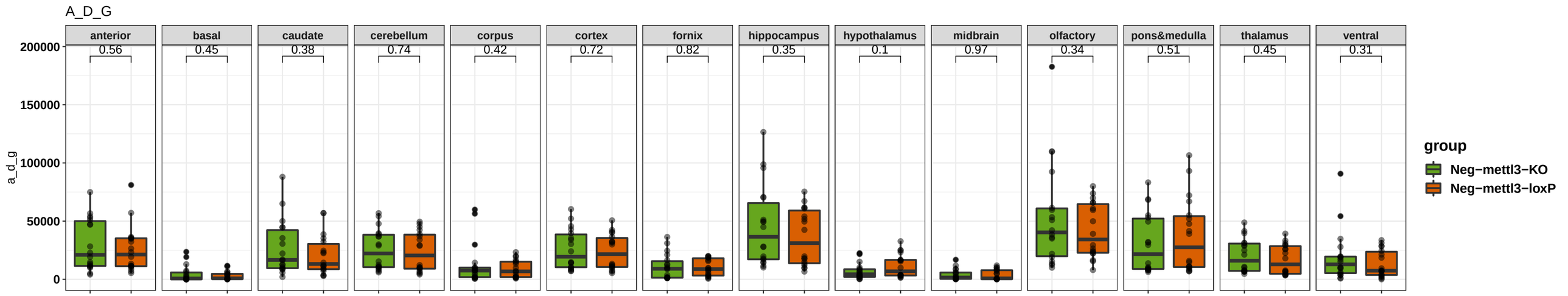
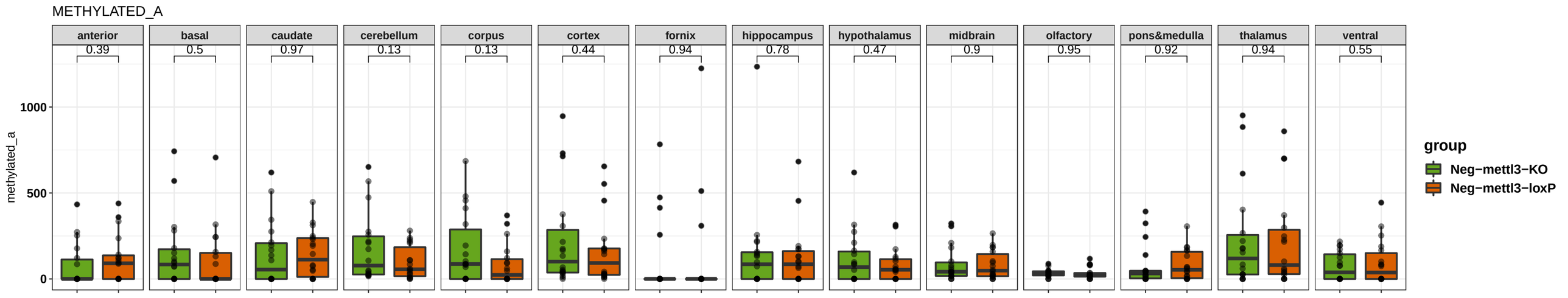
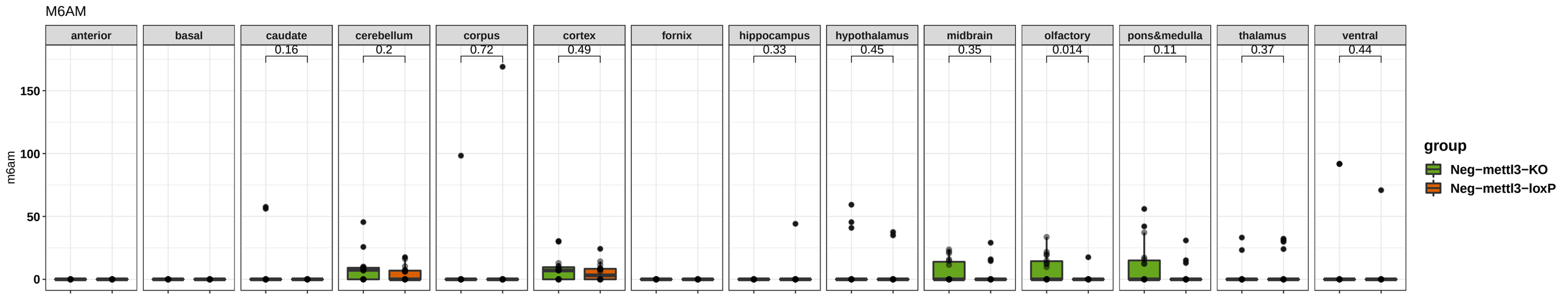
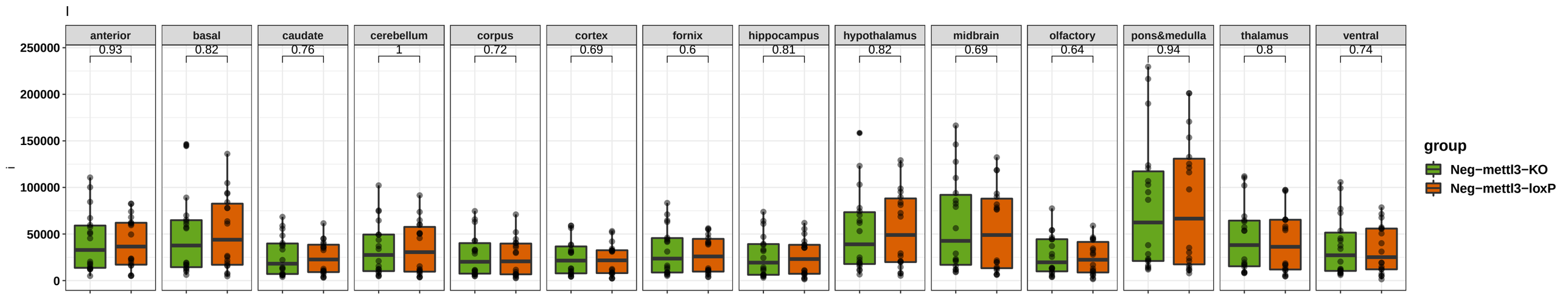
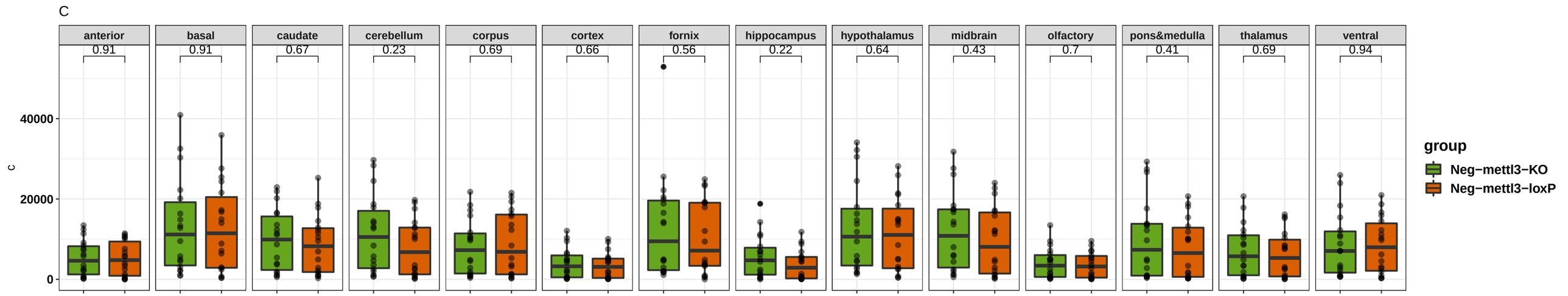
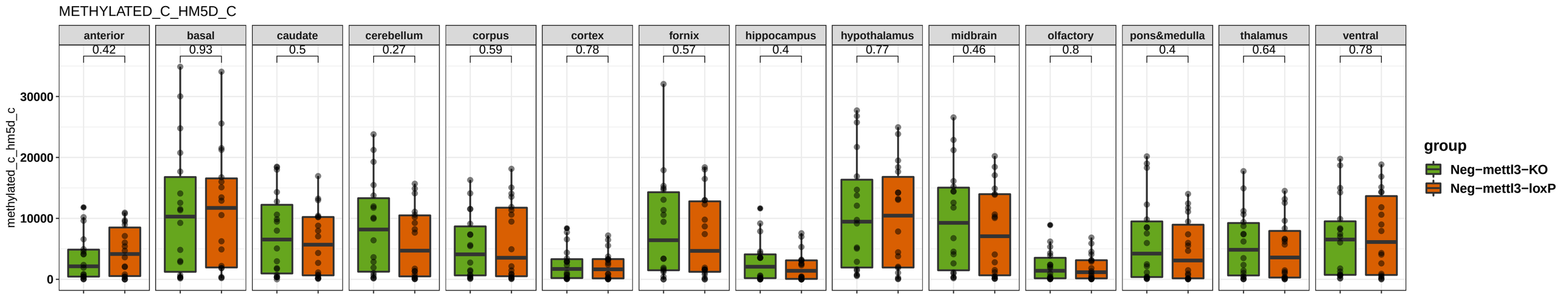

