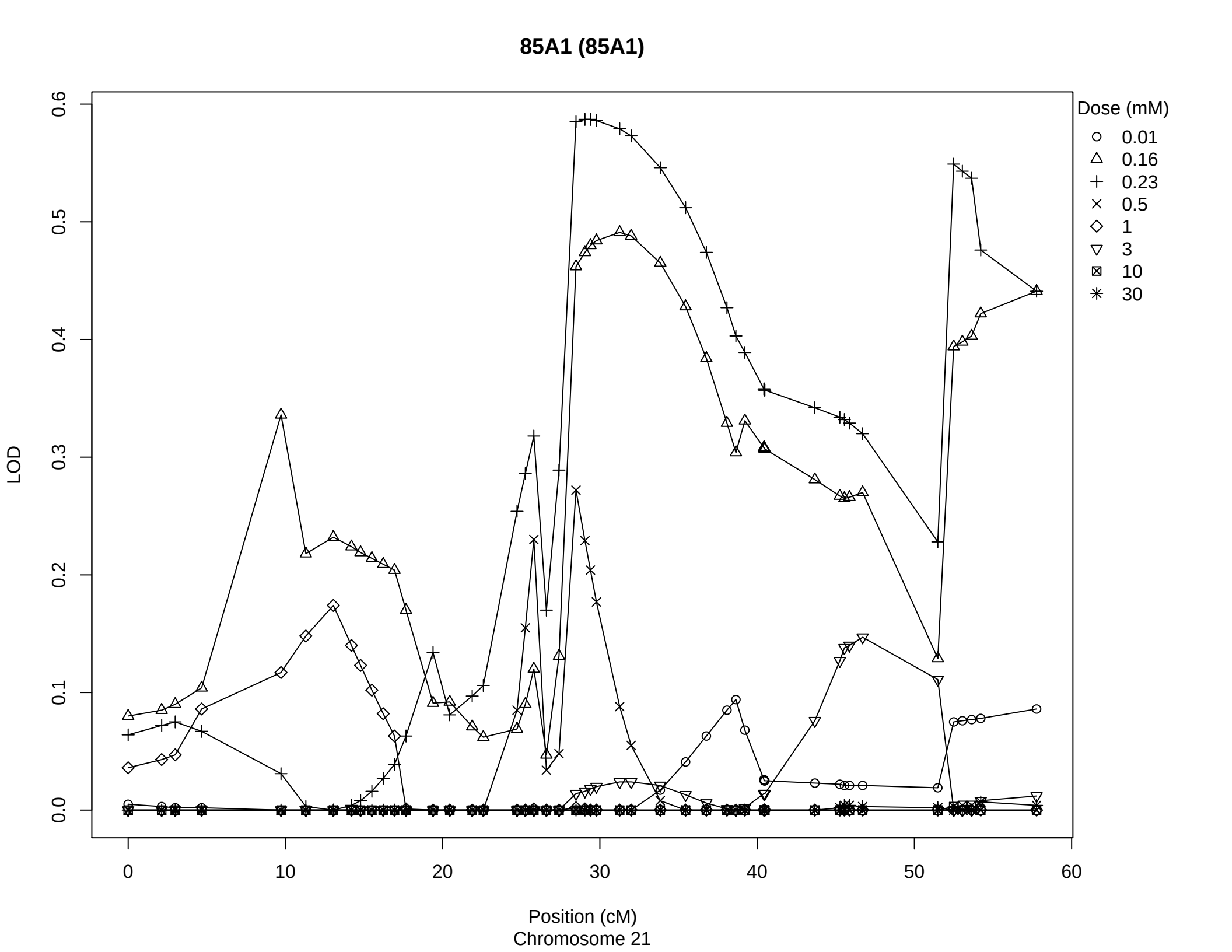

85A1 (85A1)
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30
LOD
0.0
0.5
1.0
1.5
2.0
0
20
40
60
80
100
120
Position (cM)
Chromosome 16

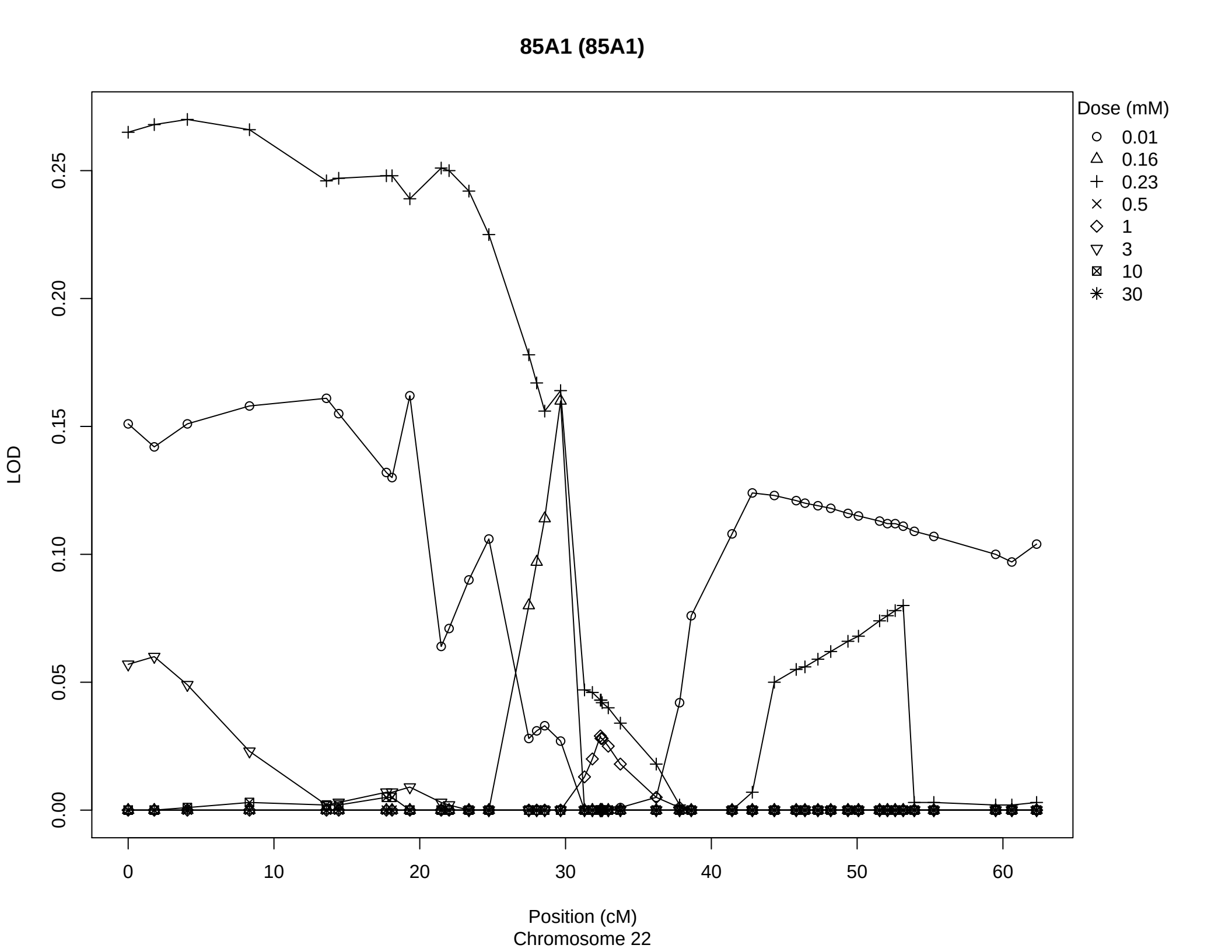

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
120
Position (cM)
Chromosome 17
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

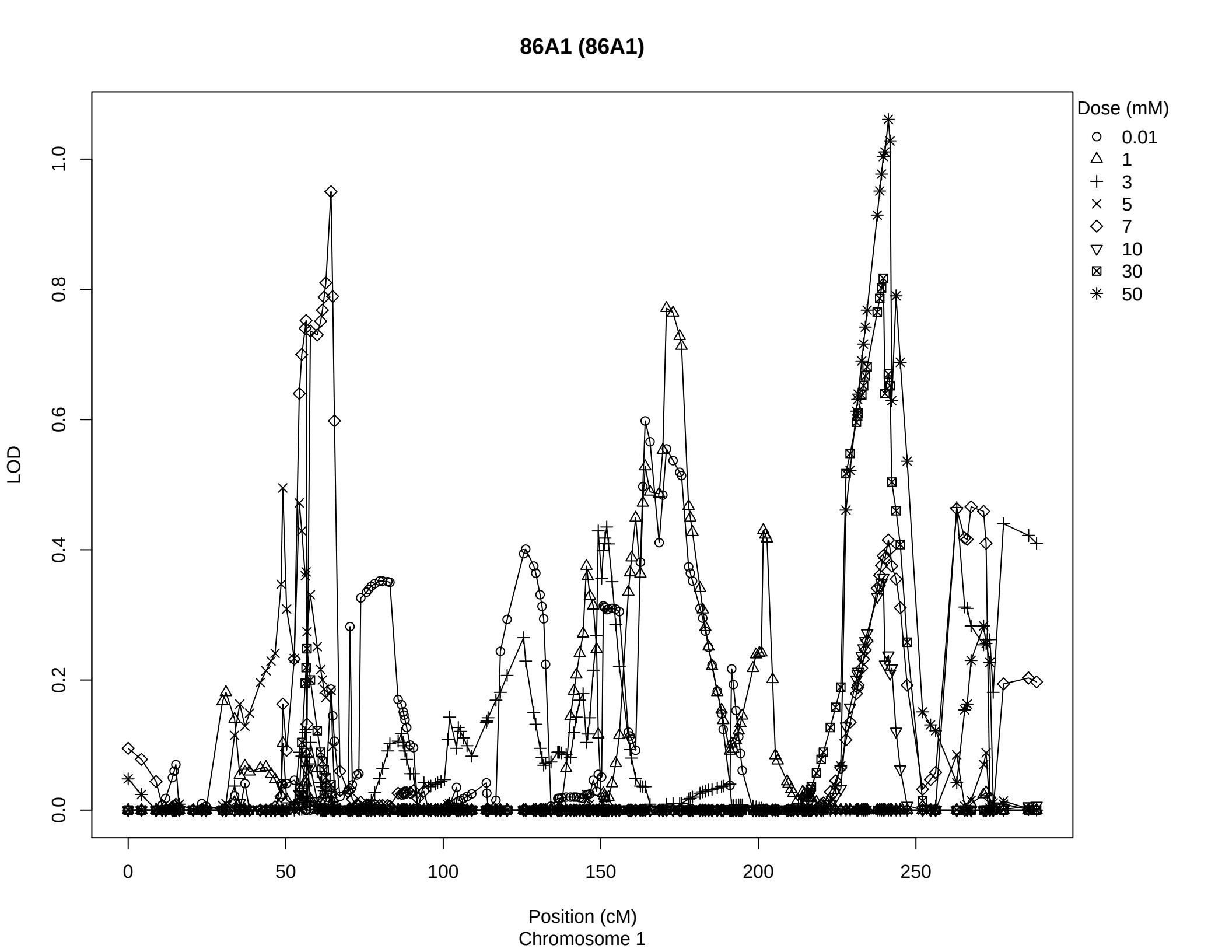

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
120
Position (cM)
Chromosome 18
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

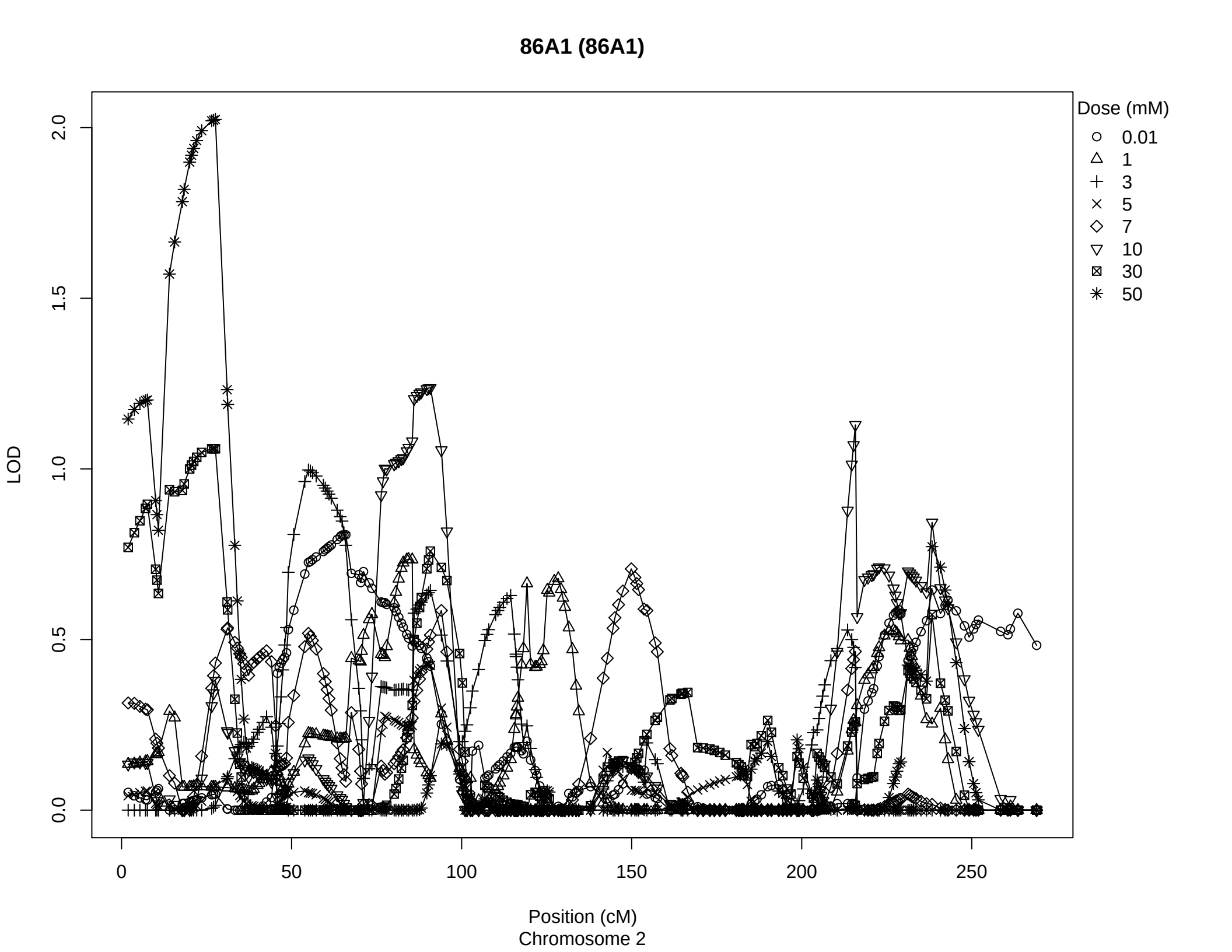

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
Position (cM)
Chromosome 19
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

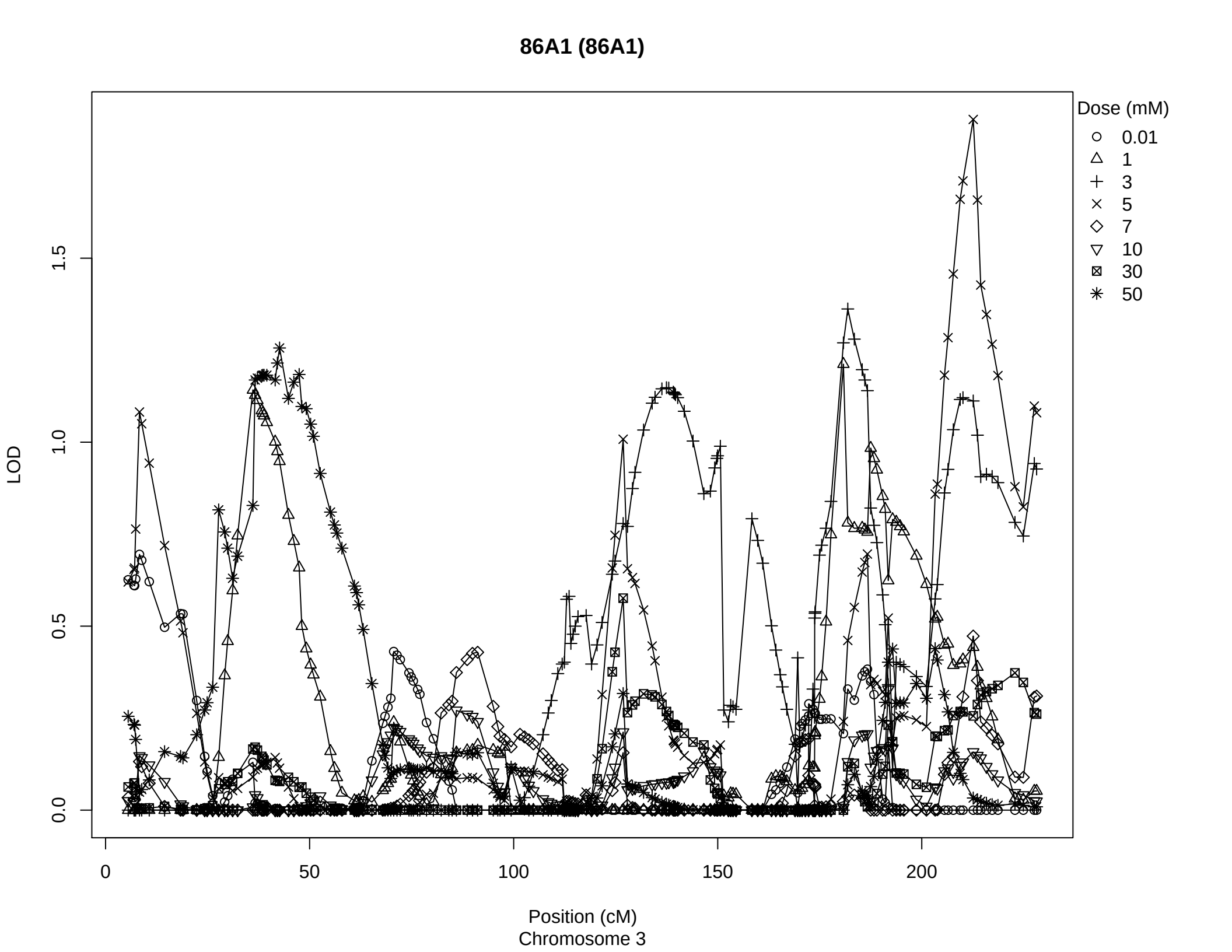

85A1 (85A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
Position (cM)
Chromosome 20
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