A_D_G
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.56
0.45
0.38
0.74
0.42
0.72
0.82
0.35
0.1
0.97
0.34
0.51
0.45
0.31
200000
150000
100000
50000
0
a_d_g
group
Neg−mettl3−KO
Neg−mettl3−loxP


METHYLATED_A
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.39
0.5
0.97
0.13
0.13
0.44
0.94
0.78
0.47
0.9
0.95
0.92
0.94
0.55
methylated_a
1000
500
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


M6AM
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.16
0.2
0.72
0.49
0.33
0.45
0.35
0.014
0.11
0.37
0.44
m6am
150
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.93
0.82
0.76
1
0.72
0.69
0.6
0.81
0.82
0.69
0.64
0.94
0.8
0.74
250000
200000
150000
100000
50000
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


C
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.91
0.91
0.67
0.23
0.69
0.66
0.56
0.22
0.64
0.43
0.7
0.41
0.69
0.94
40000
20000
0
c
group
Neg−mettl3−KO
Neg−mettl3−loxP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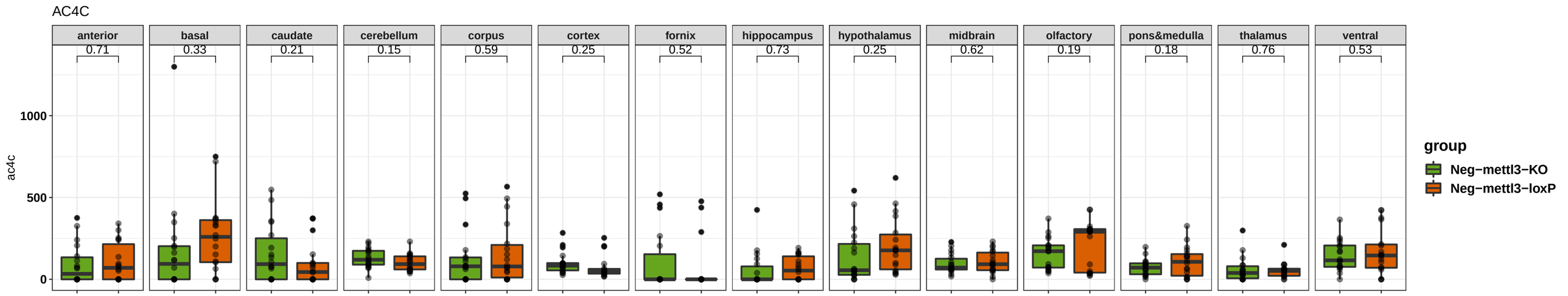
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.42
0.93
0.5
0.27
0.59
0.78
0.57
0.4
0.77
0.46
0.8
0.4
0.64
0.78
methylated_c_hm5d_c
30000
20000
10000
0
group
Neg−mettl3−KO
Neg−mettl3−loxP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caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.71
0.33
0.21
0.15
0.59
0.25
0.52
0.73
0.25
0.62
0.19
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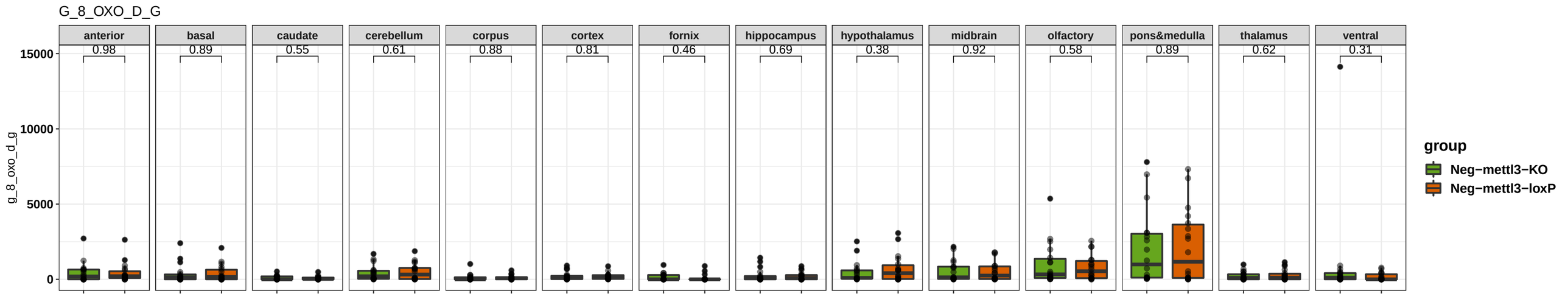
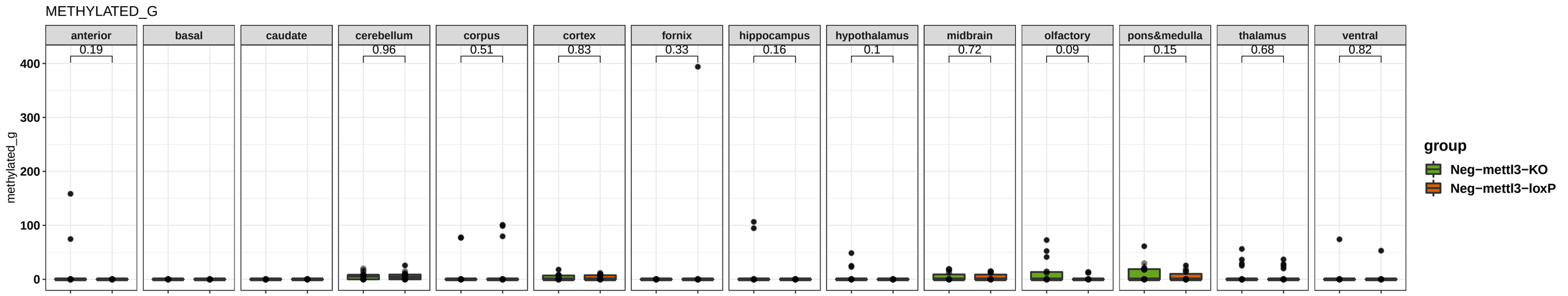
0.76
0.53
ac4c
1000
500
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