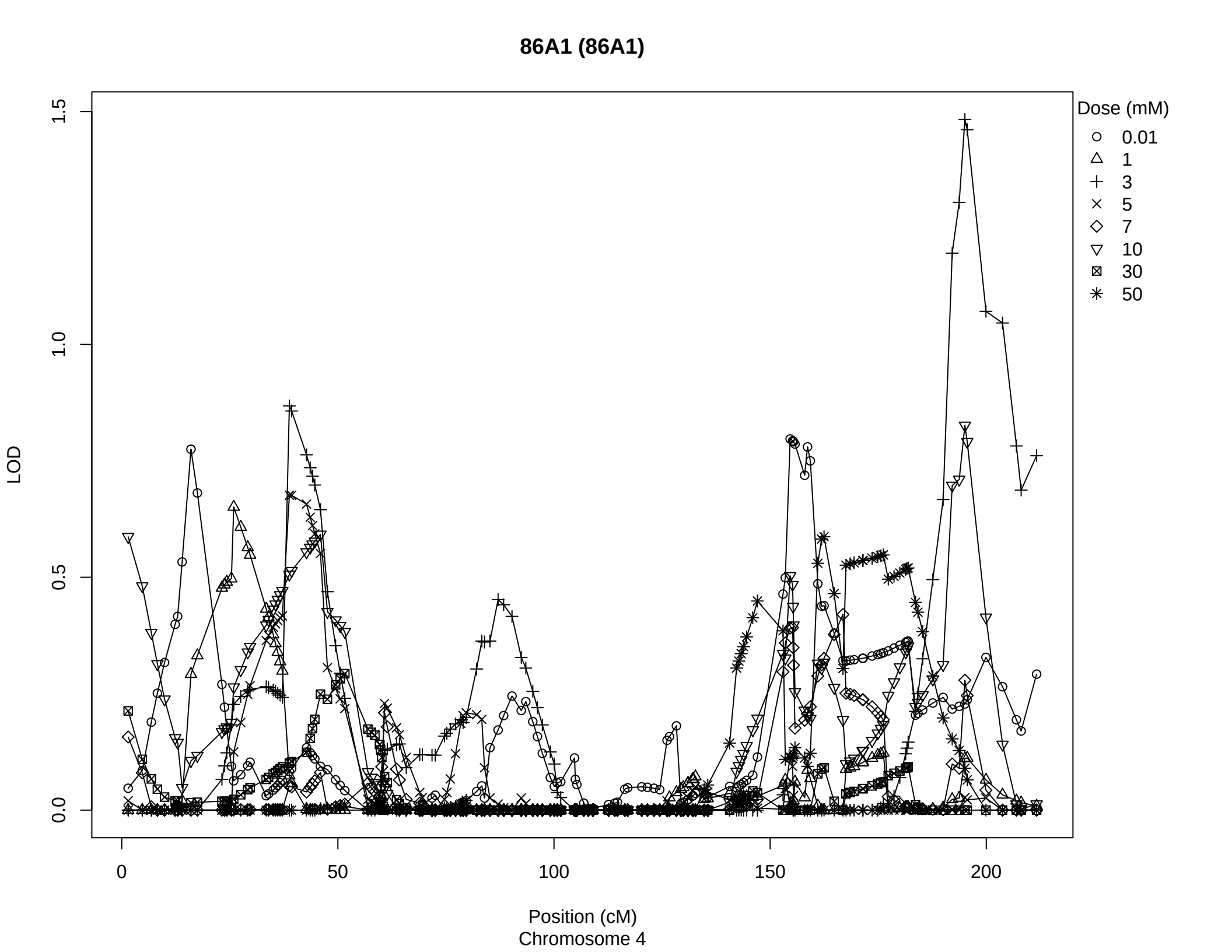

85A1 (85A1)
LOD
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0
10
20
30
40
50
60
Position (cM)
Chromosome 21
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

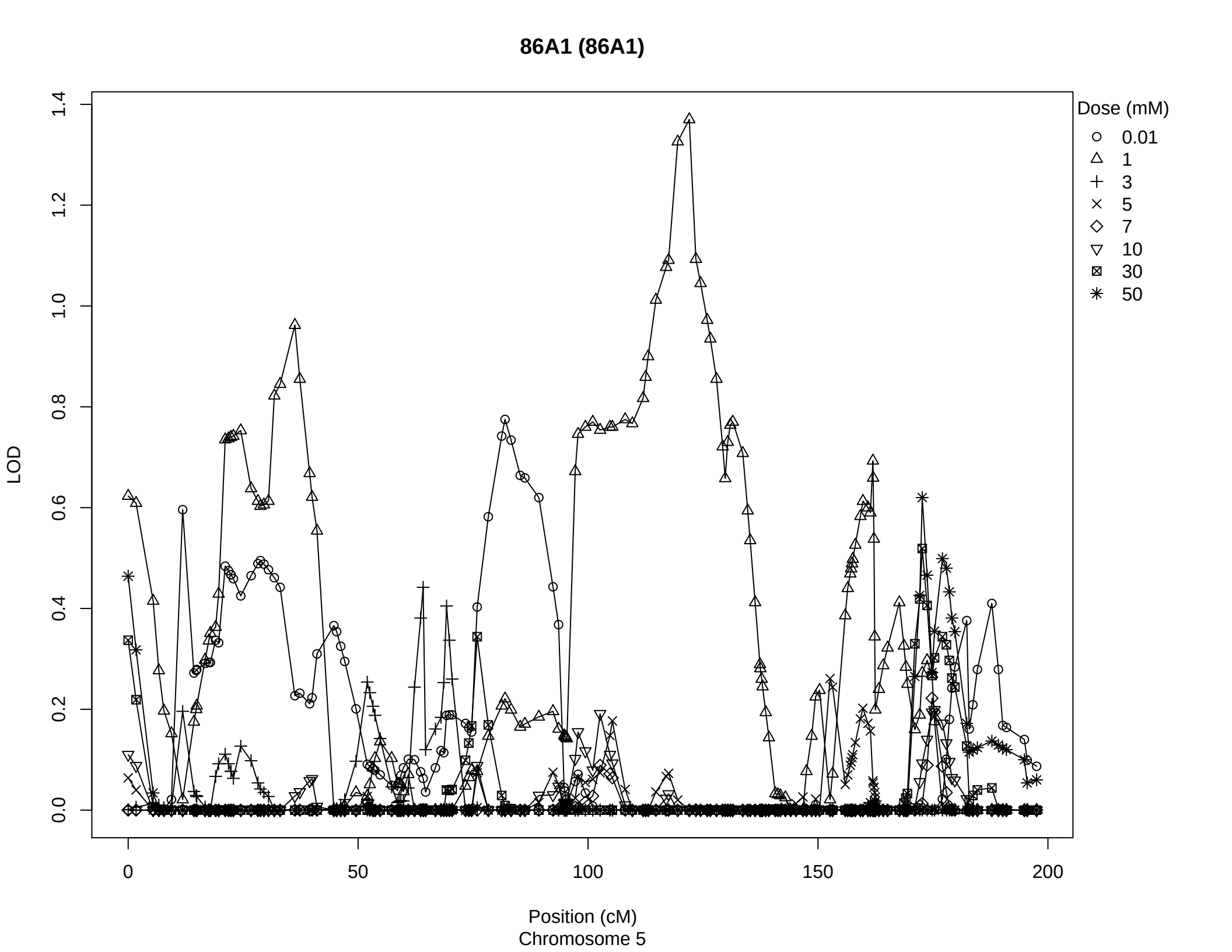

85A1 (85A1)
LOD
0.00
0.05
0.10
0.15
0.20
0.25
0
10
20
30
40
50
60
Position (cM)
Chromosome 22
Dose (mM)
0.01
0.16
0.23
0.5
1
3
10
30

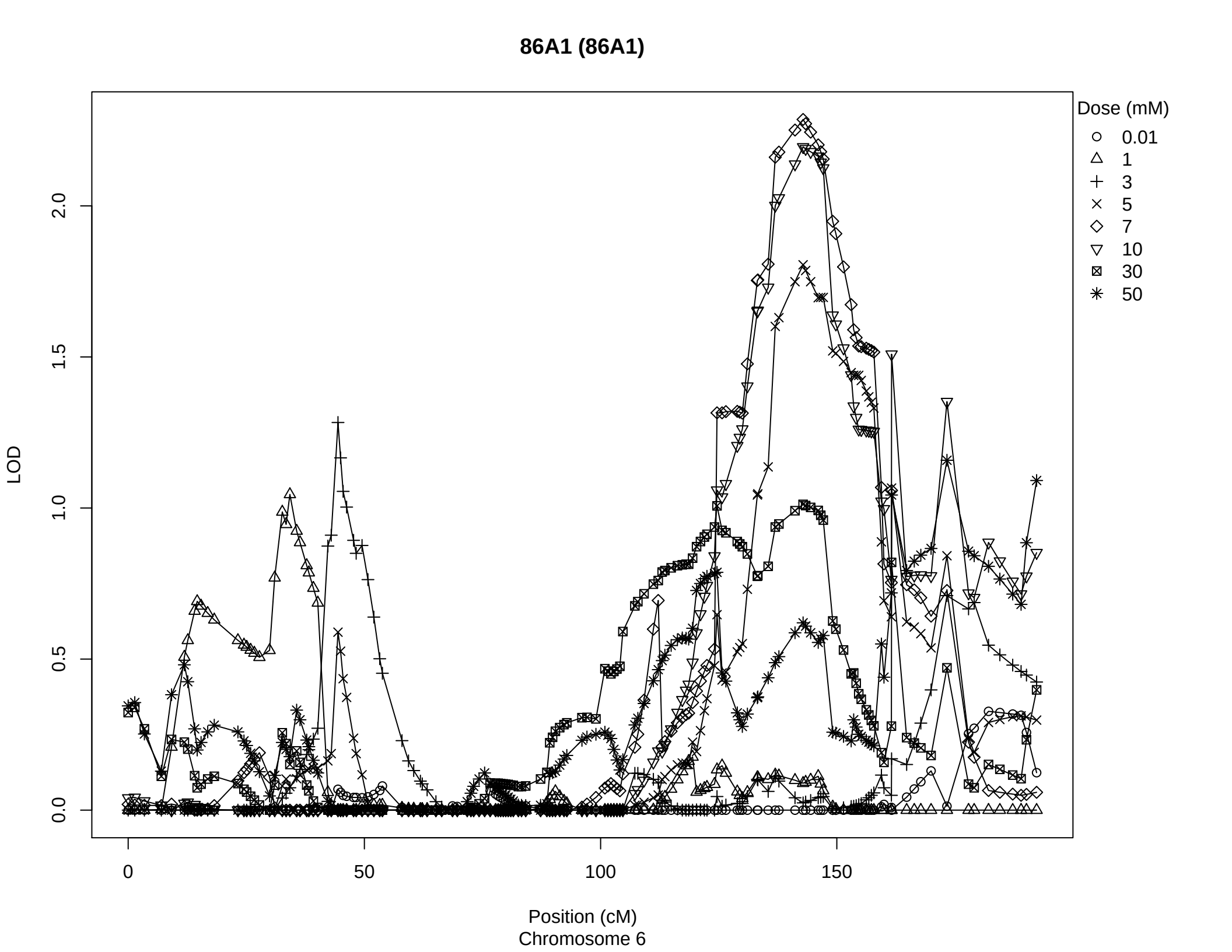

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
250
Position (cM)
Chromosome 1
Dose (mM)
0.01
1
3
5
7
10
30
50

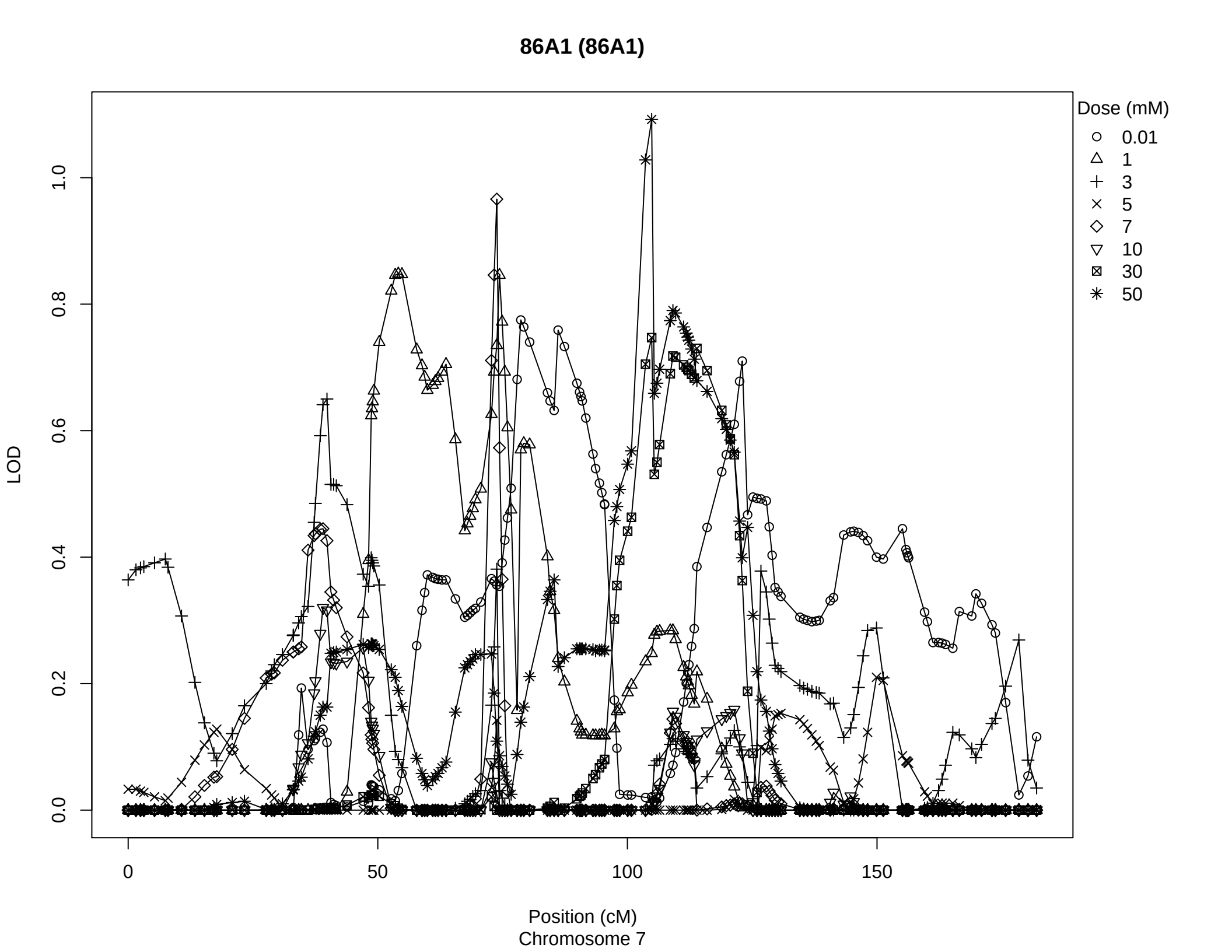

86A1 (86A1)
LOD
0.0
0.5
1.0
1.5
2.0
0
50
100
150
200
250
Position (cM)
Chromosome 2
Dose (mM)
0.01
1
3
5
7
10
30
50

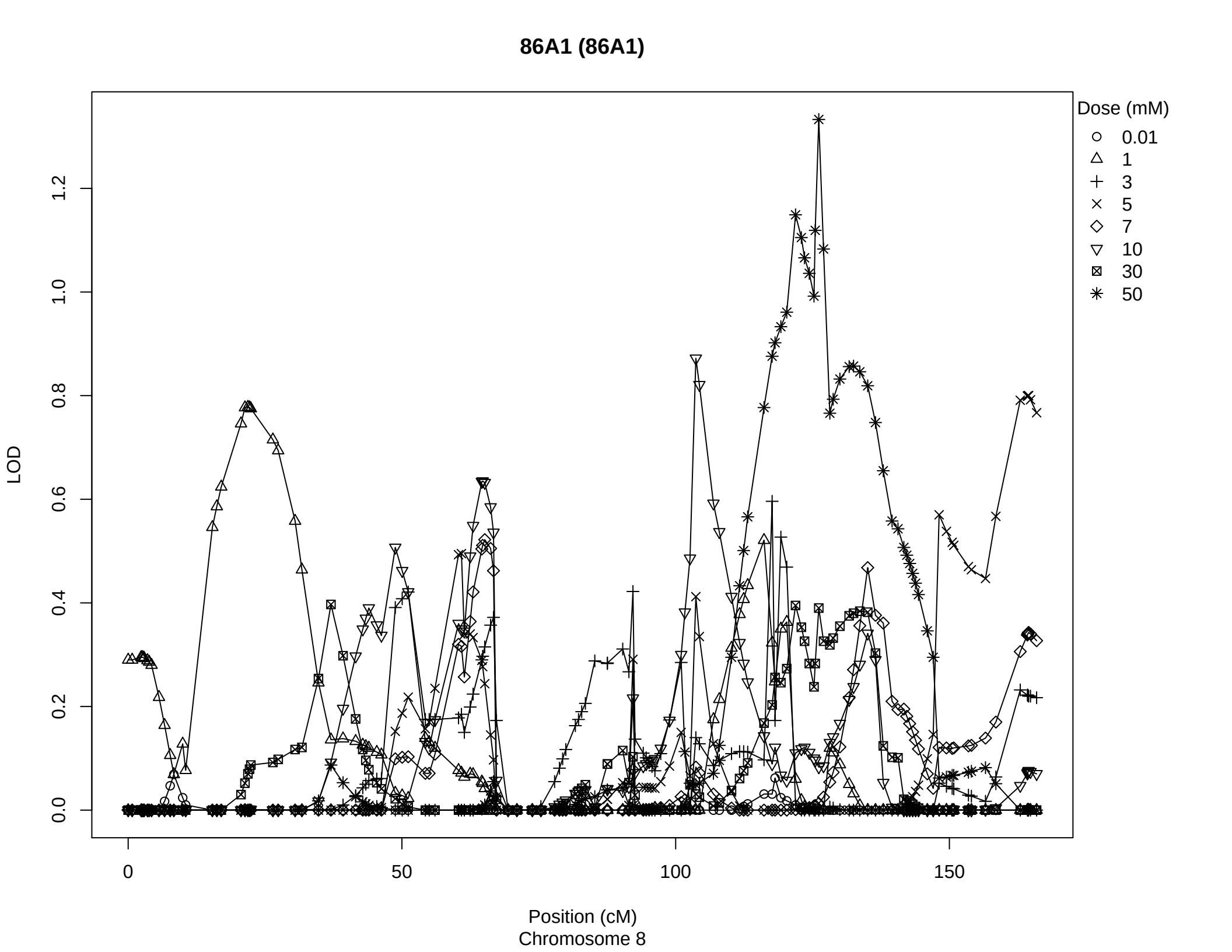

86A1 (86A1)
Dose (mM)
0.01
1
3
5
7
10
30
50
LOD
0.0
0.5
1.0
1.5
0
50
100
150
200
Position (cM)
Chromosome 3