G_8_OXO_D_G
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.98
0.89
0.55
0.61
0.88
0.81
0.46
0.69
0.38
0.92
0.58
0.89
0.62
0.31
15000
10000
5000
0
g_8_oxo_d_g
group
Neg−mettl3−KO
Neg−mettl3−loxP


METHYLATED_G
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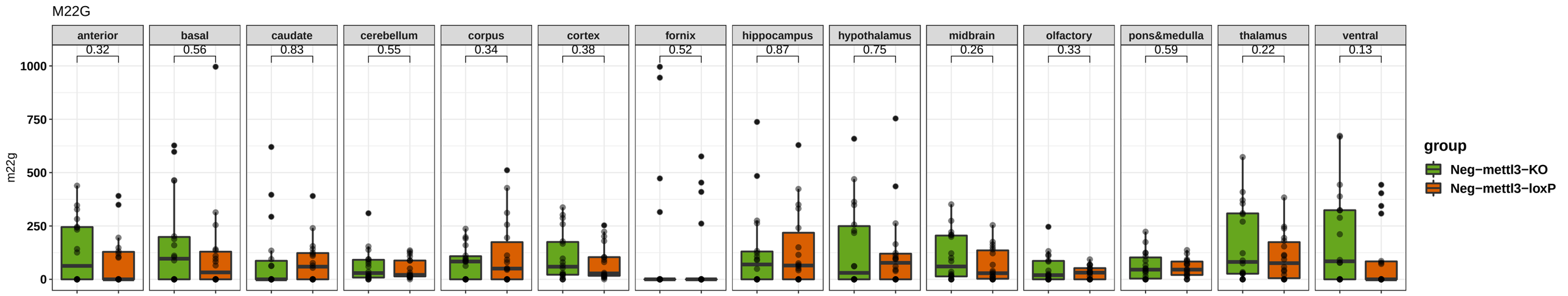
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.19
0.96
0.51
0.83
0.33
0.16
0.1
0.72
0.09
0.15
0.68
0.82
methylated_g
400
300
200
100
0
group
Neg−mettl3−KO
Neg−mettl3−loxP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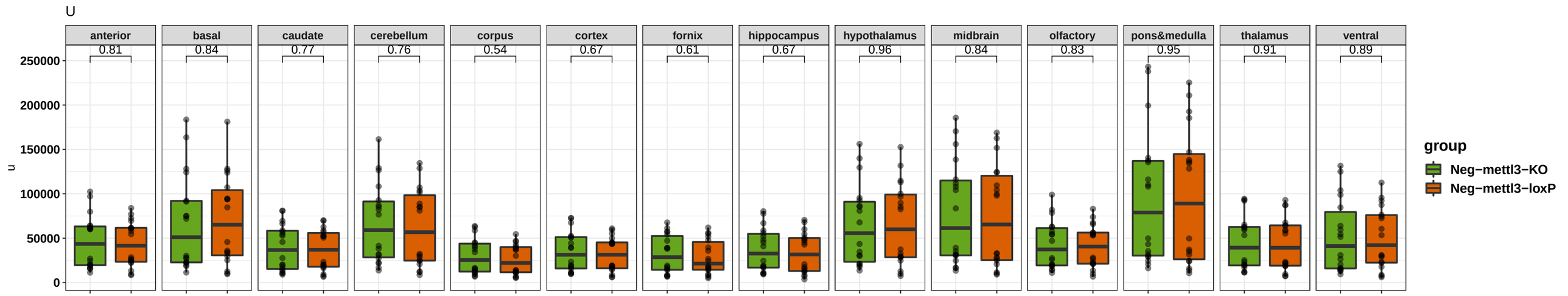
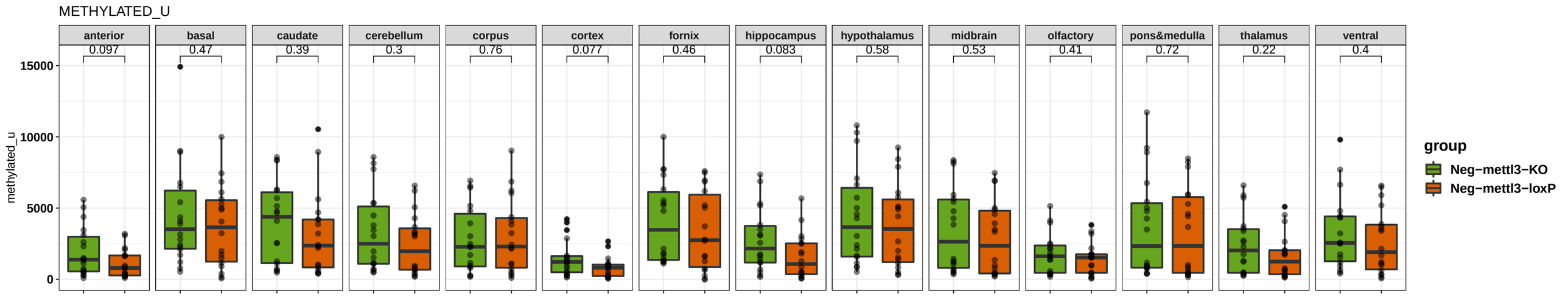
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.32
0.56
0.83
0.55
0.34
0.38
0.52
0.87
0.75
0.26
0.33
0.59
0.22
0.13
m22g
1000
750
500
250
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


U
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.81
0.84
0.77
0.76
0.54
0.67
0.61
0.67
0.96
0.84
0.83
0.95
0.91
0.89
u
250000
200000
150000
100000
50000
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


METHYLATED_U
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cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
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0.47
0.39
0.3
0.76
0.077
0.46
0.083
0.58
0.53
0.41
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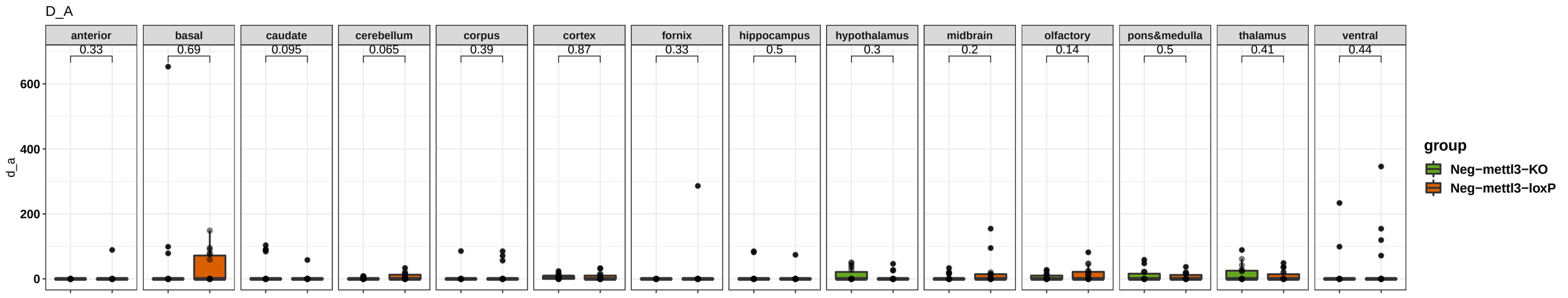
0.4
15000
10000
5000
0
methylated_u
group
Neg−mettl3−KO
Neg−mettl3−loxP