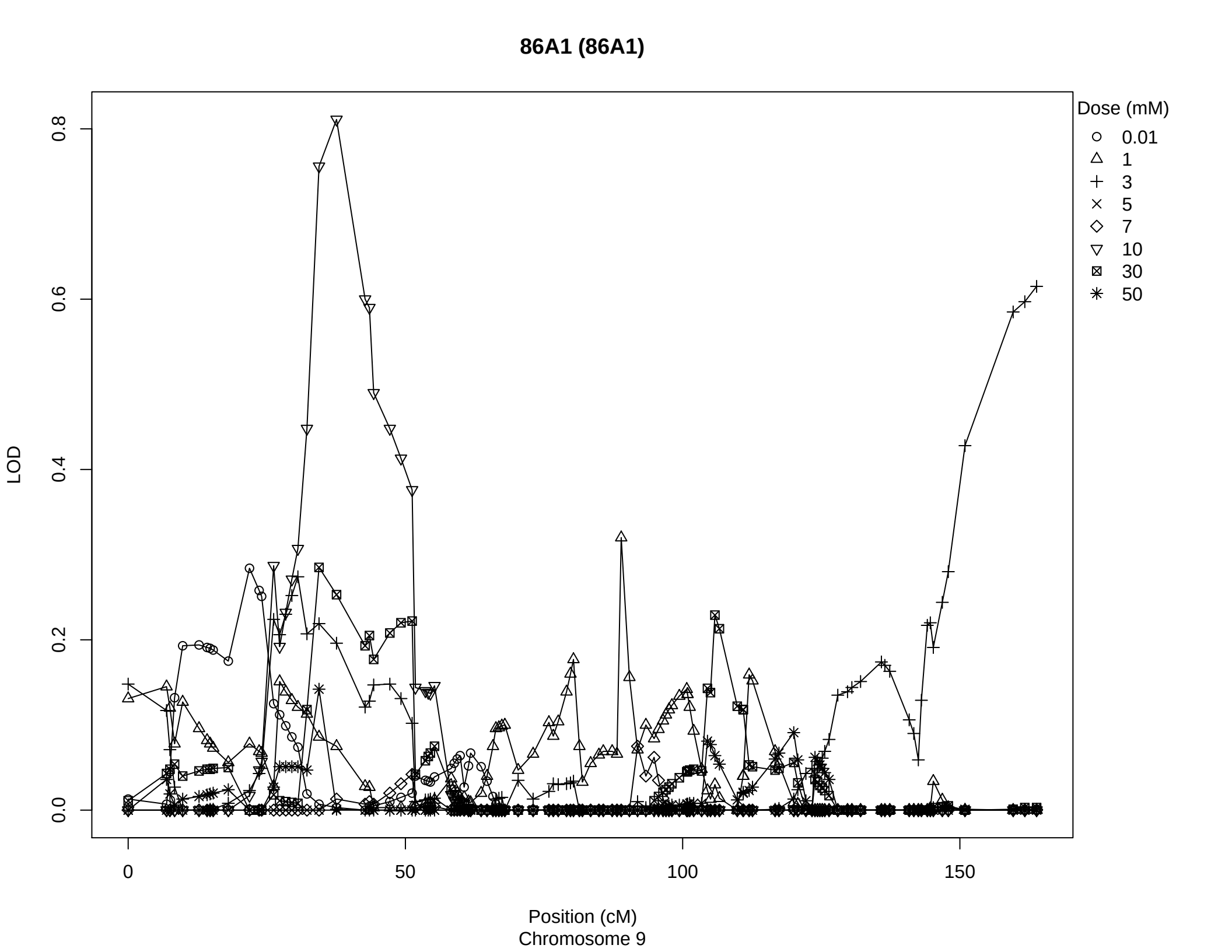

86A1 (86A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
200
Position (cM)
Chromosome 4
Dose (mM)
0.01
1
3
5
7
10
30
50

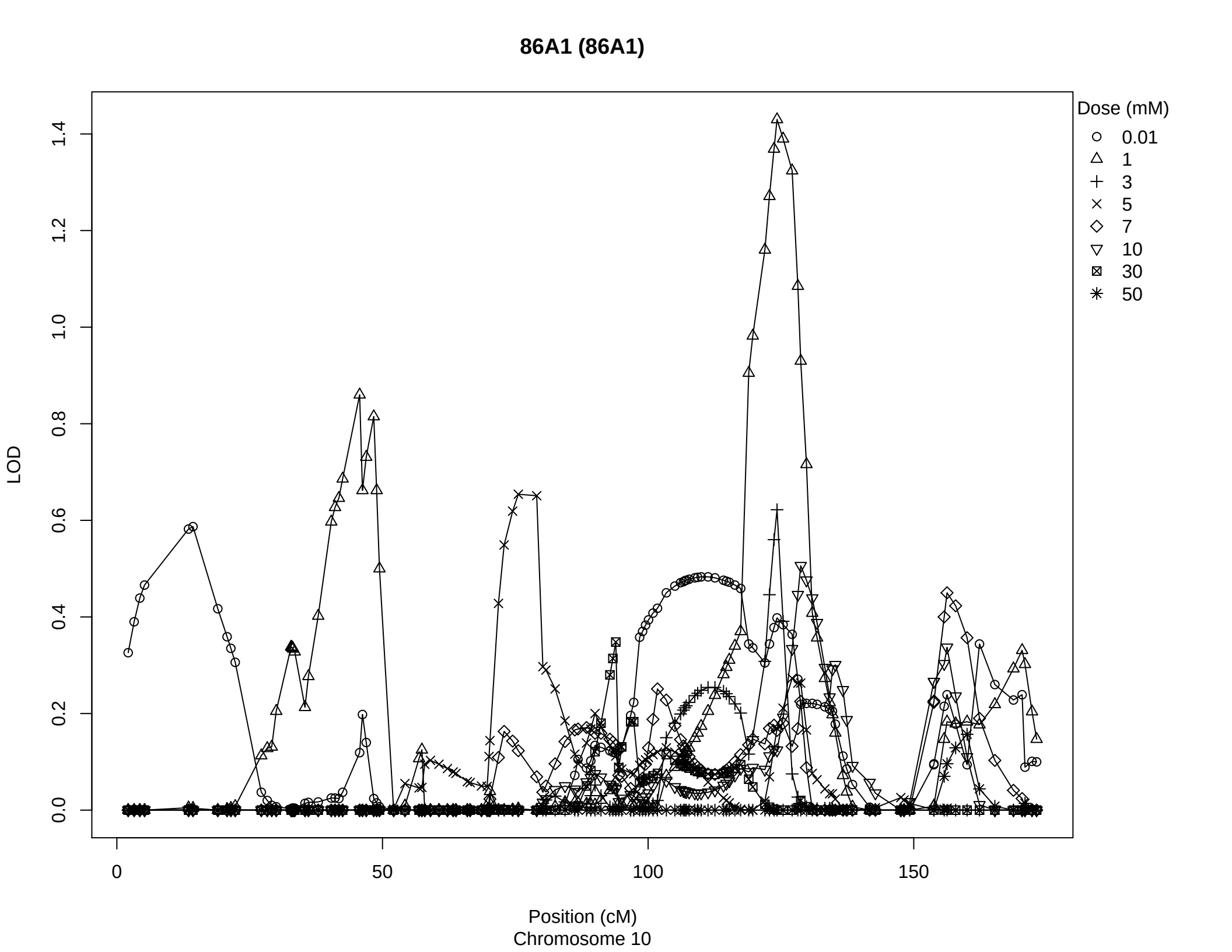

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
50
100
150
200
Position (cM)
Chromosome 5
Dose (mM)
0.01
1
3
5
7
10
30
50

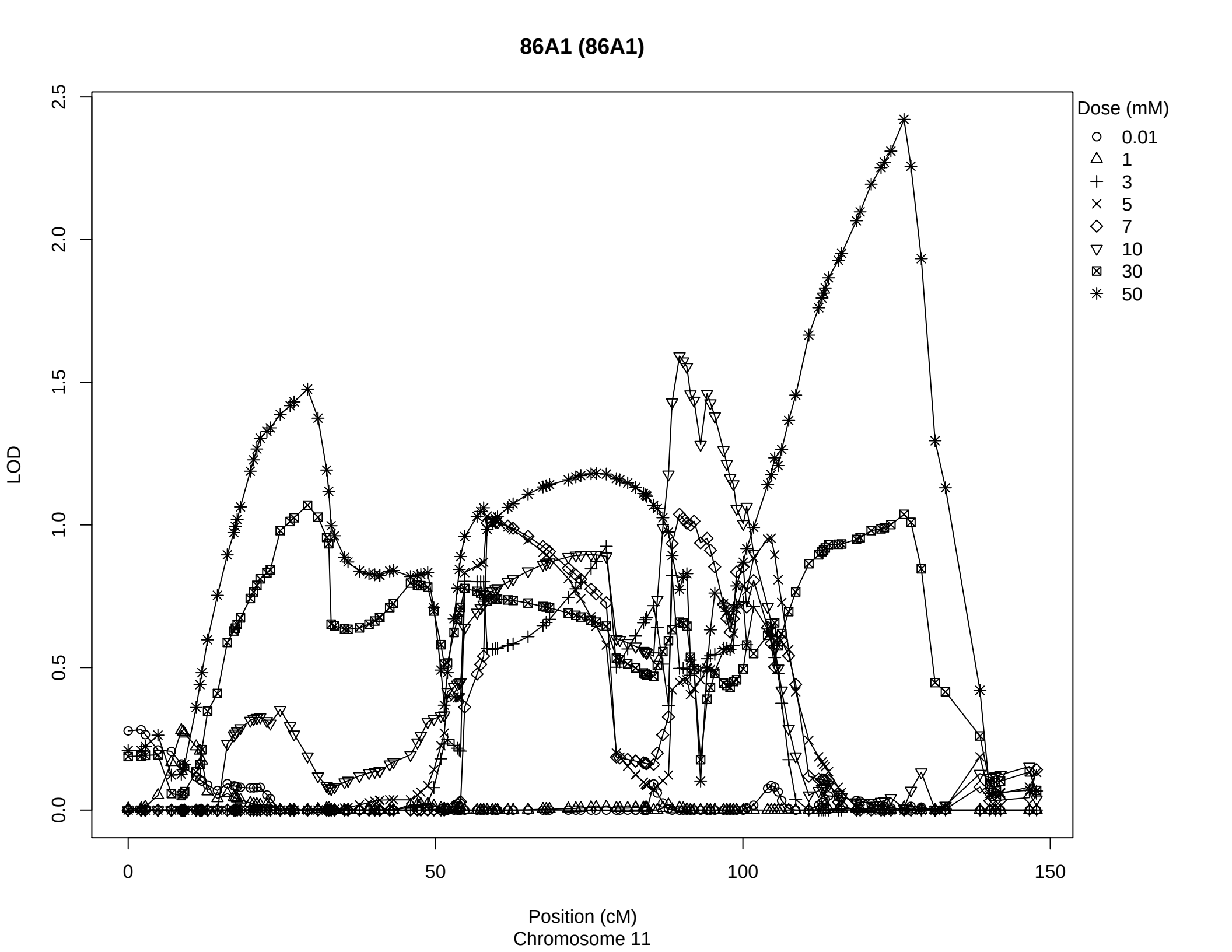

86A1 (86A1)
LOD
0.0
0.5
1.0
1.5
2.0
0
50
100
150
Position (cM)
Chromosome 6
Dose (mM)
0.01
1
3
5
7
10
30
50

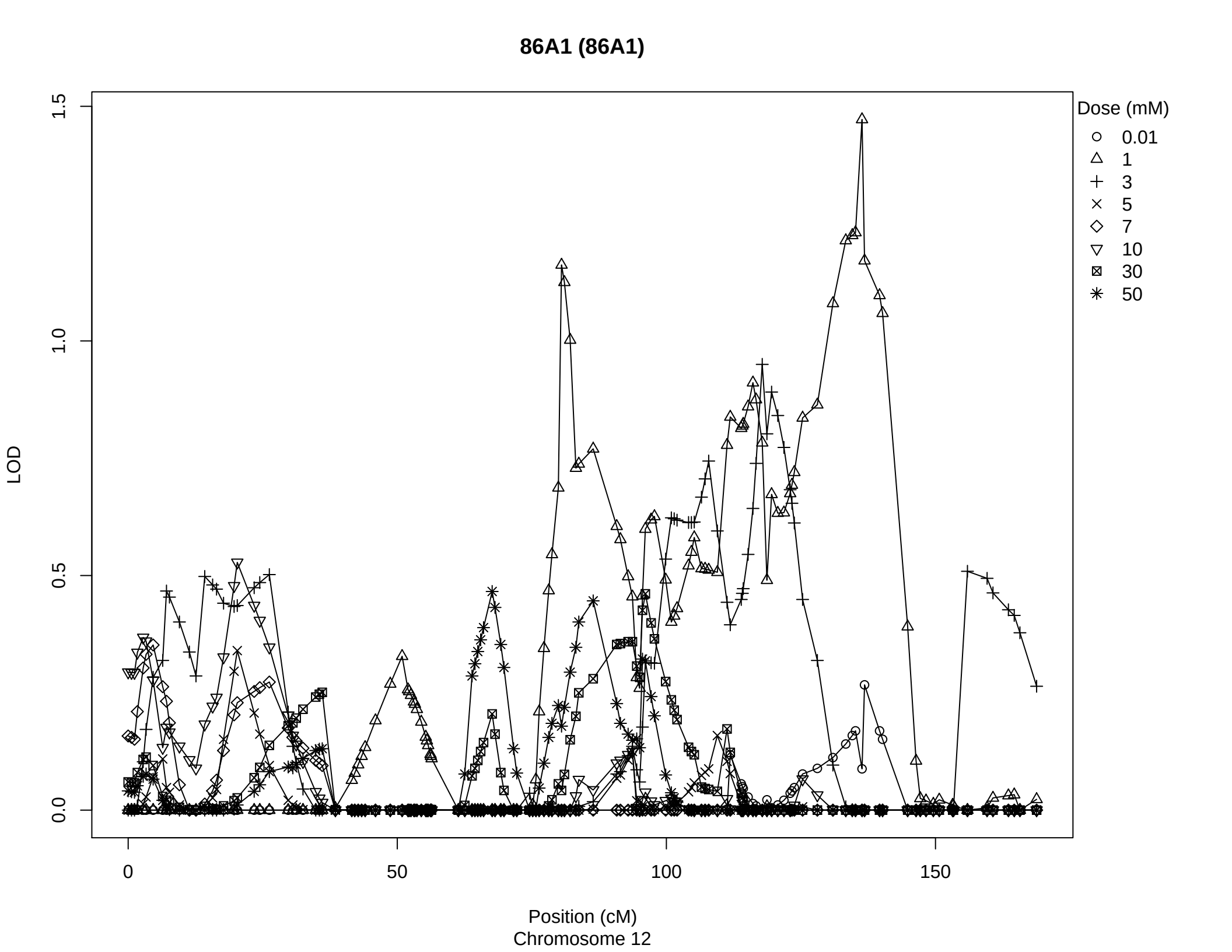

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
Position (cM)
Chromosome 7
Dose (mM)
0.01
1
3
5
7
10
30
50

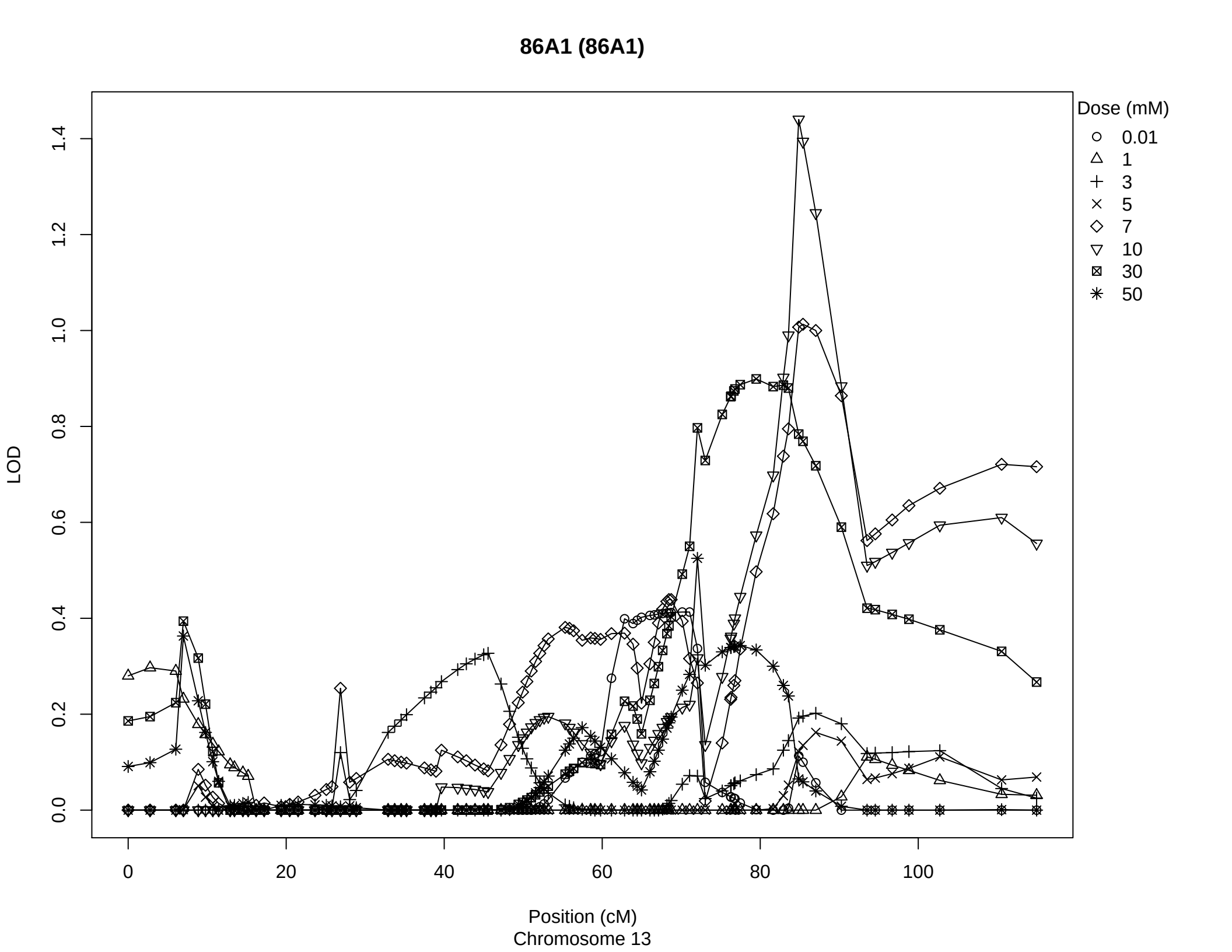

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
50
100
150
Position (cM)
Chromosome 8
Dose (mM)
0.01
1
3
5
7
10
30
50