D_A
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.33
0.69
0.095
0.065
0.39
0.87
0.33
0.5
0.3
0.2
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0.44
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600
400
200
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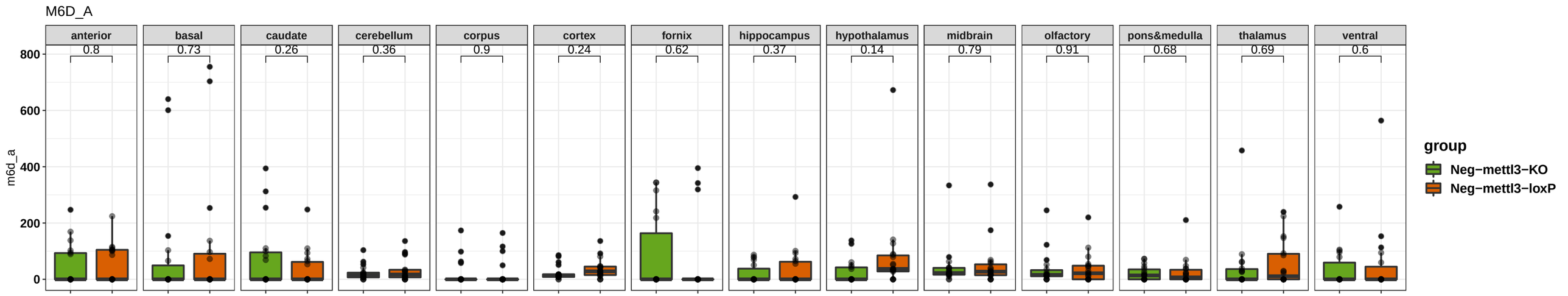
group
Neg−mettl3−KO
Neg−mettl3−loxP


M6D_A
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basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.8
0.73
0.26
0.36
0.9
0.24
0.62
0.37
0.14
0.79
0.91
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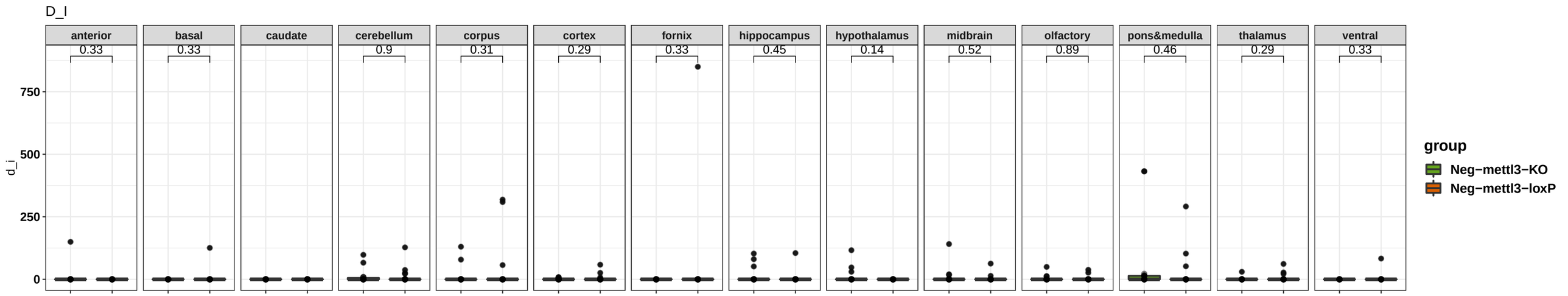
m6d_a
800
600
400
200
0
group
Neg−mettl3−KO
Neg−mettl3−loxP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cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.33
0.33
0.9
0.31
0.29
0.33
0.45
0.14
0.52
0.89
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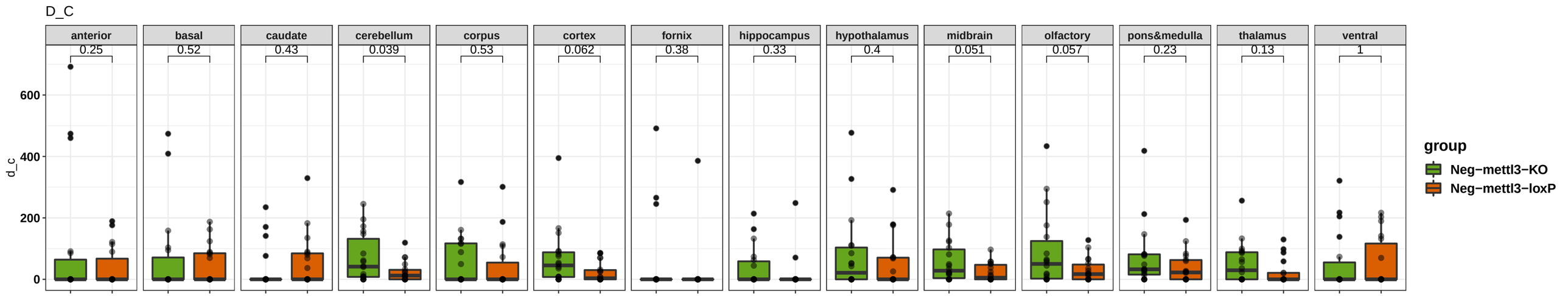
0.33
d_i
750
500
250
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


D_C
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basal
caudate
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corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
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0.52
0.43
0.039
0.53
0.062
0.38
0.33
0.4
0.051
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1
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600
400
200
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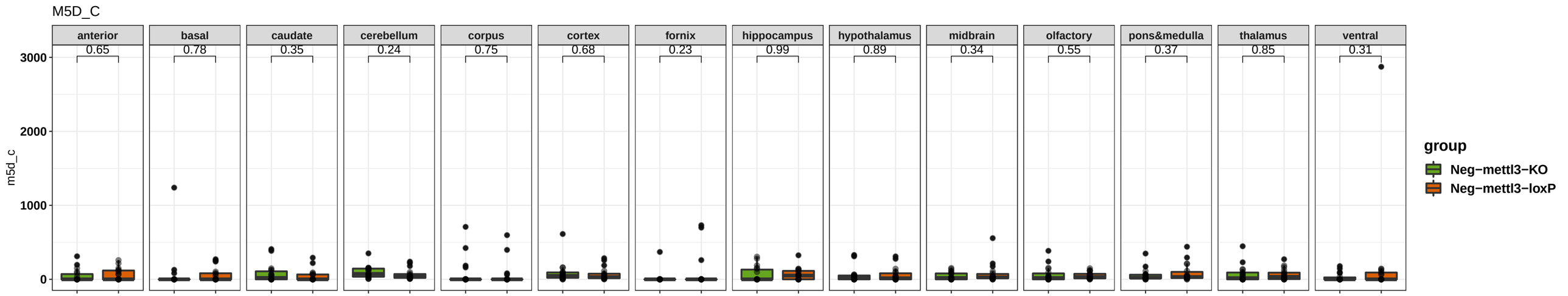
group
Neg−mettl3−KO
Neg−mettl3−loxP