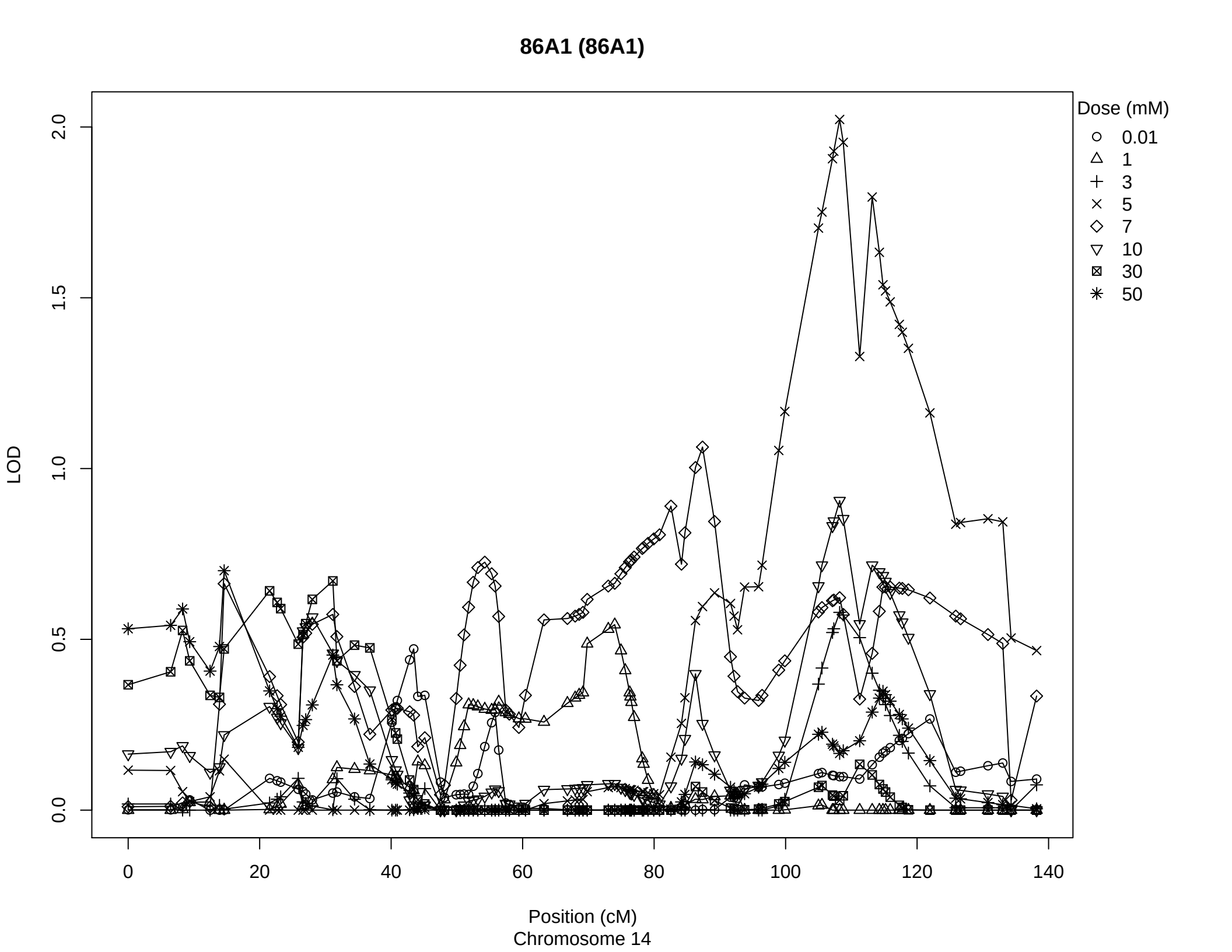

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
50
100
150
Position (cM)
Chromosome 9
Dose (mM)
0.01
1
3
5
7
10
30
50

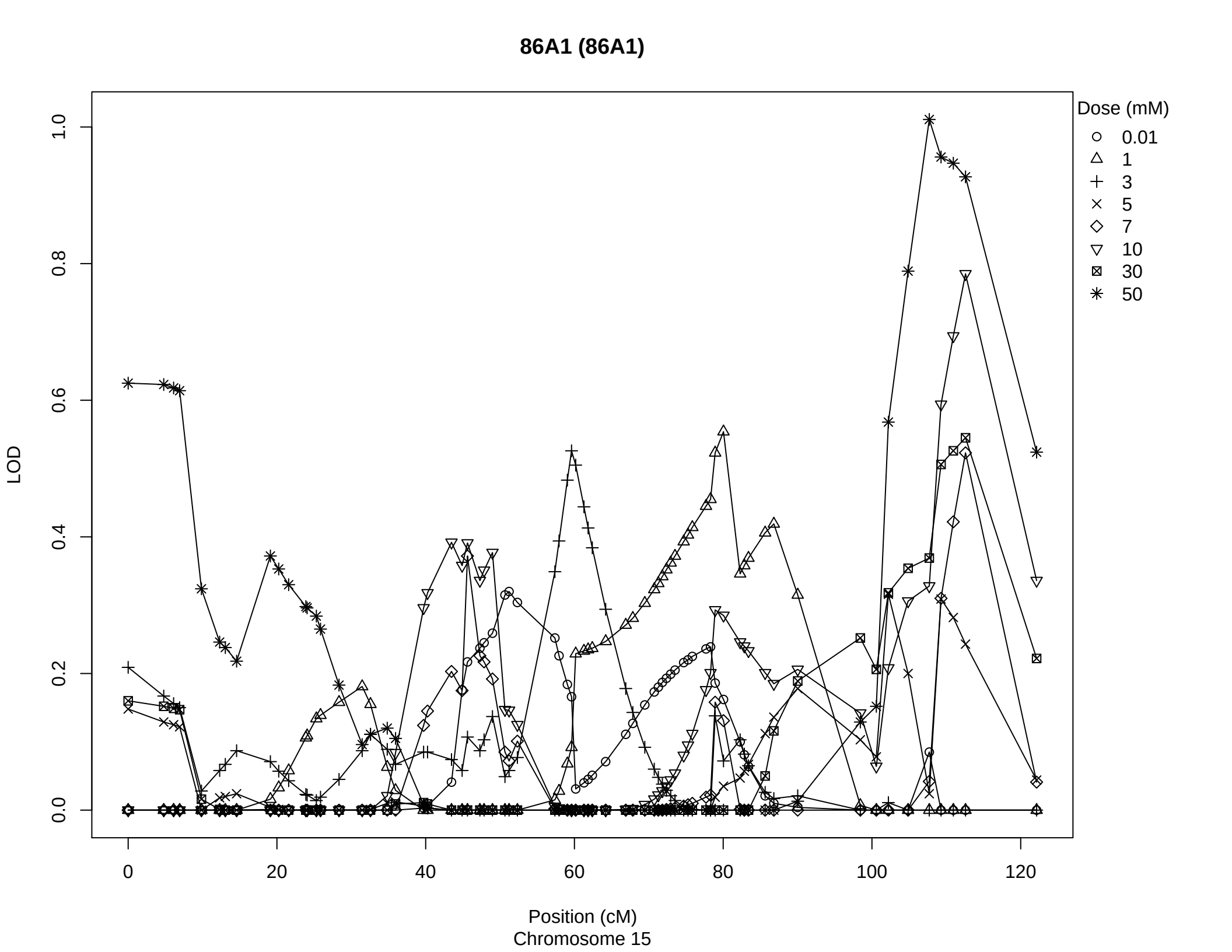

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
50
100
150
Position (cM)
Chromosome 10
Dose (mM)
0.01
1
3
5
7
10
30
50

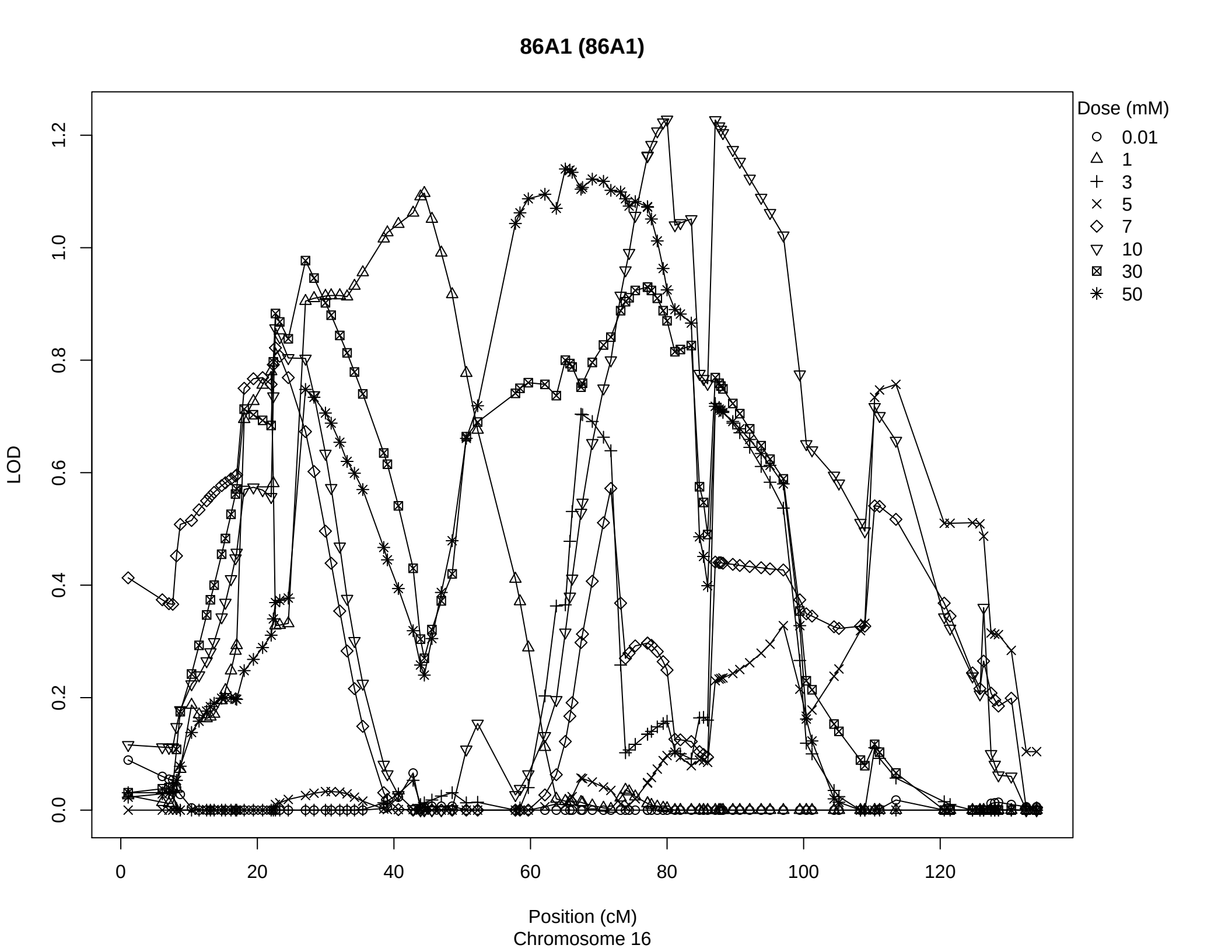

86A1 (86A1)
LOD
0.0
0.5
1.0
1.5
2.0
2.5
0
50
100
150
Position (cM)
Chromosome 11
Dose (mM)
0.01
1
3
5
7
10
30
50

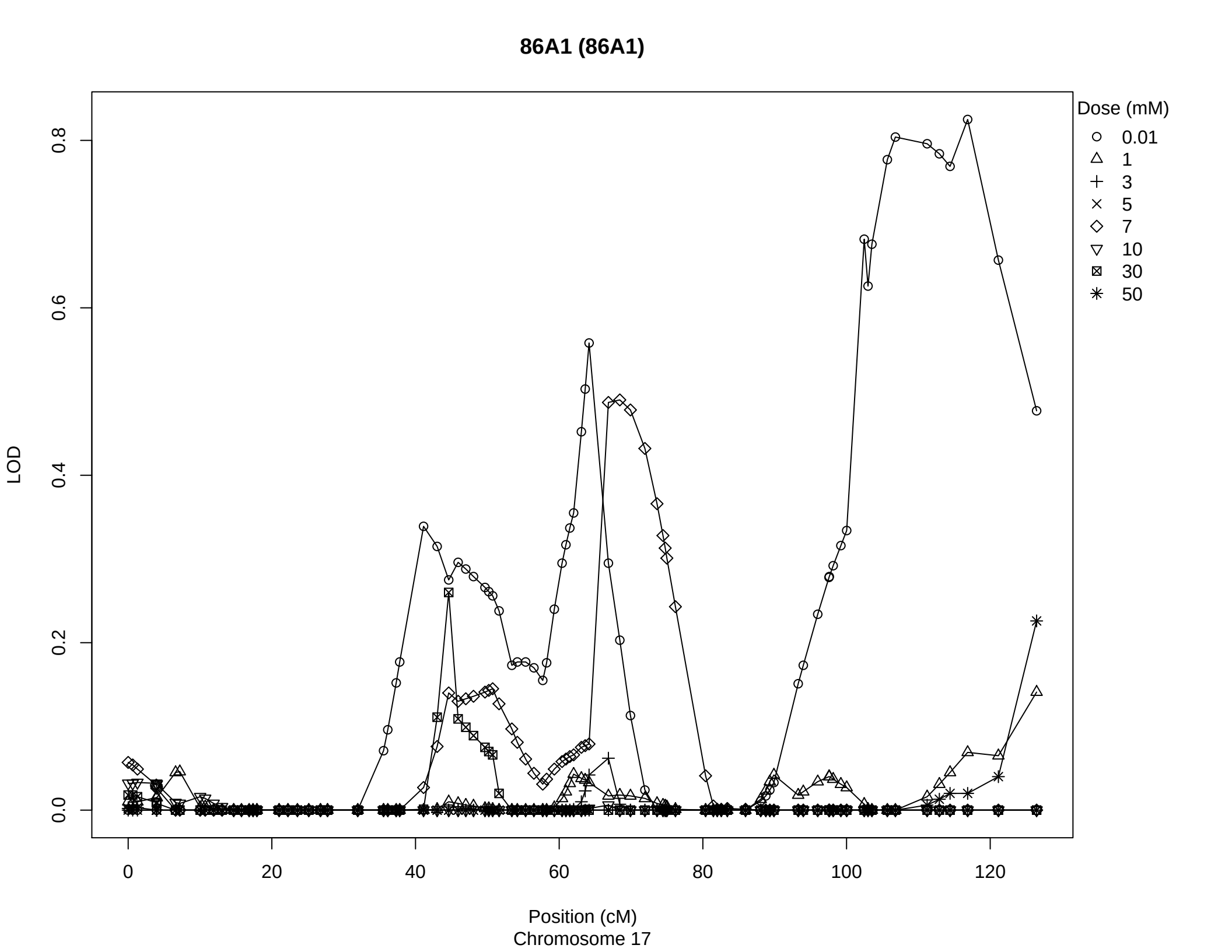

86A1 (86A1)
LOD
0.0
0.5
1.0
1.5
0
50
100
150
Position (cM)
Chromosome 12
Dose (mM)
0.01
1
3
5
7
10
30
50

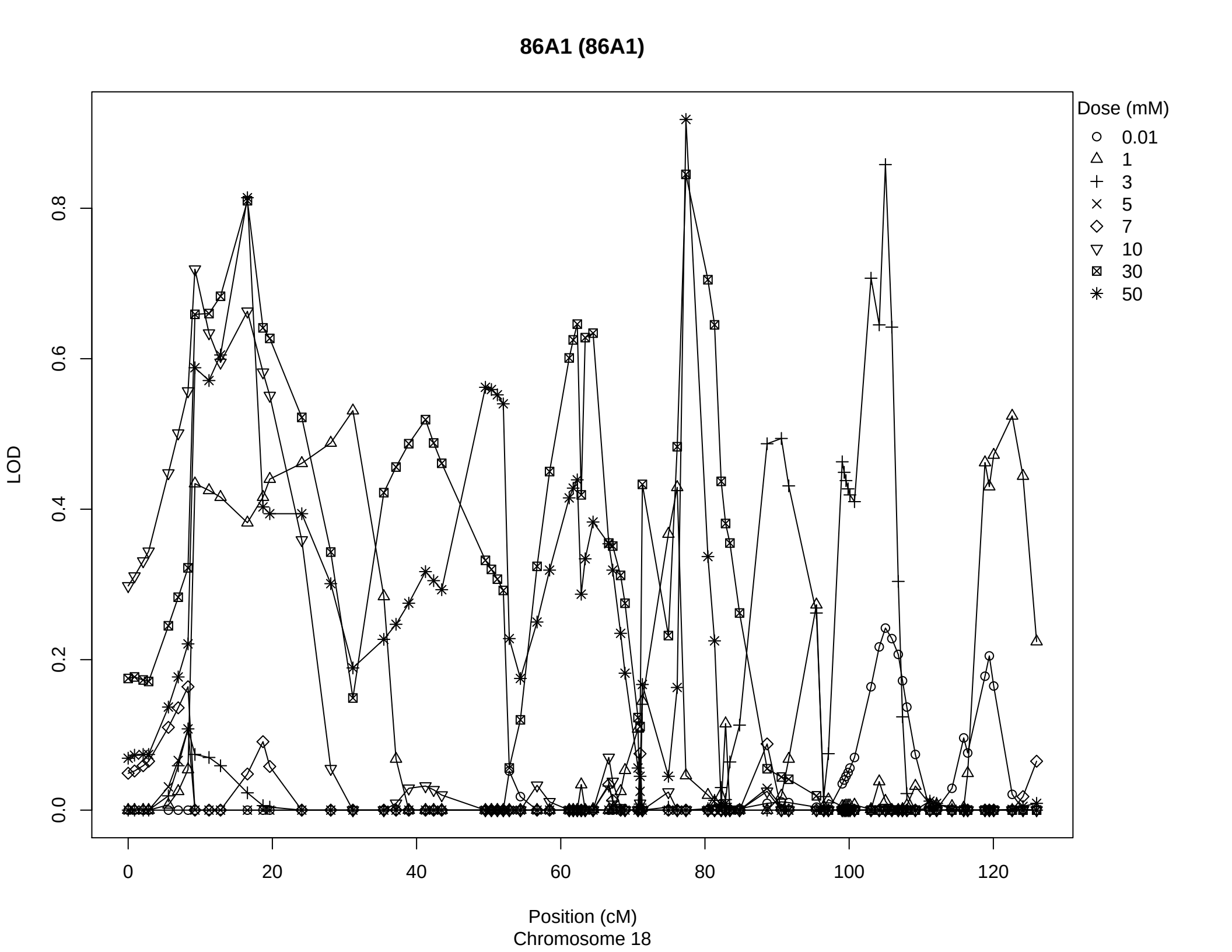

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
20
40
60
80
100
Position (cM)
Chromosome 13
Dose (mM)
0.01
1
3
5
7
10
30
50

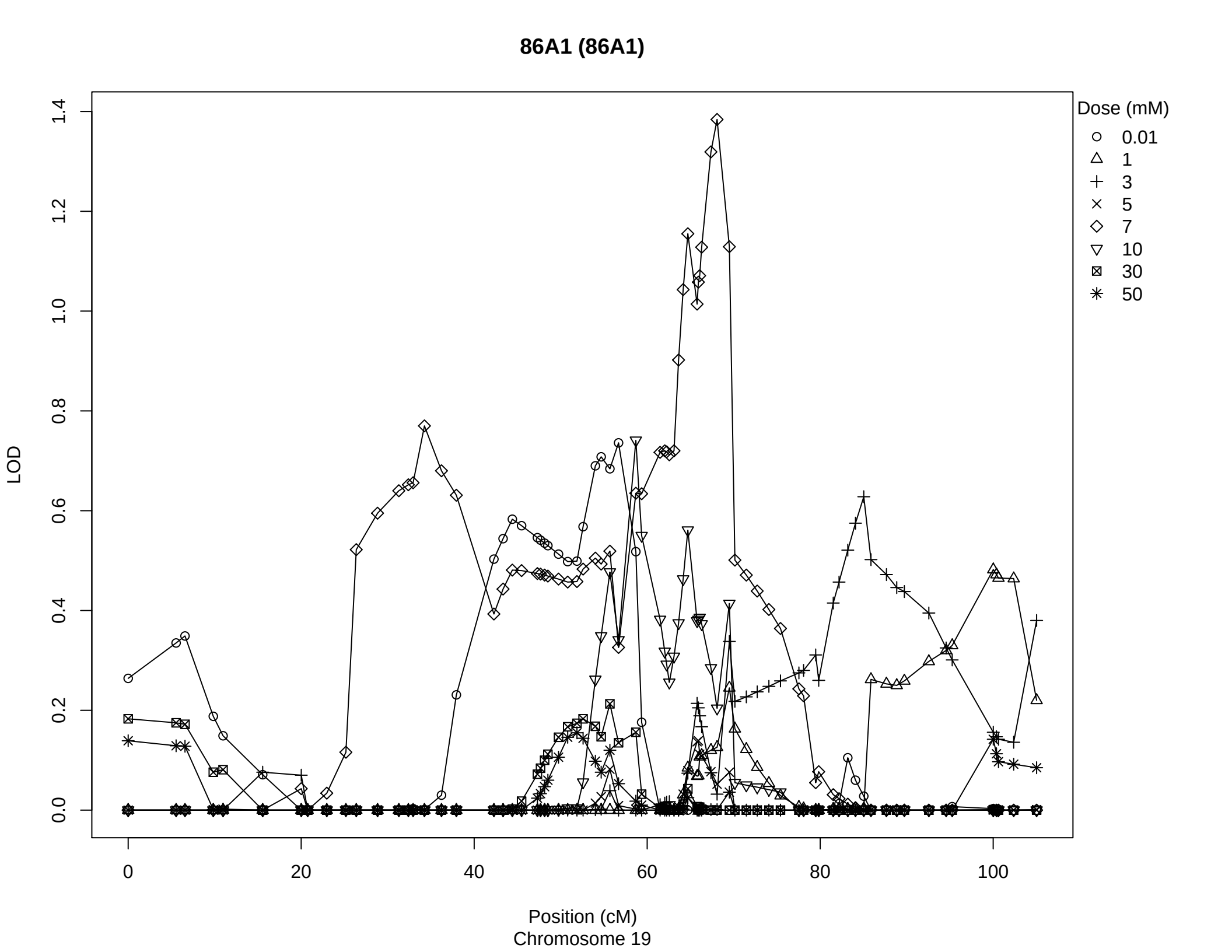

86A1 (86A1)
LOD
0.0
0.5
1.0
1.5
2.0
0
20
40
60
80
100
120
140
Position (cM)
Chromosome 14
Dose (mM)
0.01
1
3
5
7
10
30
50