M5D_C
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basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.65
0.78
0.35
0.24
0.75
0.68
0.23
0.99
0.89
0.34
0.55
0.37
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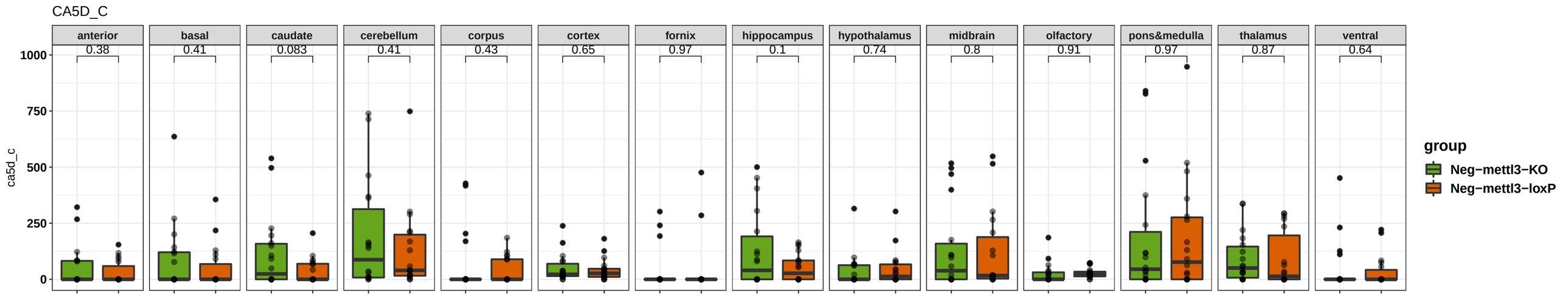
0.31
3000
2000
1000
0
m5d_c
group
Neg−mettl3−KO
Neg−mettl3−loxP


CA5D_C
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basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.38
0.41
0.083
0.41
0.43
0.65
0.97
0.1
0.74
0.8
0.91
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0.87
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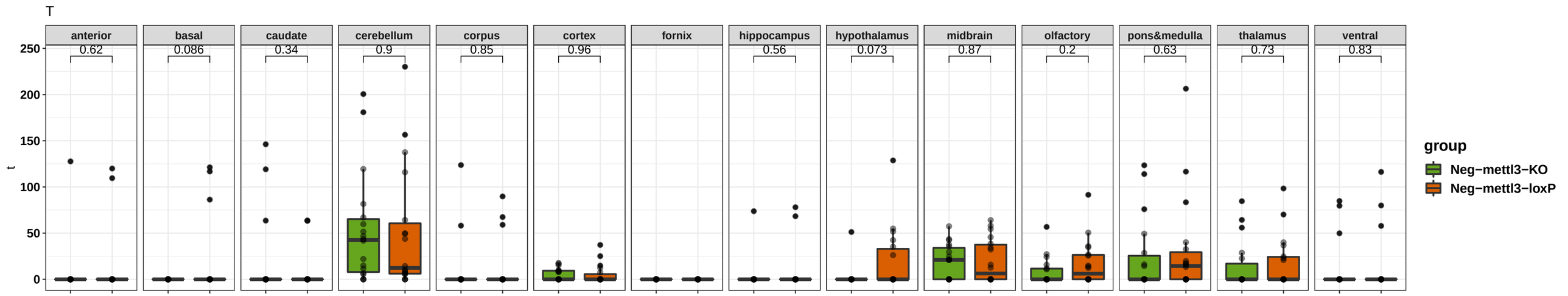
1000
750
500
250
0
ca5d_c
group
Neg−mettl3−KO
Neg−mettl3−loxP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corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
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0.34
0.9
0.85
0.96
0.56
0.073
0.87
0.2
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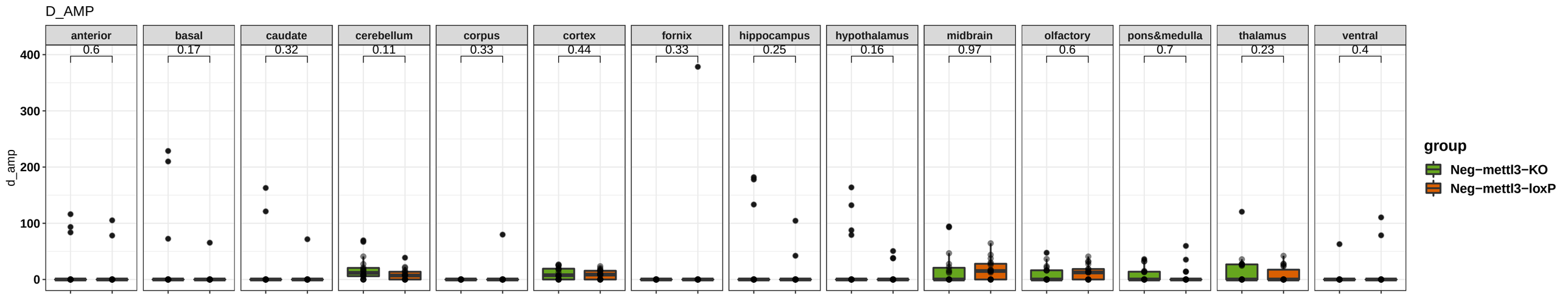
0.73
0.83
t
250
200
150
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP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caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.6
0.17
0.32
0.11
0.33
0.44
0.33
0.25
0.16
0.97
0.6
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d_amp
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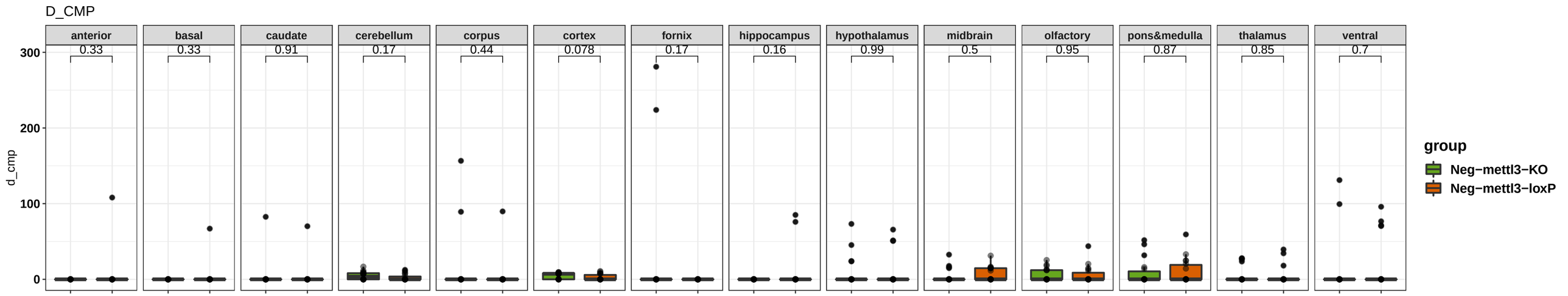
300
200
100
0
group
Neg−mettl3−KO
Neg−mettl3−loxP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basal
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cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
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0.33
0.91
0.17
0.44
0.078
0.17
0.16
0.99
0.5
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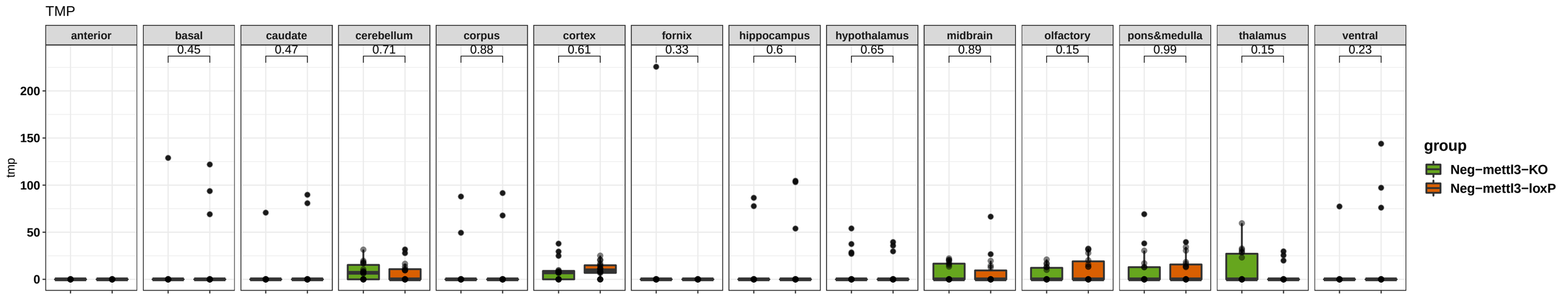
0.7
300
200
100
0
d_cmp
group
Neg−mettl3−KO
Neg−mettl3−loxP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basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
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0.47
0.71
0.88
0.61
0.33
0.6
0.65
0.89
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0.23
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150
100
50
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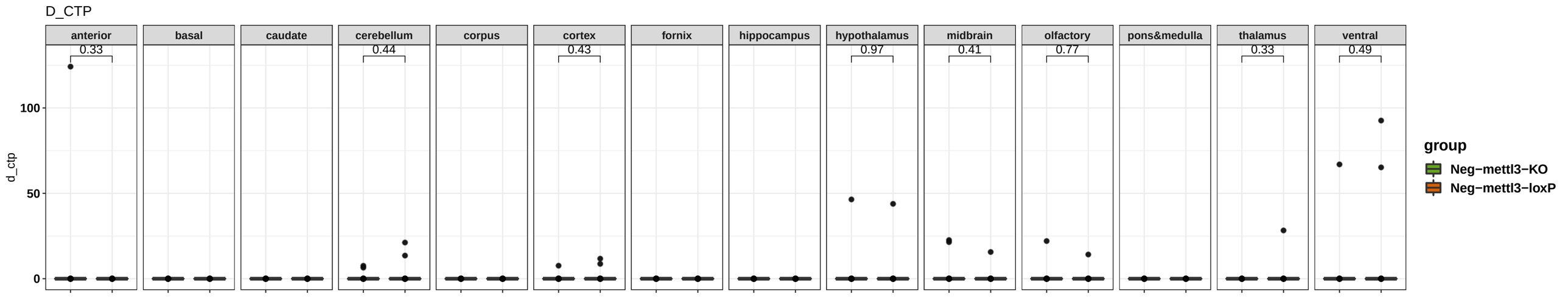
group
Neg−mettl3−KO
Neg−mettl3−loxP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anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.33
0.44
0.43
0.97
0.41
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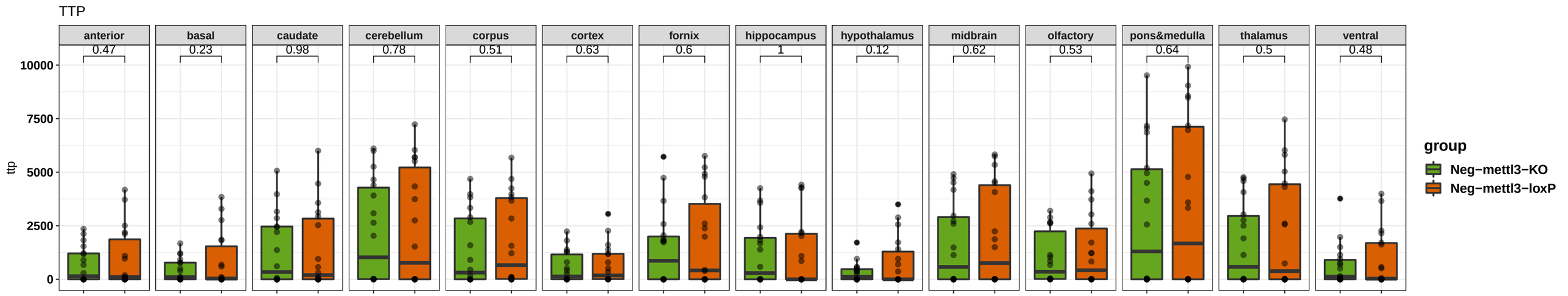
0.49
d_ctp
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