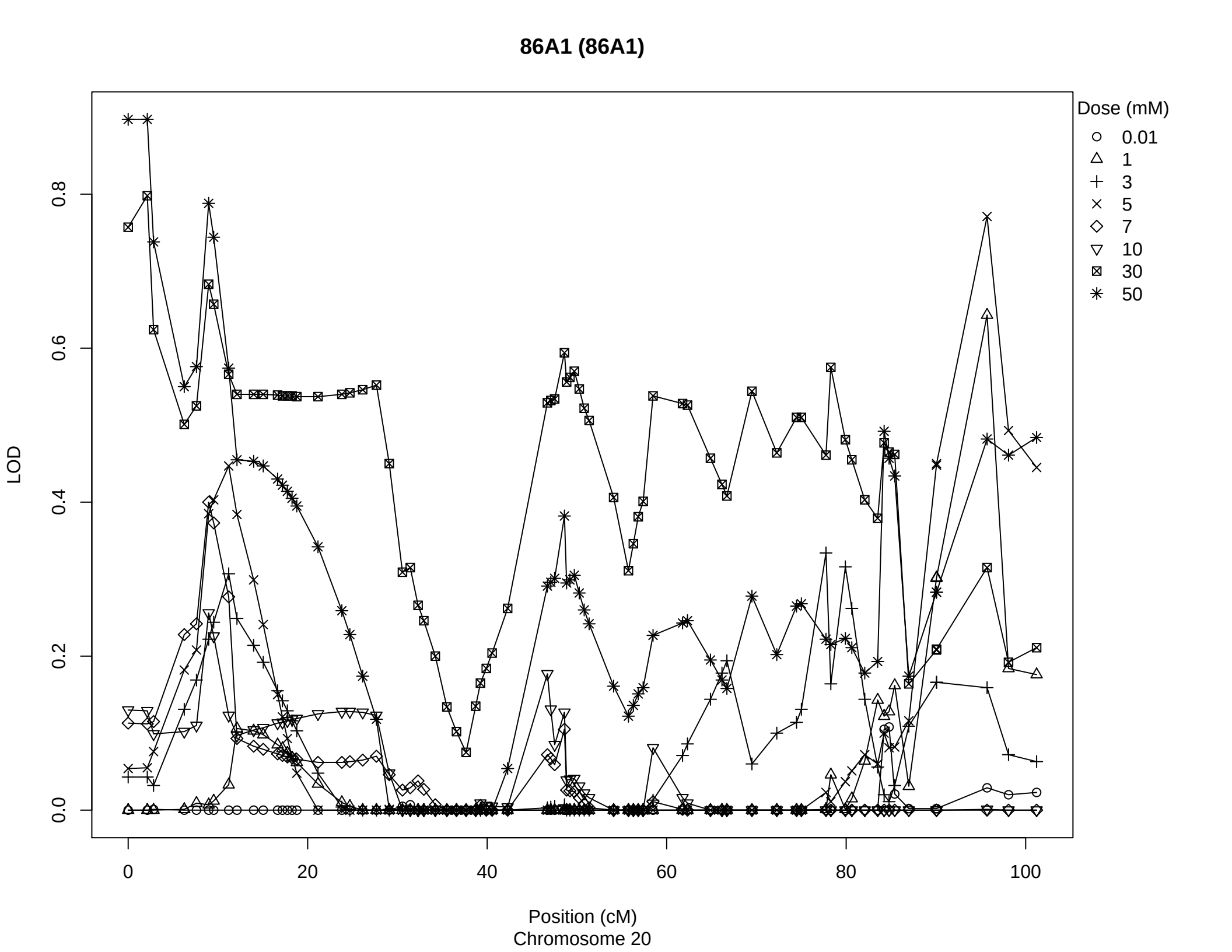

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
120
Position (cM)
Chromosome 15
Dose (mM)
0.01
1
3
5
7
10
30
50

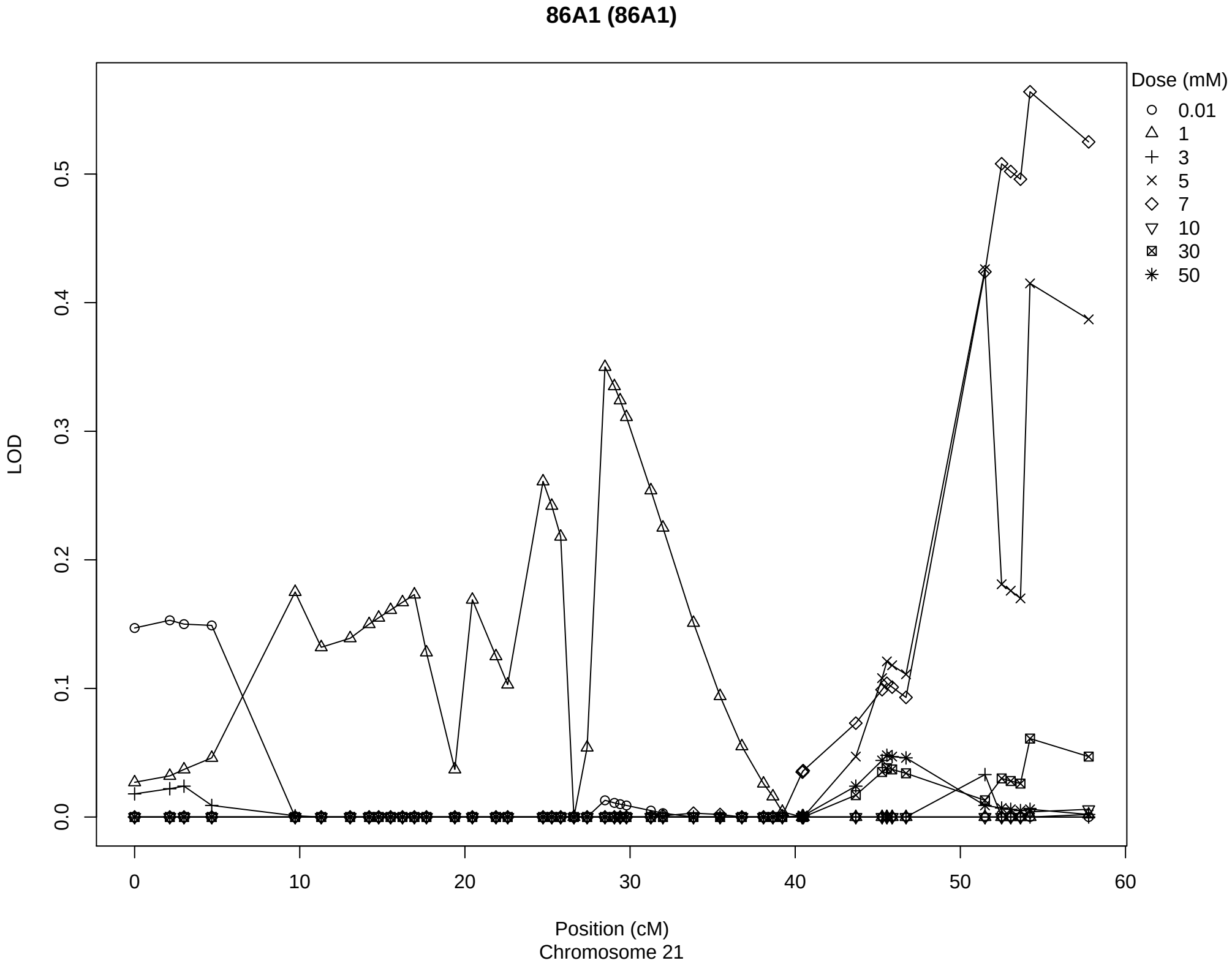

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
20
40
60
80
100
120
Position (cM)
Chromosome 16
Dose (mM)
0.01
1
3
5
7
10
30
50

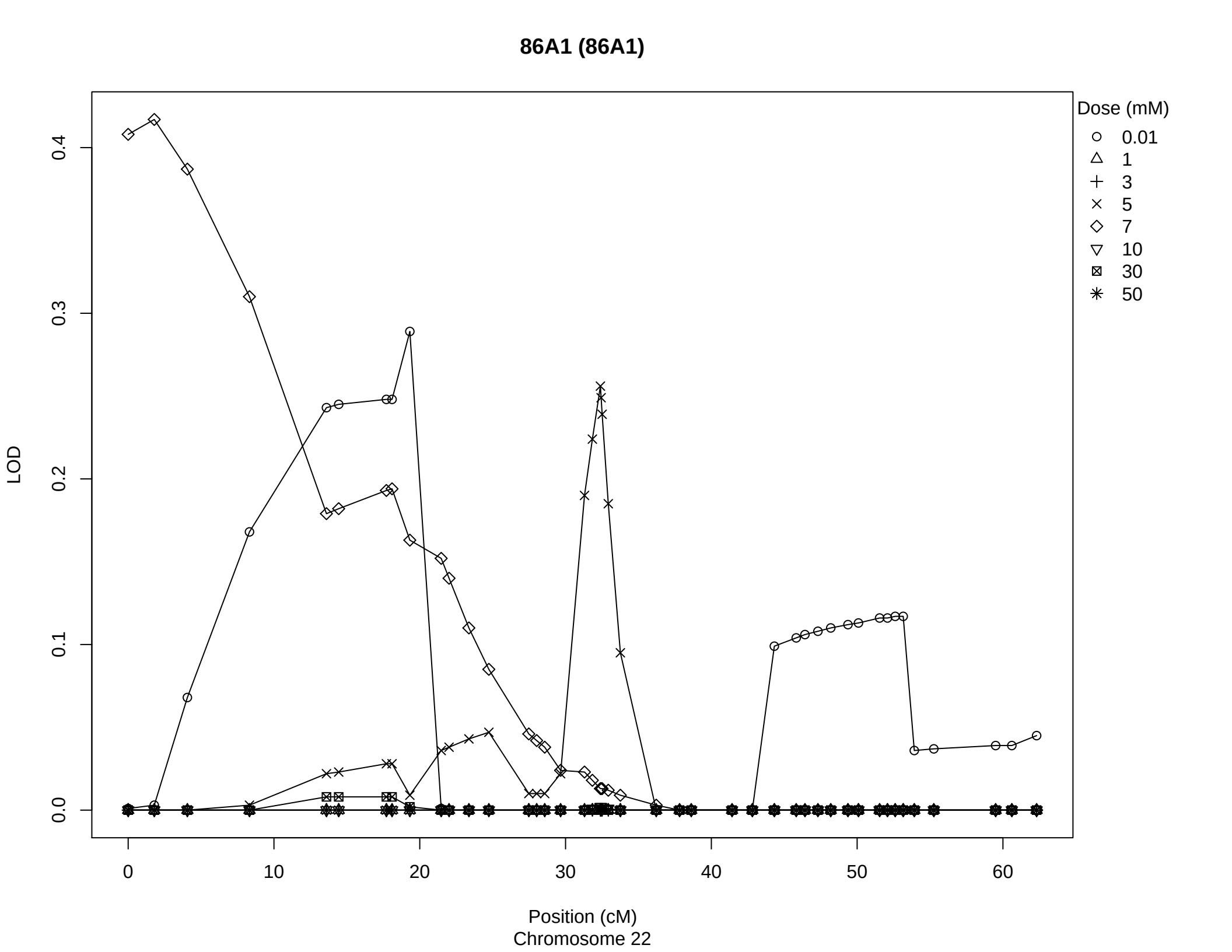

86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
120
Position (cM)
Chromosome 17
Dose (mM)
0.01
1
3
5
7
10
30
50


86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
120
Position (cM)
Chromosome 18
Dose (mM)
0.01
1
3
5
7
10
30
50


86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
20
40
60
80
100
Position (cM)
Chromosome 19
Dose (mM)
0.01
1
3
5
7
10
30
50


86A1 (86A1)
LOD
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
Position (cM)
Chromosome 20
Dose (mM)
0.01
1
3
5
7
10
30
50


86A1 (86A1)
LOD
0.0
0.1
0.2
0.3
0.4
0.5
0
10
20
30
40
50
60
Position (cM)
Chromosome 21
Dose (mM)
0.01
1
3
5
7
10
30
50


86A1 (86A1)
LOD
0.0
0.1
0.2
0.3
0.4
0
10
20
30
40
50
60
Position (cM)
Chromosome 22
Dose (mM)
0.01
1
3
5
7
10
30
50

Supplemental Dataset 4. LOD score thresholds. Gene dropping permutations were used to identify LOD score thresholds for significant and suggestive linkage. LOD score cut-offs corresponding to a genome-wide p-values less than or equal to .05 for each compound at each concenration were found, and used to define significant LOD score peaks. LOD score cut-offs corresponding to a genome-wide p-values less than or equal to .05 for each drug at each dose were found, and used to define significant LOD score peaks. LOD score cutoffs for suggestive peaks were defined as the minimum LOD score to achieve a p-value of 0.05 at each chromosome for each compound-concentration phenotype. Significant and suggestive peak thresholds for each compound-concentration combination on each chromosome as generated by permutation analysis are listed.

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind1	0.001	1	1.299	0.685
Ind1	0.001	2	1.236	0.579
Ind1	0.001	3	1.398	0.572
Ind1	0.001	4	1.458	0.664
Ind1	0.001	5	1.657	0.657
Ind1	0.001	6	1.345	0.69
Ind1	0.001	7	1.276	0.58
Ind1	0.001	8	1.28	0.657
Ind1	0.001	9	1.233	0.627
Ind1	0.001	10	1.411	0.681
Ind1	0.001	11	1.214	0.621
Ind1	0.001	12	1.593	0.733
Ind1	0.001	13	1.079	0.529
Ind1	0.001	14	1.448	0.885
Ind1	0.001	15	1.473	0.529
Ind1	0.001	16	1.522	0.633
Ind1	0.001	17	1.496	0.657
Ind1	0.001	18	1.174	0.53
Ind1	0.001	19	1.467	0.807
Ind1	0.001	20	1.34	0.584
Ind1	0.001	21	0.965	0.404
Ind1	0.001	22	1.213	0.711
Ind1	0.03	1	1.181	0.579
Ind1	0.03	2	1.268	0.596
Ind1	0.03	3	1.24	0.592
Ind1	0.03	4	2.074	1.074
Ind1	0.03	5	1.068	0.571
Ind1	0.03	6	1.41	0.549
Ind1	0.03	7	1.264	0.653
Ind1	0.03	8	1.222	0.529
Ind1	0.03	9	1.28	0.413
Ind1	0.03	10	1.157	0.506
Ind1	0.03	11	1.151	0.564
Ind1	0.03	12	1.496	0.629
Ind1	0.03	13	1.939	0.939
Ind1	0.03	14	1.81	0.81
Ind1	0.03	15	1.238	0.566
Ind1	0.03	16	1.388	0.474
Ind1	0.03	17	1.025	0.457
Ind1	0.03	18	1.34	0.612
Ind1	0.03	19	1.208	0.474
Ind1	0.03	20	1.764	0.764
Ind1	0.03	21	0.614	0.296
Ind1	0.03	22	1.28	0.495
Ind1	0.05	1	1.268	0.599
Ind1	0.05	2	1.264	0.465
Ind1	0.05	3	1.357	0.632
Ind1	0.05	4	1.745	0.745
Ind1	0.05	5	1.322	0.546
Ind1	0.05	6	1.467	0.582

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind1	0.05	7	1.539	0.754
Ind1	0.05	8	1.692	0.906
Ind1	0.05	9	1.347	0.682
Ind1	0.05	10	1.218	0.608
Ind1	0.05	11	1.374	0.466
Ind1	0.05	12	1.484	0.734
Ind1	0.05	13	1.254	0.523
Ind1	0.05	14	1.518	0.731
Ind1	0.05	15	1.513	0.625
Ind1	0.05	16	1.606	0.606
Ind1	0.05	17	1.222	0.494
Ind1	0.05	18	1.761	0.761
Ind1	0.05	19	1.634	0.728
Ind1	0.05	20	1.508	0.788
Ind1	0.05	21	2.163	1.163
Ind1	0.05	22	1.073	0.533
Ind1	0.1	1	1.386	0.624
Ind1	0.1	2	1.444	0.604
Ind1	0.1	3	1.159	0.471
Ind1	0.1	4	1.161	0.522
Ind1	0.1	5	0.998	0.44
Ind1	0.1	6	1.278	0.619
Ind1	0.1	7	1.774	0.774
Ind1	0.1	8	1.419	0.556
Ind1	0.1	9	1.121	0.572
Ind1	0.1	10	1.252	0.718
Ind1	0.1	11	1.169	0.434
Ind1	0.1	12	1.345	0.697
Ind1	0.1	13	1.025	0.519
Ind1	0.1	14	1.3	0.553
Ind1	0.1	15	1.288	0.532
Ind1	0.1	16	1.201	0.541
Ind1	0.1	17	1.078	0.495
Ind1	0.1	18	1.23	0.531
Ind1	0.1	19	1.439	0.582
Ind1	0.1	20	1.473	0.714
Ind1	0.1	21	0.97	0.485
Ind1	0.1	22	1.167	0.612
Ind1	0.2	1	1.265	0.537
Ind1	0.2	2	1.089	0.576
Ind1	0.2	3	1.172	0.514
Ind1	0.2	4	1.124	0.413
Ind1	0.2	5	1.033	0.518
Ind1	0.2	6	1.046	0.556
Ind1	0.2	7	1.344	0.618
Ind1	0.2	8	1.018	0.543
Ind1	0.2	9	1.095	0.563
Ind1	0.2	10	1.221	0.636
Ind1	0.2	11	1.301	0.531
Ind1	0.2	12	1.213	0.724