TTP
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basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.47
0.23
0.98
0.78
0.51
0.63
0.6
1
0.12
0.62
0.53
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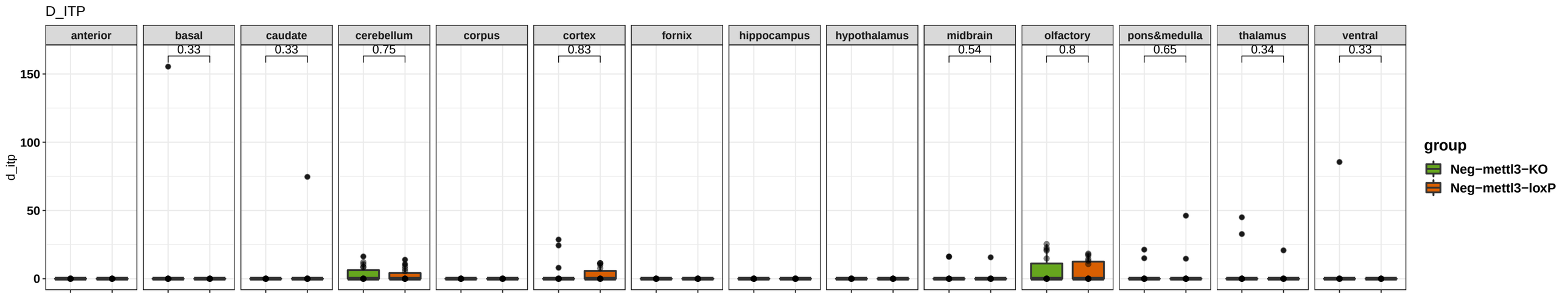
0.48
ttp
10000
7500
5000
2500
0
group
Neg−mettl3−KO
Neg−mettl3−loxP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cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.33
0.33
0.75
0.83
0.54
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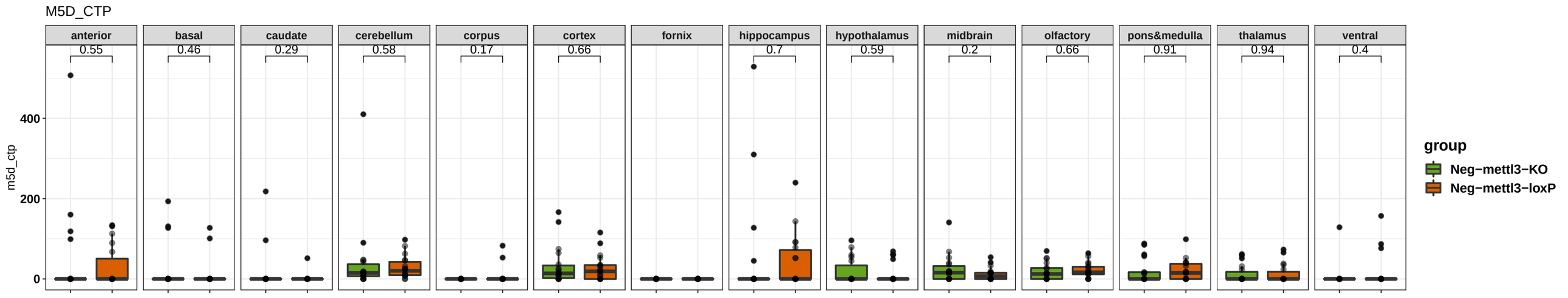
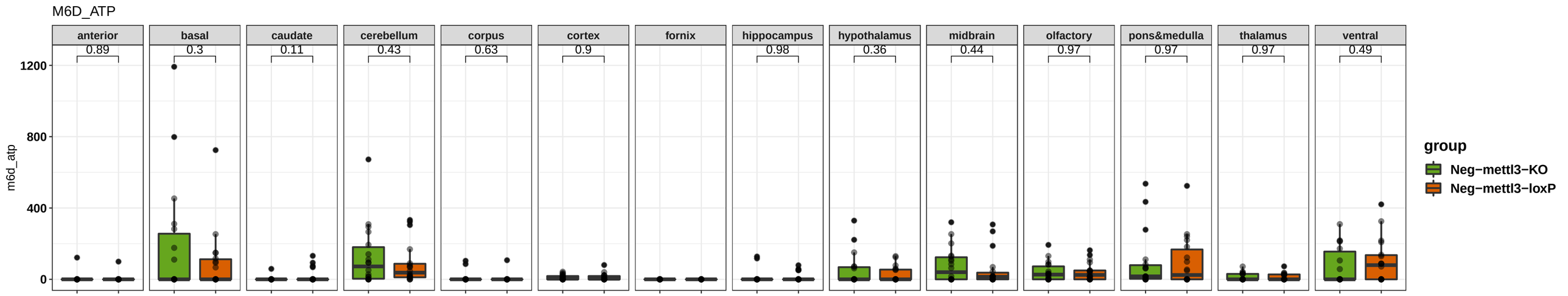
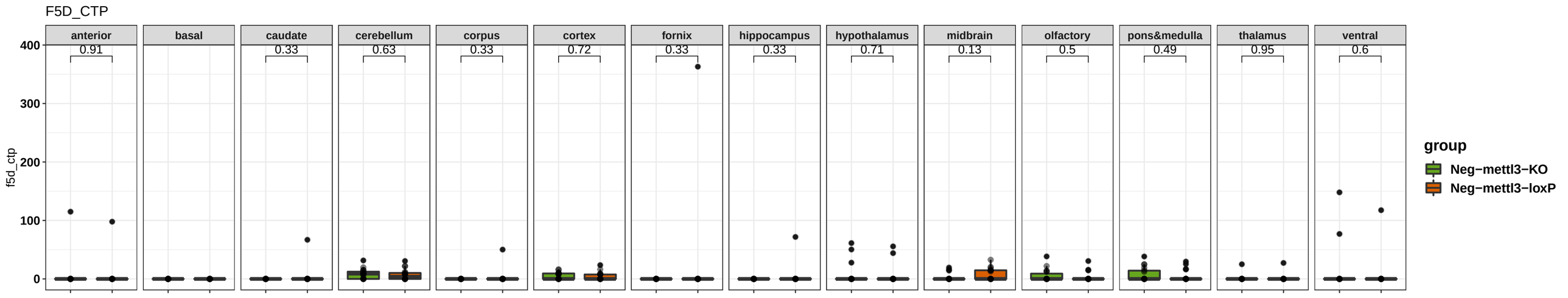
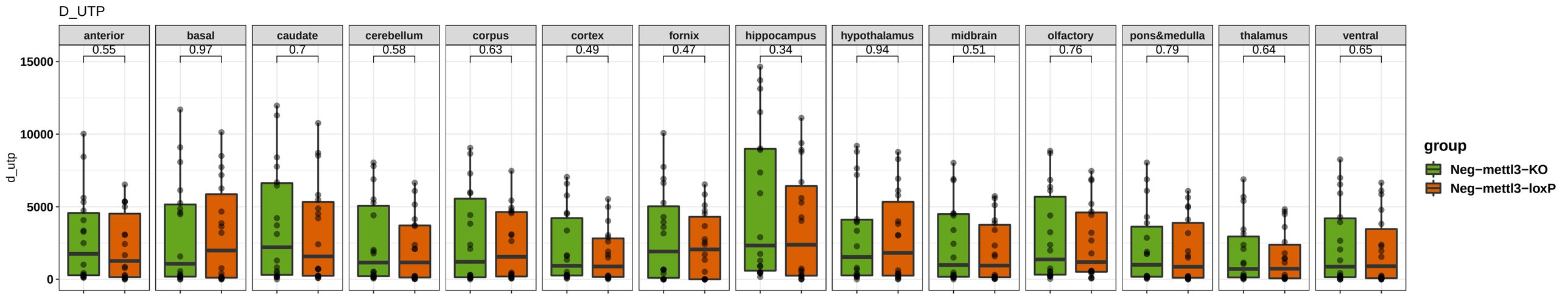
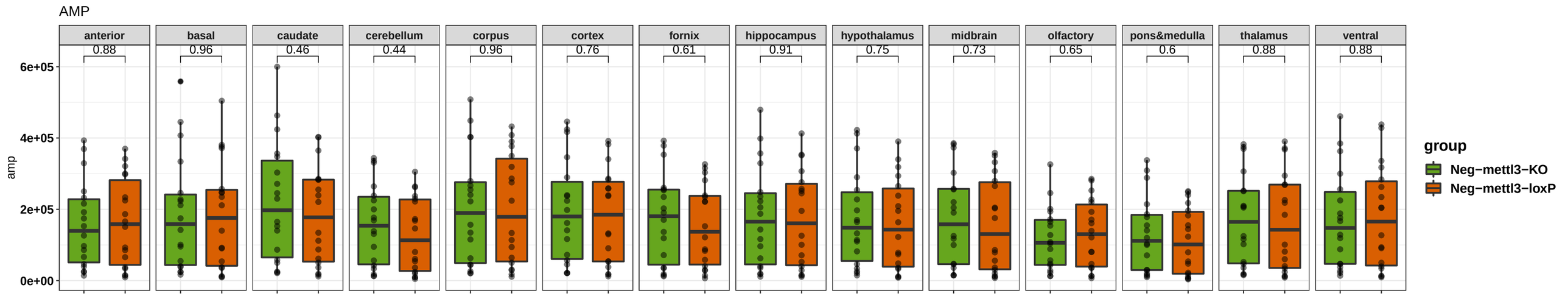
0.33
d_itp
150
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