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind1	0.2	13	0.983	0.572
Ind1	0.2	14	0.95	0.427
Ind1	0.2	15	1.116	0.319
Ind1	0.2	16	0.789	0.437
Ind1	0.2	17	1.078	0.5
Ind1	0.2	18	0.931	0.468
Ind1	0.2	19	1.534	0.534
Ind1	0.2	20	1.44	0.492
Ind1	0.2	21	1.178	0.512
Ind1	0.2	22	0.972	0.472
Ind1	0.3	1	1.357	0.632
Ind1	0.3	2	1.247	0.532
Ind1	0.3	3	1.539	0.619
Ind1	0.3	4	1.383	0.634
Ind1	0.3	5	1.332	0.522
Ind1	0.3	6	1.546	0.694
Ind1	0.3	7	1.287	0.682
Ind1	0.3	8	1.248	0.604
Ind1	0.3	9	1.243	0.65
Ind1	0.3	10	1.659	0.667
Ind1	0.3	11	1.527	0.577
Ind1	0.3	12	1.348	0.699
Ind1	0.3	13	1.178	0.601
Ind1	0.3	14	1.239	0.462
Ind1	0.3	15	1.443	0.56
Ind1	0.3	16	0.994	0.416
Ind1	0.3	17	1.541	0.72
Ind1	0.3	18	1.394	0.653
Ind1	0.3	19	1.667	0.737
Ind1	0.3	20	1.337	0.543
Ind1	0.3	21	0.988	0.56
Ind1	0.3	22	1.296	0.742
Ind1	0.5	1	0.878	0.538
Ind1	0.5	2	0.967	0.436
Ind1	0.5	3	1.165	0.515
Ind1	0.5	4	1.041	0.459
Ind1	0.5	5	1.129	0.504
Ind1	0.5	6	0.962	0.52
Ind1	0.5	7	1.268	0.638
Ind1	0.5	8	1.136	0.52
Ind1	0.5	9	1.014	0.434
Ind1	0.5	10	1.161	0.666
Ind1	0.5	11	1.593	0.593
Ind1	0.5	12	1.226	0.513
Ind1	0.5	13	0.949	0.428
Ind1	0.5	14	0.991	0.444
Ind1	0.5	15	1.151	0.567
Ind1	0.5	16	0.824	0.409
Ind1	0.5	17	1.184	0.452
Ind1	0.5	18	0.984	0.53

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind1	0.5	19	1.236	0.618
Ind1	0.5	20	1.337	0.545
Ind1	0.5	21	1.059	0.491
Ind1	0.5	22	1.109	0.563
Ind1	3	1	1.405	0.638
Ind1	3	2	1.626	0.626
Ind1	3	3	1.994	0.994
Ind1	3	4	1.309	0.574
Ind1	3	5	1.604	0.604
Ind1	3	6	1.998	0.998
Ind1	3	7	1.612	0.612
Ind1	3	8	1.418	0.454
Ind1	3	9	1.733	0.733
Ind1	3	10	1.5	0.617
Ind1	3	11	1.353	0.52
Ind1	3	12	1.378	0.584
Ind1	3	13	2.208	1.208
Ind1	3	14	1.392	0.61
Ind1	3	15	1.468	0.611
Ind1	3	16	1.386	0.517
Ind1	3	17	1.54	0.594
Ind1	3	18	1.68	0.75
Ind1	3	19	1.444	0.45
Ind1	3	20	1.607	0.686
Ind1	3	21	1.409	0.676
Ind1	3	22	1.523	0.523
Ind2	0.01	1	1.09	0.609
Ind2	0.01	2	1.318	0.525
Ind2	0.01	3	1.396	0.619
Ind2	0.01	4	1.147	0.623
Ind2	0.01	5	1.33	0.487
Ind2	0.01	6	1.151	0.61
Ind2	0.01	7	1.162	0.669
Ind2	0.01	8	1.33	0.738
Ind2	0.01	9	1.169	0.59
Ind2	0.01	10	1.252	0.596
Ind2	0.01	11	1.1	0.552
Ind2	0.01	12	1.397	0.583
Ind2	0.01	13	1.137	0.724
Ind2	0.01	14	1.354	0.586
Ind2	0.01	15	1.272	0.71
Ind2	0.01	16	1.139	0.446
Ind2	0.01	17	1.233	0.522
Ind2	0.01	18	1.474	0.732
Ind2	0.01	19	1.382	0.626
Ind2	0.01	20	1.71	0.71
Ind2	0.01	21	1.027	0.592
Ind2	0.01	22	1.116	0.557
Ind2	0.16	1	1.415	0.657
Ind2	0.16	2	1.388	0.563

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind2	0.16	3	1.337	0.588
Ind2	0.16	4	1.484	0.701
Ind2	0.16	5	1.168	0.48
Ind2	0.16	6	1.132	0.578
Ind2	0.16	7	1.082	0.594
Ind2	0.16	8	1.356	0.551
Ind2	0.16	9	1.177	0.571
Ind2	0.16	10	1.502	0.685
Ind2	0.16	11	1.278	0.611
Ind2	0.16	12	1.556	0.6
Ind2	0.16	13	1.287	0.495
Ind2	0.16	14	1.209	0.481
Ind2	0.16	15	1.237	0.602
Ind2	0.16	16	1.193	0.431
Ind2	0.16	17	0.996	0.456
Ind2	0.16	18	1.283	0.63
Ind2	0.16	19	1.231	0.56
Ind2	0.16	20	1.401	0.743
Ind2	0.16	21	1.286	0.553
Ind2	0.16	22	1.045	0.585
Ind2	0.23	1	0.94	0.482
Ind2	0.23	2	1.159	0.518
Ind2	0.23	3	1.039	0.512
Ind2	0.23	4	1.146	0.569
Ind2	0.23	5	1.064	0.51
Ind2	0.23	6	1.059	0.44
Ind2	0.23	7	1.243	0.634
Ind2	0.23	8	0.981	0.499
Ind2	0.23	9	0.988	0.596
Ind2	0.23	10	1.432	0.46
Ind2	0.23	11	0.823	0.431
Ind2	0.23	12	1.268	0.631
Ind2	0.23	13	1.153	0.622
Ind2	0.23	14	0.992	0.449
Ind2	0.23	15	0.951	0.536
Ind2	0.23	16	0.942	0.459
Ind2	0.23	17	1.204	0.583
Ind2	0.23	18	1.257	0.661
Ind2	0.23	19	1.048	0.556
Ind2	0.23	20	0.919	0.567
Ind2	0.23	21	0.581	0.294
Ind2	0.23	22	1.138	0.51
Ind2	0.5	1	1.007	0.495
Ind2	0.5	2	1.149	0.551
Ind2	0.5	3	1.049	0.535
Ind2	0.5	4	0.936	0.455
Ind2	0.5	5	1.174	0.547
Ind2	0.5	6	1.096	0.558
Ind2	0.5	7	1.094	0.623
Ind2	0.5	8	1.163	0.5

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind2	0.5	9	1.317	0.546
Ind2	0.5	10	1.129	0.64
Ind2	0.5	11	1.112	0.567
Ind2	0.5	12	1.235	0.579
Ind2	0.5	13	1.129	0.489
Ind2	0.5	14	1.27	0.56
Ind2	0.5	15	1.226	0.543
Ind2	0.5	16	1.53	0.742
Ind2	0.5	17	1.005	0.402
Ind2	0.5	18	1.218	0.542
Ind2	0.5	19	1.123	0.661
Ind2	0.5	20	0.921	0.529
Ind2	0.5	21	1.031	0.697
Ind2	0.5	22	1.101	0.651
Ind2	1	1	1.328	0.6
Ind2	1	2	1.627	0.655
Ind2	1	3	1.517	0.647
Ind2	1	4	1.257	0.676
Ind2	1	5	1.8	0.8
Ind2	1	6	1.495	0.717
Ind2	1	7	1.412	0.746
Ind2	1	8	1.336	0.595
Ind2	1	9	1.151	0.443
Ind2	1	10	1.702	0.702
Ind2	1	11	1.496	0.574
Ind2	1	12	1.709	0.727
Ind2	1	13	1.718	0.729
Ind2	1	14	1.45	0.773
Ind2	1	15	1.379	0.609
Ind2	1	16	1.66	0.66
Ind2	1	17	1.938	0.938
Ind2	1	18	1.536	0.547
Ind2	1	19	1.326	0.669
Ind2	1	20	2.067	1.067
Ind2	1	21	1.291	0.488
Ind2	1	22	1.808	0.808
Ind2	3	1	1.417	0.725
Ind2	3	2	1.581	0.581
Ind2	3	3	1.227	0.584
Ind2	3	4	0.99	0.498
Ind2	3	5	1.612	0.612
Ind2	3	6	1.326	0.501
Ind2	3	7	1.842	0.842
Ind2	3	8	1.621	0.621
Ind2	3	9	1.598	0.598
Ind2	3	10	1.566	0.672
Ind2	3	11	1.476	0.531
Ind2	3	12	1.748	0.87
Ind2	3	13	1.32	0.602
Ind2	3	14	2.158	1.158

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind2	3	15	1.116	0.545
Ind2	3	16	1.304	0.524
Ind2	3	17	1.542	0.542
Ind2	3	18	1.631	0.638
Ind2	3	19	1.405	0.557
Ind2	3	20	1.335	0.595
Ind2	3	21	1.351	0.605
Ind2	3	22	1.411	0.564
Ind2	10	1	1.018	0.504
Ind2	10	2	1.243	0.515
Ind2	10	3	1.257	0.578
Ind2	10	4	0.949	0.404
Ind2	10	5	0.952	0.413
Ind2	10	6	1.199	0.515
Ind2	10	7	1.151	0.567
Ind2	10	8	1.21	0.568
Ind2	10	9	0.933	0.515
Ind2	10	10	1.08	0.638
Ind2	10	11	0.891	0.486
Ind2	10	12	0.885	0.579
Ind2	10	13	0.852	0.349
Ind2	10	14	0.935	0.391
Ind2	10	15	1.058	0.553
Ind2	10	16	0.892	0.419
Ind2	10	17	1.141	0.458
Ind2	10	18	1.71	0.71
Ind2	10	19	1.275	0.578
Ind2	10	20	1.22	0.59
Ind2	10	21	0.999	0.529
Ind2	10	22	1.011	0.441
Ind2	30	1	1.321	0.608
Ind2	30	2	1.345	0.623
Ind2	30	3	1.405	0.587
Ind2	30	4	1.273	0.564
Ind2	30	5	1.065	0.524
Ind2	30	6	1.261	0.629
Ind2	30	7	1.331	0.697
Ind2	30	8	1.183	0.587
Ind2	30	9	1.036	0.527
Ind2	30	10	1.409	0.579
Ind2	30	11	1.307	0.539
Ind2	30	12	1.386	0.705
Ind2	30	13	0.912	0.438
Ind2	30	14	1.358	0.593
Ind2	30	15	1.146	0.566
Ind2	30	16	1.21	0.545
Ind2	30	17	1.256	0.545
Ind2	30	18	1.361	0.58
Ind2	30	19	1.503	0.67
Ind2	30	20	1.661	0.661

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind2	30	21	1.212	0.669
Ind2	30	22	1.188	0.547
Ind3	0.01	1	0.806	0.371
Ind3	0.01	2	0.915	0.472
Ind3	0.01	3	0.841	0.406
Ind3	0.01	4	1.064	0.437
Ind3	0.01	5	1.056	0.575
Ind3	0.01	6	0.837	0.367
Ind3	0.01	7	0.963	0.504
Ind3	0.01	8	1.199	0.556
Ind3	0.01	9	0.941	0.566
Ind3	0.01	10	0.877	0.432
Ind3	0.01	11	0.944	0.461
Ind3	0.01	12	1.086	0.518
Ind3	0.01	13	1.007	0.587
Ind3	0.01	14	0.838	0.469
Ind3	0.01	15	0.965	0.494
Ind3	0.01	16	1.098	0.55
Ind3	0.01	17	1.005	0.543
Ind3	0.01	18	1.058	0.459
Ind3	0.01	19	0.877	0.501
Ind3	0.01	20	0.744	0.411
Ind3	0.01	21	0.989	0.395
Ind3	0.01	22	0.744	0.561
Ind3	1	1	1.33	0.583
Ind3	1	2	1.339	0.571
Ind3	1	3	1.145	0.55
Ind3	1	4	1.487	0.685
Ind3	1	5	1.594	0.681
Ind3	1	6	1.21	0.656
Ind3	1	7	1.159	0.624
Ind3	1	8	1.057	0.535
Ind3	1	9	1.156	0.527
Ind3	1	10	1.085	0.495
Ind3	1	11	1.015	0.53
Ind3	1	12	1.275	0.684
Ind3	1	13	1.155	0.695
Ind3	1	14	1.163	0.708
Ind3	1	15	1.479	0.605
Ind3	1	16	0.853	0.349
Ind3	1	17	1.117	0.6
Ind3	1	18	1.035	0.566
Ind3	1	19	1.209	0.626
Ind3	1	20	1.584	0.621
Ind3	1	21	0.921	0.409
Ind3	1	22	0.92	0.437
Ind3	3	1	1.285	0.531
Ind3	3	2	1.468	0.545
Ind3	3	3	1.095	0.559
Ind3	3	4	1.322	0.68

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind3	3	5	1.365	0.584
Ind3	3	6	1.371	0.429
Ind3	3	7	1.534	0.714
Ind3	3	8	1.35	0.621
Ind3	3	9	1.225	0.543
Ind3	3	10	1.318	0.579
Ind3	3	11	1.368	0.579
Ind3	3	12	1.366	0.634
Ind3	3	13	2.132	1.132
Ind3	3	14	1.618	0.902
Ind3	3	15	1.445	0.752
Ind3	3	16	1.581	0.68
Ind3	3	17	1.676	0.676
Ind3	3	18	1.752	0.752
Ind3	3	19	1.546	0.712
Ind3	3	20	1.804	0.804
Ind3	3	21	1.771	0.788
Ind3	3	22	1.156	0.752
Ind3	5	1	1.476	0.584
Ind3	5	2	1.407	0.536
Ind3	5	3	1.549	0.67
Ind3	5	4	1.295	0.616
Ind3	5	5	1.588	0.588
Ind3	5	6	1.345	0.522
Ind3	5	7	1.407	0.609
Ind3	5	8	1.505	0.769
Ind3	5	9	1.438	0.654
Ind3	5	10	1.935	0.935
Ind3	5	11	1.167	0.507
Ind3	5	12	1.839	0.839
Ind3	5	13	1.198	0.402
Ind3	5	14	1.557	0.737
Ind3	5	15	1.335	0.565
Ind3	5	16	1.589	0.589
Ind3	5	17	1.522	0.711
Ind3	5	18	1.191	0.472
Ind3	5	19	1.638	0.889
Ind3	5	20	1.461	0.695
Ind3	5	21	1.252	0.643
Ind3	5	22	1.187	0.766
Ind3	7	1	1.404	0.62
Ind3	7	2	1.185	0.519
Ind3	7	3	1.622	0.732
Ind3	7	4	1.417	0.551
Ind3	7	5	1.59	0.623
Ind3	7	6	1.261	0.495
Ind3	7	7	1.867	0.867
Ind3	7	8	1.55	0.643
Ind3	7	9	1.844	0.844
Ind3	7	10	1.779	0.779

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind3	7	11	1.603	0.603
Ind3	7	12	1.748	0.748
Ind3	7	13	1.263	0.402
Ind3	7	14	1.726	0.726
Ind3	7	15	1.395	0.616
Ind3	7	16	1.58	0.648
Ind3	7	17	1.428	0.557
Ind3	7	18	1.631	0.668
Ind3	7	19	1.542	0.675
Ind3	7	20	1.594	0.691
Ind3	7	21	1.361	0.708
Ind3	7	22	1.363	0.634
Ind3	10	1	1.268	0.592
Ind3	10	2	1.333	0.542
Ind3	10	3	1.215	0.554
Ind3	10	4	1.287	0.497
Ind3	10	5	1.104	0.514
Ind3	10	6	1.265	0.56
Ind3	10	7	1.301	0.654
Ind3	10	8	1.238	0.679
Ind3	10	9	1.219	0.585
Ind3	10	10	1.284	0.577
Ind3	10	11	1.555	0.555
Ind3	10	12	1.41	0.755
Ind3	10	13	1.056	0.405
Ind3	10	14	1.238	0.507
Ind3	10	15	1.203	0.52
Ind3	10	16	1.215	0.597
Ind3	10	17	1.341	0.623
Ind3	10	18	1.149	0.519
Ind3	10	19	1.433	0.725
Ind3	10	20	1.622	0.805
Ind3	10	21	1.443	0.598
Ind3	10	22	1.257	0.566
Ind3	30	1	1.036	0.486
Ind3	30	2	1.194	0.548
Ind3	30	3	0.987	0.51
Ind3	30	4	0.89	0.382
Ind3	30	5	0.968	0.436
Ind3	30	6	1.008	0.54
Ind3	30	7	1.015	0.593
Ind3	30	8	0.897	0.486
Ind3	30	9	0.797	0.481
Ind3	30	10	0.944	0.504
Ind3	30	11	1.133	0.523
Ind3	30	12	1.091	0.577
Ind3	30	13	0.788	0.381
Ind3	30	14	1.07	0.505
Ind3	30	15	0.914	0.463
Ind3	30	16	0.855	0.457

Drug	Dose (mM)	Chr	Significance threshold	Suggestive threshold
Ind3	30	17	1.373	0.46
Ind3	30	18	1.134	0.503
Ind3	30	19	1.085	0.485
Ind3	30	20	1.606	0.606
Ind3	30	21	0.883	0.536
Ind3	30	22	0.627	0.367
Ind3	50	1	1.185	0.639
Ind3	50	2	1.58	0.717
Ind3	50	3	1.461	0.642
Ind3	50	4	1.017	0.525
Ind3	50	5	1.561	0.561
Ind3	50	6	1.39	0.603
Ind3	50	7	1.673	0.715
Ind3	50	8	1.589	0.608
Ind3	50	9	1.595	0.7
Ind3	50	10	1.392	0.684
Ind3	50	11	1.765	0.765
Ind3	50	12	1.731	0.791
Ind3	50	13	1.473	0.552
Ind3	50	14	1.55	0.706
Ind3	50	15	1.27	0.508
Ind3	50	16	1.523	0.523
Ind3	50	17	1.599	0.599
Ind3	50	18	1.391	0.547
Ind3	50	19	1.855	0.855
Ind3	50	20	2.203	1.203
Ind3	50	21	1.581	0.746
Ind3	50	22	1.313	0.425

Supplemental Dataset 5. Details of significant and replicating peaks for indenoisoquinolines. All significant QTLs are listed by compound and chromosome (tab 1). The chromosome, the beginning and end of all peaks in centiMorgan (cM) units, and the maximum peak LOD score in the region are listed. Peaks found as significant for one indenoisoquinoline and replicated at the significant or suggestive level in other indenoisoquinolines are also listed (tab 2). The chromosome, the beginning and end of the peak in centiMorgan (cM) units, the compound-concentration combination which was significant at the given chromosomal location (referred to as peak drug and peak dose), the drug-dose combinations which have QTLs at the same location (referred to as related drug and related dose), and the maximum peak LOD score for the related compound-concentration combination in the region are reported.

Peaks Identified as Significant to the Indenoisoquinolines

Chr	Drug	Dose (mM)	Peak Start (cM)	Peak End (cM)	Peak LOD
2	Ind1	0.2	20.03	34.78	1.129
6	Ind1	0.1	124.11	161.55	1.734
6	Ind1	0.2	128.93	192.29	1.28
6	Ind1	0.3	120.31	156.77	1.964
7	Ind1	0.001	74.38	89.88	1.348
9	Ind1	0.001	146.83	163.84	1.331
9	Ind1	0.03	8.37	60.59	1.558
10	Ind1	0.05	127.11	155.73	1.775
11	Ind1	0.1	22.56	131.26	1.797
11	Ind1	0.3	51.95	119.07	1.714
11	Ind1	3	59.77	93.12	1.591
13	Ind1	0.1	76.26	93.52	1.21
14	Ind1	0.5	0	21.51	1.129
14	Ind1	3	99.88	125.88	1.447
16	Ind1	0.1	65.1	104.45	1.474
16	Ind1	0.2	15.32	108.32	1.721
16	Ind1	0.3	59.68	108.32	1.198
16	Ind1	0.5	1.08	29.97	1.279
18	Ind1	0.03	90.6	96.48	1.554
18	Ind1	0.2	0	31.17	1.038
19	Ind1	0.1	52.59	77.54	1.574
21	Ind1	0.03	31.26	57.77	0.778
1	Ind2	0.01	69.86	87.31	1.345
4	Ind2	1	192.12	203.77	1.365
5	Ind2	0.16	114.75	133.65	1.551
5	Ind2	0.23	14.3	39.46	1.114
6	Ind2	10	120.31	159.44	1.694
6	Ind2	30	167.78	192.29	1.273
7	Ind2	0.16	10.68	33.05	1.143
7	Ind2	1	63.67	76.71	1.517
8	Ind2	1	104.33	122.96	1.683
11	Ind2	1	53.02	91.47	1.593
11	Ind2	10	19.86	79.43	1.098
11	Ind2	10	86.08	110.73	1.265
13	Ind2	10	75.19	93.52	1.019
13	Ind2	30	67.12	114.98	1.191
16	Ind2	3	35.44	99.44	2.139
16	Ind2	10	11.46	34.22	0.959
21	Ind2	0.23	28.48	51.49	0.587
2	Ind3	50	1.95	34.04	2.024
3	Ind3	1	177.75	203.28	1.212
3	Ind3	3	124.16	151.49	1.148
3	Ind3	3	174.94	191.04	1.362
3	Ind3	3	203.28	228.14	1.121
3	Ind3	5	203.28	228.14	1.877
4	Ind3	3	192.12	211.65	1.483
6	Ind3	5	128.93	177.88	1.805

Peaks Identified as Significant to the Indenoisoquinolines

Chr	Drug	Dose (mM)	Peak Start (cM)	Peak End (cM)	Peak LOD
6	Ind3	7	124.11	177.88	2.286
6	Ind3	10	120.31	192.29	2.195
6	Ind3	30	104.71	151.42	1.012
10	Ind3	1	118.94	130.9	1.43
11	Ind3	10	86.08	105.74	1.592
11	Ind3	50	98.98	138.56	2.421
12	Ind3	1	123.33	144.83	1.472
13	Ind3	10	77.47	114.98	1.44
13	Ind3	30	68.44	102.73	0.899
14	Ind3	5	98.96	134.3	2.022
16	Ind3	1	27.05	59.68	1.097
16	Ind3	10	69.05	104.45	1.228
16	Ind3	30	15.32	42.81	0.977
16	Ind3	30	50.6	99.44	0.93

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
1	69.86	87.31	Ind2	0.01	Ind1	3	0.4
1	69.86	87.31	Ind2	0.01	Ind1	0.03	0.682
1	69.86	87.31	Ind2	0.01	Ind1	0.001	0.54
2	20.03	34.78	Ind1	0.2	Ind3	50	2.024
2	20.03	34.78	Ind1	0.2	Ind3	7	0.534
2	20.03	34.78	Ind1	0.2	Ind3	30	1.059
2	20.03	34.78	Ind1	0.2	Ind2	3	0.567
2	20.03	34.78	Ind1	0.2	Ind2	30	0.489
2	20.03	34.78	Ind1	0.2	Ind2	10	0.84
2	1.95	34.04	Ind3	50	Ind2	3	1.026
2	1.95	34.04	Ind3	50	Ind2	30	0.826
2	1.95	34.04	Ind3	50	Ind2	10	0.84
2	1.95	34.04	Ind3	50	Ind1	0.2	1.129
2	1.95	34.04	Ind3	50	Ind1	0.1	0.51
2	1.95	34.04	Ind3	50	Ind1	0.3	0.661
2	1.95	34.04	Ind3	50	Ind1	0.03	0.891
3	177.75	203.28	Ind3	1	Ind2	3	1.141
3	177.75	203.28	Ind3	1	Ind2	0.16	0.597
3	177.75	203.28	Ind3	1	Ind2	1	0.518
3	177.75	203.28	Ind3	1	Ind2	30	1.039
3	177.75	203.28	Ind3	1	Ind1	0.2	0.661
3	177.75	203.28	Ind3	1	Ind1	0.3	0.852
3	177.75	203.28	Ind3	1	Ind1	0.05	0.462
3	177.75	203.28	Ind3	1	Ind1	0.5	0.458
3	124.16	151.49	Ind3	3	Ind2	30	0.771
3	124.16	151.49	Ind3	3	Ind1	3	1.095
3	124.16	151.49	Ind3	3	Ind1	0.3	0.63
3	124.16	151.49	Ind3	3	Ind1	0.001	0.712
3	174.94	191.04	Ind3	3	Ind2	3	1.141
3	174.94	191.04	Ind3	3	Ind2	0.16	0.597
3	174.94	191.04	Ind3	3	Ind2	1	0.518
3	174.94	191.04	Ind3	3	Ind2	30	0.7
3	174.94	191.04	Ind3	3	Ind1	0.2	0.583
3	174.94	191.04	Ind3	3	Ind1	0.3	0.852
3	203.28	228.14	Ind3	3	Ind2	3	0.507
3	203.28	228.14	Ind3	3	Ind2	1	1.263
3	203.28	228.14	Ind3	3	Ind2	30	0.444
3	203.28	228.14	Ind3	3	Ind2	10	0.502
3	203.28	228.14	Ind3	3	Ind1	0.2	0.438
3	203.28	228.14	Ind3	3	Ind1	0.3	0.781
3	203.28	228.14	Ind3	3	Ind1	0.05	0.462
3	203.28	228.14	Ind3	3	Ind1	0.5	0.618
3	203.28	228.14	Ind3	3	Ind1	0.03	1.139
3	203.28	228.14	Ind3	5	Ind2	3	0.507
3	203.28	228.14	Ind3	5	Ind2	1	1.263
3	203.28	228.14	Ind3	5	Ind2	30	0.444
3	203.28	228.14	Ind3	5	Ind2	10	0.502

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
3	203.28	228.14	Ind3	5	Ind1	0.2	0.438
3	203.28	228.14	Ind3	5	Ind1	0.3	0.781
3	203.28	228.14	Ind3	5	Ind1	0.05	0.462
3	203.28	228.14	Ind3	5	Ind1	0.5	0.618
3	203.28	228.14	Ind3	5	Ind1	0.03	1.139
4	192.12	203.77	Ind2	1	Ind3	3	1.483
4	192.12	203.77	Ind2	1	Ind3	10	0.826
4	192.12	203.77	Ind2	1	Ind1	0.1	0.417
4	192.12	203.77	Ind2	1	Ind1	0.3	0.493
4	192.12	203.77	Ind2	1	Ind1	0.05	0.871
4	192.12	211.65	Ind3	3	Ind2	1	1.365
4	192.12	211.65	Ind3	3	Ind2	0.23	0.531
4	192.12	211.65	Ind3	3	Ind2	0.5	0.612
4	192.12	211.65	Ind3	3	Ind1	0.1	0.417
4	192.12	211.65	Ind3	3	Ind1	0.3	0.493
4	192.12	211.65	Ind3	3	Ind1	0.05	0.871
5	114.75	133.65	Ind2	0.16	Ind3	1	1.37
5	114.75	133.65	Ind2	0.16	Ind1	0.001	1.546
5	14.3	39.46	Ind2	0.23	Ind3	1	0.962
5	14.3	39.46	Ind2	0.23	Ind3	0.01	0.495
5	14.3	39.46	Ind2	0.23	Ind1	3	0.543
5	14.3	39.46	Ind2	0.23	Ind1	0.001	0.639
6	124.11	161.55	Ind1	0.1	Ind3	50	0.787
6	124.11	161.55	Ind1	0.1	Ind3	7	2.286
6	124.11	161.55	Ind1	0.1	Ind3	30	1.012
6	124.11	161.55	Ind1	0.1	Ind3	10	2.195
6	124.11	161.55	Ind1	0.1	Ind3	5	1.805
6	124.11	161.55	Ind1	0.1	Ind2	3	1.091
6	124.11	161.55	Ind1	0.1	Ind2	1	0.513
6	124.11	161.55	Ind1	0.1	Ind2	0.01	0.789
6	124.11	161.55	Ind1	0.1	Ind2	30	1.235
6	124.11	161.55	Ind1	0.1	Ind2	0.23	0.645
6	124.11	161.55	Ind1	0.1	Ind2	10	1.694
6	128.93	192.29	Ind1	0.2	Ind3	50	1.158
6	128.93	192.29	Ind1	0.2	Ind3	3	0.71
6	128.93	192.29	Ind1	0.2	Ind3	7	2.286
6	128.93	192.29	Ind1	0.2	Ind3	30	1.012
6	128.93	192.29	Ind1	0.2	Ind3	10	2.195
6	128.93	192.29	Ind1	0.2	Ind3	5	1.805
6	128.93	192.29	Ind1	0.2	Ind2	3	1.091
6	128.93	192.29	Ind1	0.2	Ind2	1	0.603
6	128.93	192.29	Ind1	0.2	Ind2	0.01	0.896
6	128.93	192.29	Ind1	0.2	Ind2	30	1.273
6	128.93	192.29	Ind1	0.2	Ind2	0.23	0.645
6	128.93	192.29	Ind1	0.2	Ind2	10	1.694
6	120.31	156.77	Ind1	0.3	Ind3	50	0.787
6	120.31	156.77	Ind1	0.3	Ind3	7	2.286

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
6	120.31	156.77	Ind1	0.3	Ind3	30	1.012
6	120.31	156.77	Ind1	0.3	Ind3	10	2.195
6	120.31	156.77	Ind1	0.3	Ind3	5	1.805
6	120.31	156.77	Ind1	0.3	Ind2	3	1.091
6	120.31	156.77	Ind1	0.3	Ind2	0.01	0.615
6	120.31	156.77	Ind1	0.3	Ind2	30	1.235
6	120.31	156.77	Ind1	0.3	Ind2	0.23	0.491
6	120.31	156.77	Ind1	0.3	Ind2	10	1.694
6	120.31	159.44	Ind2	10	Ind3	50	0.787
6	120.31	159.44	Ind2	10	Ind3	7	2.286
6	120.31	159.44	Ind2	10	Ind3	30	1.012
6	120.31	159.44	Ind2	10	Ind3	10	2.195
6	120.31	159.44	Ind2	10	Ind3	5	1.805
6	120.31	159.44	Ind2	10	Ind1	0.2	1.28
6	120.31	159.44	Ind2	10	Ind1	3	1.169
6	120.31	159.44	Ind2	10	Ind1	0.1	1.734
6	120.31	159.44	Ind2	10	Ind1	0.3	1.964
6	120.31	159.44	Ind2	10	Ind1	0.5	0.698
6	120.31	159.44	Ind2	10	Ind1	0.001	0.545
6	167.78	192.29	Ind2	30	Ind3	50	1.158
6	167.78	192.29	Ind2	30	Ind3	3	0.71
6	167.78	192.29	Ind2	30	Ind3	7	0.727
6	167.78	192.29	Ind2	30	Ind3	30	0.471
6	167.78	192.29	Ind2	30	Ind3	10	1.352
6	167.78	192.29	Ind2	30	Ind3	5	0.842
6	167.78	192.29	Ind2	30	Ind1	0.2	0.988
6	167.78	192.29	Ind2	30	Ind1	3	0.533
6	167.78	192.29	Ind2	30	Ind1	0.1	0.675
6	167.78	192.29	Ind2	30	Ind1	0.3	0.592
6	167.78	192.29	Ind2	30	Ind1	0.05	0.528
6	167.78	192.29	Ind2	30	Ind1	0.001	0.484
6	128.93	177.88	Ind3	5	Ind2	3	1.091
6	128.93	177.88	Ind3	5	Ind2	1	0.603
6	128.93	177.88	Ind3	5	Ind2	0.01	0.895
6	128.93	177.88	Ind3	5	Ind2	30	1.273
6	128.93	177.88	Ind3	5	Ind2	0.23	0.645
6	128.93	177.88	Ind3	5	Ind2	10	1.694
6	128.93	177.88	Ind3	5	Ind1	0.2	1.28
6	128.93	177.88	Ind3	5	Ind1	3	1.169
6	128.93	177.88	Ind3	5	Ind1	0.1	1.734
6	128.93	177.88	Ind3	5	Ind1	0.3	1.964
6	128.93	177.88	Ind3	5	Ind1	0.05	0.471
6	128.93	177.88	Ind3	5	Ind1	0.5	0.698
6	128.93	177.88	Ind3	5	Ind1	0.001	0.545
6	124.11	177.88	Ind3	7	Ind2	3	1.091
6	124.11	177.88	Ind3	7	Ind2	1	0.603
6	124.11	177.88	Ind3	7	Ind2	0.01	0.895

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
6	124.11	177.88	Ind3	7	Ind2	30	1.273
6	124.11	177.88	Ind3	7	Ind2	0.23	0.645
6	124.11	177.88	Ind3	7	Ind2	10	1.694
6	124.11	177.88	Ind3	7	Ind1	0.2	1.28
6	124.11	177.88	Ind3	7	Ind1	3	1.169
6	124.11	177.88	Ind3	7	Ind1	0.1	1.734
6	124.11	177.88	Ind3	7	Ind1	0.3	1.964
6	124.11	177.88	Ind3	7	Ind1	0.05	0.471
6	124.11	177.88	Ind3	7	Ind1	0.5	0.698
6	124.11	177.88	Ind3	7	Ind1	0.001	0.545
6	120.31	192.29	Ind3	10	Ind2	3	1.091
6	120.31	192.29	Ind3	10	Ind2	1	0.603
6	120.31	192.29	Ind3	10	Ind2	0.01	0.896
6	120.31	192.29	Ind3	10	Ind2	30	1.273
6	120.31	192.29	Ind3	10	Ind2	0.23	0.645
6	120.31	192.29	Ind3	10	Ind2	10	1.694
6	120.31	192.29	Ind3	10	Ind1	0.2	1.28
6	120.31	192.29	Ind3	10	Ind1	3	1.169
6	120.31	192.29	Ind3	10	Ind1	0.1	1.734
6	120.31	192.29	Ind3	10	Ind1	0.3	1.964
6	120.31	192.29	Ind3	10	Ind1	0.05	0.528
6	120.31	192.29	Ind3	10	Ind1	0.5	0.698
6	120.31	192.29	Ind3	10	Ind1	0.001	0.545
6	104.71	151.42	Ind3	30	Ind2	3	1.091
6	104.71	151.42	Ind3	30	Ind2	0.01	0.85
6	104.71	151.42	Ind3	30	Ind2	30	1.235
6	104.71	151.42	Ind3	30	Ind2	0.23	0.457
6	104.71	151.42	Ind3	30	Ind2	10	1.694
6	104.71	151.42	Ind3	30	Ind1	0.2	1.28
6	104.71	151.42	Ind3	30	Ind1	3	1.169
6	104.71	151.42	Ind3	30	Ind1	0.1	1.734
6	104.71	151.42	Ind3	30	Ind1	0.3	1.964
6	104.71	151.42	Ind3	30	Ind1	0.5	0.698
7	74.38	89.88	Ind1	0.001	Ind3	1	0.846
7	74.38	89.88	Ind1	0.001	Ind3	0.01	0.775
7	74.38	89.88	Ind1	0.001	Ind3	7	0.573
7	74.38	89.88	Ind1	0.001	Ind2	0.16	0.561
7	74.38	89.88	Ind1	0.001	Ind2	1	1.162
7	74.38	89.88	Ind1	0.001	Ind2	0.5	1.06
7	10.68	33.05	Ind2	0.16	Ind1	3	0.457
7	10.68	33.05	Ind2	0.16	Ind1	0.1	0.563
7	10.68	33.05	Ind2	0.16	Ind1	0.05	0.645
7	63.67	76.71	Ind2	1	Ind3	1	0.846
7	63.67	76.71	Ind2	1	Ind3	0.01	0.509
7	63.67	76.71	Ind2	1	Ind3	7	0.966
7	63.67	76.71	Ind2	1	Ind1	3	0.472
7	63.67	76.71	Ind2	1	Ind1	0.001	1.348

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
8	104.33	122.96	Ind2	1	Ind3	50	1.149
8	104.33	122.96	Ind2	1	Ind3	1	0.521
8	104.33	122.96	Ind2	1	Ind3	3	0.596
8	104.33	122.96	Ind2	1	Ind3	10	0.821
8	104.33	122.96	Ind2	1	Ind1	0.2	0.642
8	104.33	122.96	Ind2	1	Ind1	0.1	1.063
8	104.33	122.96	Ind2	1	Ind1	0.3	0.416
9	146.83	163.84	Ind1	0.001	Ind3	3	0.615
9	8.37	60.59	Ind1	0.03	Ind3	10	0.811
9	8.37	60.59	Ind1	0.03	Ind2	0.16	0.573
9	8.37	60.59	Ind1	0.03	Ind2	0.01	0.722
9	8.37	60.59	Ind1	0.03	Ind2	30	0.604
10	127.11	155.73	Ind1	0.05	Ind3	1	1.324
10	127.11	155.73	Ind1	0.05	Ind3	7	0.4
10	127.11	155.73	Ind1	0.05	Ind3	10	0.506
10	127.11	155.73	Ind1	0.05	Ind2	1	0.687
10	127.11	155.73	Ind1	0.05	Ind2	0.23	1.407
10	127.11	155.73	Ind1	0.05	Ind2	0.5	0.614
10	118.94	130.9	Ind3	1	Ind2	1	0.874
10	118.94	130.9	Ind3	1	Ind2	0.23	0.986
10	118.94	130.9	Ind3	1	Ind1	0.05	0.966
10	118.94	130.9	Ind3	1	Ind1	0.5	0.566
10	118.94	130.9	Ind3	1	Ind1	0.001	0.444
11	22.56	131.26	Ind1	0.1	Ind3	50	2.421
11	22.56	131.26	Ind1	0.1	Ind3	3	0.925
11	22.56	131.26	Ind1	0.1	Ind3	7	1.037
11	22.56	131.26	Ind1	0.1	Ind3	30	1.069
11	22.56	131.26	Ind1	0.1	Ind3	10	1.592
11	22.56	131.26	Ind1	0.1	Ind3	5	1.031
11	22.56	131.26	Ind1	0.1	Ind2	3	1.064
11	22.56	131.26	Ind1	0.1	Ind2	0.16	0.614
11	22.56	131.26	Ind1	0.1	Ind2	1	1.593
11	22.56	131.26	Ind1	0.1	Ind2	0.01	0.885
11	22.56	131.26	Ind1	0.1	Ind2	30	0.879
11	22.56	131.26	Ind1	0.1	Ind2	10	1.265
11	51.95	119.07	Ind1	0.3	Ind3	50	2.097
11	51.95	119.07	Ind1	0.3	Ind3	3	0.925
11	51.95	119.07	Ind1	0.3	Ind3	7	1.037
11	51.95	119.07	Ind1	0.3	Ind3	30	0.955
11	51.95	119.07	Ind1	0.3	Ind3	10	1.592
11	51.95	119.07	Ind1	0.3	Ind3	5	1.031
11	51.95	119.07	Ind1	0.3	Ind2	3	1.064
11	51.95	119.07	Ind1	0.3	Ind2	0.16	0.614
11	51.95	119.07	Ind1	0.3	Ind2	1	1.593
11	51.95	119.07	Ind1	0.3	Ind2	0.01	0.885
11	51.95	119.07	Ind1	0.3	Ind2	30	0.853
11	51.95	119.07	Ind1	0.3	Ind2	10	1.265

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
11	59.77	93.12	Ind1	3	Ind3	50	1.18
11	59.77	93.12	Ind1	3	Ind3	3	0.925
11	59.77	93.12	Ind1	3	Ind3	7	1.037
11	59.77	93.12	Ind1	3	Ind3	30	0.741
11	59.77	93.12	Ind1	3	Ind3	10	1.592
11	59.77	93.12	Ind1	3	Ind3	5	1.013
11	59.77	93.12	Ind1	3	Ind2	3	1.064
11	59.77	93.12	Ind1	3	Ind2	1	1.593
11	59.77	93.12	Ind1	3	Ind2	0.01	0.885
11	59.77	93.12	Ind1	3	Ind2	30	0.603
11	59.77	93.12	Ind1	3	Ind2	10	1.265
11	53.02	91.47	Ind2	1	Ind3	50	1.18
11	53.02	91.47	Ind2	1	Ind3	3	0.925
11	53.02	91.47	Ind2	1	Ind3	7	1.037
11	53.02	91.47	Ind2	1	Ind3	30	0.777
11	53.02	91.47	Ind2	1	Ind3	10	1.592
11	53.02	91.47	Ind2	1	Ind3	5	1.031
11	53.02	91.47	Ind2	1	Ind1	0.2	1.009
11	53.02	91.47	Ind2	1	Ind1	3	1.591
11	53.02	91.47	Ind2	1	Ind1	0.1	1.797
11	53.02	91.47	Ind2	1	Ind1	0.3	1.714
11	53.02	91.47	Ind2	1	Ind1	0.5	0.799
11	53.02	91.47	Ind2	1	Ind1	0.03	0.572
11	19.86	79.43	Ind2	10	Ind3	50	1.476
11	19.86	79.43	Ind2	10	Ind3	3	0.925
11	19.86	79.43	Ind2	10	Ind3	7	1.013
11	19.86	79.43	Ind2	10	Ind3	30	1.069
11	19.86	79.43	Ind2	10	Ind3	10	0.896
11	19.86	79.43	Ind2	10	Ind3	5	1.031
11	19.86	79.43	Ind2	10	Ind1	0.2	1.002
11	19.86	79.43	Ind2	10	Ind1	3	1.482
11	19.86	79.43	Ind2	10	Ind1	0.1	1.455
11	19.86	79.43	Ind2	10	Ind1	0.3	1.714
11	19.86	79.43	Ind2	10	Ind1	0.5	0.611
11	19.86	79.43	Ind2	10	Ind1	0.03	0.572
11	19.86	79.43	Ind2	10	Ind1	0.001	0.463
11	86.08	110.73	Ind2	10	Ind3	50	1.665
11	86.08	110.73	Ind2	10	Ind3	3	0.823
11	86.08	110.73	Ind2	10	Ind3	7	1.037
11	86.08	110.73	Ind2	10	Ind3	30	0.864
11	86.08	110.73	Ind2	10	Ind3	10	1.592
11	86.08	110.73	Ind2	10	Ind3	5	0.953
11	86.08	110.73	Ind2	10	Ind1	0.2	1.009
11	86.08	110.73	Ind2	10	Ind1	3	1.516
11	86.08	110.73	Ind2	10	Ind1	0.1	1.797
11	86.08	110.73	Ind2	10	Ind1	0.3	1.643
11	86.08	110.73	Ind2	10	Ind1	0.5	0.799

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
11	86.08	105.74	Ind3	10	Ind2	3	1.064
11	86.08	105.74	Ind3	10	Ind2	0.16	0.614
11	86.08	105.74	Ind3	10	Ind2	1	1.55
11	86.08	105.74	Ind3	10	Ind2	0.01	0.885
11	86.08	105.74	Ind3	10	Ind2	30	0.603
11	86.08	105.74	Ind3	10	Ind2	10	1.265
11	86.08	105.74	Ind3	10	Ind1	0.2	1.009
11	86.08	105.74	Ind3	10	Ind1	3	1.516
11	86.08	105.74	Ind3	10	Ind1	0.1	1.797
11	86.08	105.74	Ind3	10	Ind1	0.3	1.643
11	86.08	105.74	Ind3	10	Ind1	0.5	0.799
11	98.98	138.56	Ind3	50	Ind2	3	0.959
11	98.98	138.56	Ind3	50	Ind2	0.16	0.614
11	98.98	138.56	Ind3	50	Ind2	0.01	0.795
11	98.98	138.56	Ind3	50	Ind2	30	0.879
11	98.98	138.56	Ind3	50	Ind2	10	0.762
11	98.98	138.56	Ind3	50	Ind1	0.2	0.864
11	98.98	138.56	Ind3	50	Ind1	0.1	1.336
11	98.98	138.56	Ind3	50	Ind1	0.3	1.306
12	123.33	144.83	Ind3	1	Ind2	0.16	0.513
12	123.33	144.83	Ind3	1	Ind2	1	0.511
12	123.33	144.83	Ind3	1	Ind2	0.23	0.828
13	76.26	93.52	Ind1	0.1	Ind3	7	1.013
13	76.26	93.52	Ind1	0.1	Ind3	30	0.899
13	76.26	93.52	Ind1	0.1	Ind3	10	1.44
13	76.26	93.52	Ind1	0.1	Ind2	0.16	0.982
13	76.26	93.52	Ind1	0.1	Ind2	30	1.191
13	76.26	93.52	Ind1	0.1	Ind2	10	1.019
13	75.19	93.52	Ind2	10	Ind3	7	1.013
13	75.19	93.52	Ind2	10	Ind3	30	0.899
13	75.19	93.52	Ind2	10	Ind3	10	1.44
13	75.19	93.52	Ind2	10	Ind1	0.1	1.21
13	75.19	93.52	Ind2	10	Ind1	0.3	0.625
13	75.19	93.52	Ind2	10	Ind1	0.5	0.66
13	75.19	93.52	Ind2	10	Ind1	0.03	0.524
13	67.12	114.98	Ind2	30	Ind3	50	0.525
13	67.12	114.98	Ind2	30	Ind3	0.01	0.413
13	67.12	114.98	Ind2	30	Ind3	7	1.013
13	67.12	114.98	Ind2	30	Ind3	30	0.899
13	67.12	114.98	Ind2	30	Ind3	10	1.44
13	67.12	114.98	Ind2	30	Ind1	0.1	1.21
13	67.12	114.98	Ind2	30	Ind1	0.3	0.625
13	67.12	114.98	Ind2	30	Ind1	0.5	0.66
13	67.12	114.98	Ind2	30	Ind1	0.03	0.524
13	77.47	114.98	Ind3	10	Ind2	0.16	0.982
13	77.47	114.98	Ind3	10	Ind2	30	1.191
13	77.47	114.98	Ind3	10	Ind2	10	1.019

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
13	77.47	114.98	Ind3	10	Ind1	0.1	1.21
13	77.47	114.98	Ind3	10	Ind1	0.3	0.625
13	77.47	114.98	Ind3	10	Ind1	0.5	0.66
13	77.47	114.98	Ind3	10	Ind1	0.03	0.524
13	68.44	102.73	Ind3	30	Ind2	0.16	0.982
13	68.44	102.73	Ind3	30	Ind2	0.01	0.416
13	68.44	102.73	Ind3	30	Ind2	30	1.191
13	68.44	102.73	Ind3	30	Ind2	0.23	0.407
13	68.44	102.73	Ind3	30	Ind2	10	1.019
13	68.44	102.73	Ind3	30	Ind1	0.1	1.21
13	68.44	102.73	Ind3	30	Ind1	0.3	0.625
13	68.44	102.73	Ind3	30	Ind1	0.5	0.66
13	68.44	102.73	Ind3	30	Ind1	0.03	0.524
14	0	21.51	Ind1	0.5	Ind3	50	0.701
14	0	21.51	Ind1	0.5	Ind3	7	0.663
14	0	21.51	Ind1	0.5	Ind3	30	0.642
14	0	21.51	Ind1	0.5	Ind2	0.01	0.628
14	0	21.51	Ind1	0.5	Ind2	30	0.67
14	99.88	125.88	Ind1	3	Ind3	3	0.579
14	99.88	125.88	Ind1	3	Ind3	7	0.653
14	99.88	125.88	Ind1	3	Ind3	10	0.906
14	99.88	125.88	Ind1	3	Ind3	5	2.022
14	99.88	125.88	Ind1	3	Ind2	3	0.448
14	98.96	134.3	Ind3	5	Ind2	3	0.448
14	98.96	134.3	Ind3	5	Ind1	3	1.447
16	65.1	104.45	Ind1	0.1	Ind3	50	1.14
16	65.1	104.45	Ind1	0.1	Ind3	3	0.723
16	65.1	104.45	Ind1	0.1	Ind3	7	0.572
16	65.1	104.45	Ind1	0.1	Ind3	30	0.93
16	65.1	104.45	Ind1	0.1	Ind3	10	1.228
16	65.1	104.45	Ind1	0.1	Ind2	3	2.139
16	65.1	104.45	Ind1	0.1	Ind2	0.01	0.421
16	65.1	104.45	Ind1	0.1	Ind2	30	1.026
16	65.1	104.45	Ind1	0.1	Ind2	10	0.871
16	15.32	108.32	Ind1	0.2	Ind3	50	1.14
16	15.32	108.32	Ind1	0.2	Ind3	1	1.097
16	15.32	108.32	Ind1	0.2	Ind3	3	0.723
16	15.32	108.32	Ind1	0.2	Ind3	7	0.822
16	15.32	108.32	Ind1	0.2	Ind3	30	0.977
16	15.32	108.32	Ind1	0.2	Ind3	10	1.228
16	15.32	108.32	Ind1	0.2	Ind2	3	2.139
16	15.32	108.32	Ind1	0.2	Ind2	0.16	0.542
16	15.32	108.32	Ind1	0.2	Ind2	0.01	0.748
16	15.32	108.32	Ind1	0.2	Ind2	30	1.026
16	15.32	108.32	Ind1	0.2	Ind2	0.23	0.518
16	15.32	108.32	Ind1	0.2	Ind2	10	0.959
16	59.68	108.32	Ind1	0.3	Ind3	50	1.14

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
16	59.68	108.32	Ind1	0.3	Ind3	3	0.723
16	59.68	108.32	Ind1	0.3	Ind3	7	0.572
16	59.68	108.32	Ind1	0.3	Ind3	30	0.93
16	59.68	108.32	Ind1	0.3	Ind3	10	1.228
16	59.68	108.32	Ind1	0.3	Ind2	3	2.139
16	59.68	108.32	Ind1	0.3	Ind2	0.01	0.48
16	59.68	108.32	Ind1	0.3	Ind2	30	1.026
16	59.68	108.32	Ind1	0.3	Ind2	10	0.871
16	1.08	29.97	Ind1	0.5	Ind3	50	0.748
16	1.08	29.97	Ind1	0.5	Ind3	1	0.914
16	1.08	29.97	Ind1	0.5	Ind3	7	0.822
16	1.08	29.97	Ind1	0.5	Ind3	30	0.977
16	1.08	29.97	Ind1	0.5	Ind3	10	0.857
16	1.08	29.97	Ind1	0.5	Ind2	3	0.501
16	1.08	29.97	Ind1	0.5	Ind2	0.16	0.542
16	1.08	29.97	Ind1	0.5	Ind2	0.01	0.748
16	1.08	29.97	Ind1	0.5	Ind2	30	0.578
16	1.08	29.97	Ind1	0.5	Ind2	0.23	0.518
16	1.08	29.97	Ind1	0.5	Ind2	10	0.959
16	35.44	99.44	Ind2	3	Ind3	50	1.14
16	35.44	99.44	Ind2	3	Ind3	1	1.097
16	35.44	99.44	Ind2	3	Ind3	3	0.723
16	35.44	99.44	Ind2	3	Ind3	7	0.572
16	35.44	99.44	Ind2	3	Ind3	30	0.93
16	35.44	99.44	Ind2	3	Ind3	10	1.228
16	35.44	99.44	Ind2	3	Ind1	0.2	1.721
16	35.44	99.44	Ind2	3	Ind1	3	0.444
16	35.44	99.44	Ind2	3	Ind1	0.1	1.474
16	35.44	99.44	Ind2	3	Ind1	0.3	1.198
16	35.44	99.44	Ind2	3	Ind1	0.05	1.515
16	35.44	99.44	Ind2	3	Ind1	0.5	0.652
16	35.44	99.44	Ind2	3	Ind1	0.03	1.251
16	35.44	99.44	Ind2	3	Ind1	0.001	0.463
16	11.46	34.22	Ind2	10	Ind3	50	0.748
16	11.46	34.22	Ind2	10	Ind3	1	0.932
16	11.46	34.22	Ind2	10	Ind3	7	0.822
16	11.46	34.22	Ind2	10	Ind3	30	0.977
16	11.46	34.22	Ind2	10	Ind3	10	0.857
16	11.46	34.22	Ind2	10	Ind1	0.2	0.965
16	11.46	34.22	Ind2	10	Ind1	3	0.603
16	11.46	34.22	Ind2	10	Ind1	0.1	0.442
16	11.46	34.22	Ind2	10	Ind1	0.3	0.766
16	11.46	34.22	Ind2	10	Ind1	0.05	1.426
16	11.46	34.22	Ind2	10	Ind1	0.5	1.201
16	27.05	59.68	Ind3	1	Ind2	3	1.333
16	27.05	59.68	Ind3	1	Ind2	30	0.578
16	27.05	59.68	Ind3	1	Ind2	0.23	0.518

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
16	27.05	59.68	Ind3	1	Ind2	10	0.747
16	27.05	59.68	Ind3	1	Ind1	0.2	1.25
16	27.05	59.68	Ind3	1	Ind1	3	0.444
16	27.05	59.68	Ind3	1	Ind1	0.1	0.442
16	27.05	59.68	Ind3	1	Ind1	0.3	0.766
16	27.05	59.68	Ind3	1	Ind1	0.05	1.515
16	27.05	59.68	Ind3	1	Ind1	0.5	0.565
16	27.05	59.68	Ind3	1	Ind1	0.001	0.463
16	69.05	104.45	Ind3	10	Ind2	3	2.139
16	69.05	104.45	Ind3	10	Ind2	0.01	0.421
16	69.05	104.45	Ind3	10	Ind2	30	1.026
16	69.05	104.45	Ind3	10	Ind2	10	0.871
16	69.05	104.45	Ind3	10	Ind1	0.2	1.721
16	69.05	104.45	Ind3	10	Ind1	0.1	1.474
16	69.05	104.45	Ind3	10	Ind1	0.3	1.198
16	69.05	104.45	Ind3	10	Ind1	0.05	0.671
16	69.05	104.45	Ind3	10	Ind1	0.5	0.652
16	69.05	104.45	Ind3	10	Ind1	0.03	1.251
16	15.32	42.81	Ind3	30	Ind2	3	0.759
16	15.32	42.81	Ind3	30	Ind2	0.16	0.542
16	15.32	42.81	Ind3	30	Ind2	0.01	0.748
16	15.32	42.81	Ind3	30	Ind2	30	0.578
16	15.32	42.81	Ind3	30	Ind2	0.23	0.518
16	15.32	42.81	Ind3	30	Ind2	10	0.959
16	15.32	42.81	Ind3	30	Ind1	0.2	0.965
16	15.32	42.81	Ind3	30	Ind1	3	0.563
16	15.32	42.81	Ind3	30	Ind1	0.1	0.442
16	15.32	42.81	Ind3	30	Ind1	0.3	0.766
16	15.32	42.81	Ind3	30	Ind1	0.05	1.426
16	15.32	42.81	Ind3	30	Ind1	0.5	1.145
16	50.6	99.44	Ind3	30	Ind2	3	2.139
16	50.6	99.44	Ind3	30	Ind2	30	1.026
16	50.6	99.44	Ind3	30	Ind2	0.23	0.425
16	50.6	99.44	Ind3	30	Ind2	10	0.871
16	50.6	99.44	Ind3	30	Ind1	0.2	1.721
16	50.6	99.44	Ind3	30	Ind1	3	0.444
16	50.6	99.44	Ind3	30	Ind1	0.1	1.474
16	50.6	99.44	Ind3	30	Ind1	0.3	1.198
16	50.6	99.44	Ind3	30	Ind1	0.05	1.464
16	50.6	99.44	Ind3	30	Ind1	0.5	0.652
16	50.6	99.44	Ind3	30	Ind1	0.03	1.251
16	50.6	99.44	Ind3	30	Ind1	0.001	0.463
18	90.6	96.48	Ind1	0.03	Ind3	3	0.494
18	90.6	96.48	Ind1	0.03	Ind2	0.16	0.631
18	90.6	96.48	Ind1	0.03	Ind2	1	1.02
18	90.6	96.48	Ind1	0.03	Ind2	0.5	0.446
18	0	31.17	Ind1	0.2	Ind3	50	0.814

Peaks Identified as Shared by the Indenoisoquinolines

Chr	Peak Start (cM)	Peak End (cM)	Peak Drug	Peak Dose (mM)	Related Drug	Related Dose (mM)	Related Max LOD
18	0	31.17	Ind1	0.2	Ind3	1	0.531
18	0	31.17	Ind1	0.2	Ind3	30	0.81
18	0	31.17	Ind1	0.2	Ind3	10	0.719
18	0	31.17	Ind1	0.2	Ind2	3	0.505
18	0	31.17	Ind1	0.2	Ind2	0.16	0.612
18	0	31.17	Ind1	0.2	Ind2	1	0.584
18	0	31.17	Ind1	0.2	Ind2	30	0.884
18	0	31.17	Ind1	0.2	Ind2	0.5	1.049
18	0	31.17	Ind1	0.2	Ind2	10	0.535
19	52.59	77.54	Ind1	0.1	Ind3	0.01	0.736
19	52.59	77.54	Ind1	0.1	Ind3	7	1.384
19	52.59	77.54	Ind1	0.1	Ind3	10	0.741
19	52.59	77.54	Ind1	0.1	Ind2	3	0.989
19	52.59	77.54	Ind1	0.1	Ind2	0.01	0.55
19	52.59	77.54	Ind1	0.1	Ind2	30	0.437
19	52.59	77.54	Ind1	0.1	Ind2	0.23	0.641
19	52.59	77.54	Ind1	0.1	Ind2	10	0.441
21	31.26	57.77	Ind1	0.03	Ind3	7	0.564
21	31.26	57.77	Ind1	0.03	Ind3	5	0.426
21	31.26	57.77	Ind1	0.03	Ind2	0.16	0.491
21	31.26	57.77	Ind1	0.03	Ind2	0.23	0.579
21	28.48	51.49	Ind2	0.23	Ind3	7	0.424
21	28.48	51.49	Ind2	0.23	Ind3	5	0.426
21	28.48	51.49	Ind2	0.23	Ind1	0.03	0.778