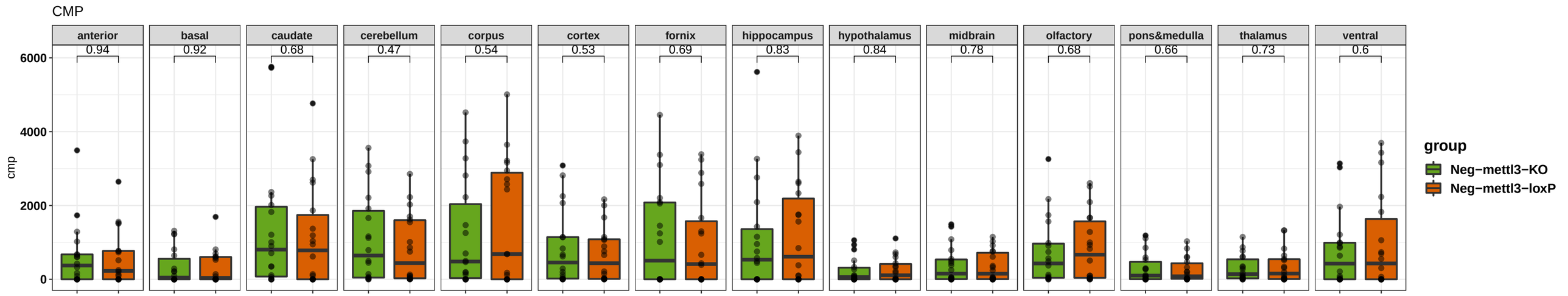

M5D_CTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.55
0.46
0.29
0.58
0.17
0.66
0.7
0.59
0.2
0.66
0.91
0.94
0.4
m5d_ctp
400
200
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

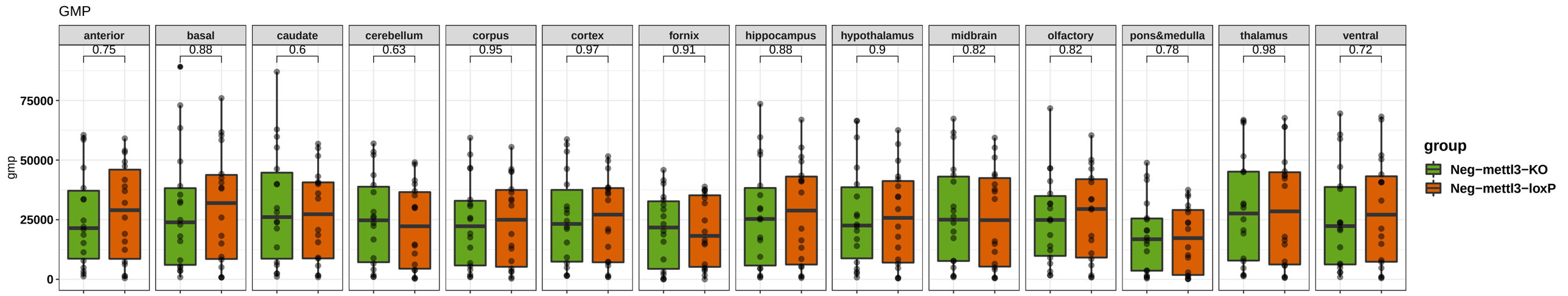

M6D_ATP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.89
0.3
0.11
0.43
0.63
0.9
0.98
0.36
0.44
0.97
0.97
0.97
0.49
1200
800
400
0
m6d_atp
group
Neg−mettl3−KO
Neg−mettl3−loxP

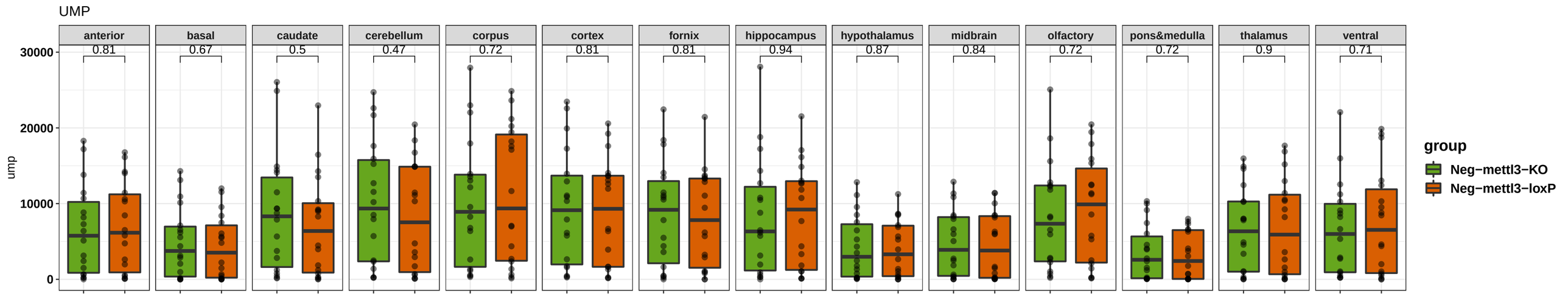

F5D_CTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.91
0.33
0.63
0.33
0.72
0.33
0.33
0.71
0.13
0.5
0.49
0.95
0.6
f5d_ctp
400
300
200
100
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

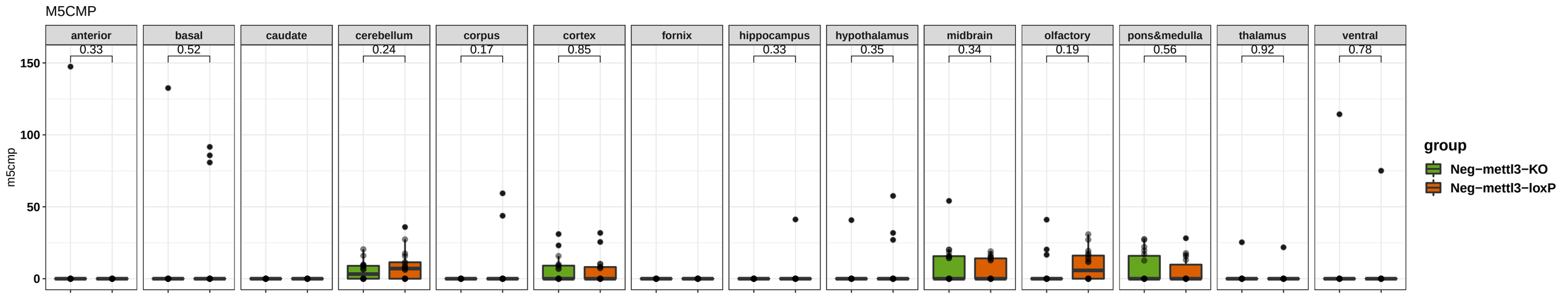

D_UTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.55
0.97
0.7
0.58
0.63
0.49
0.47
0.34
0.94
0.51
0.76
0.79
0.64
0.65
15000
10000
5000
0
d_utp
group
Neg−mettl3−KO
Neg−mettl3−loxP

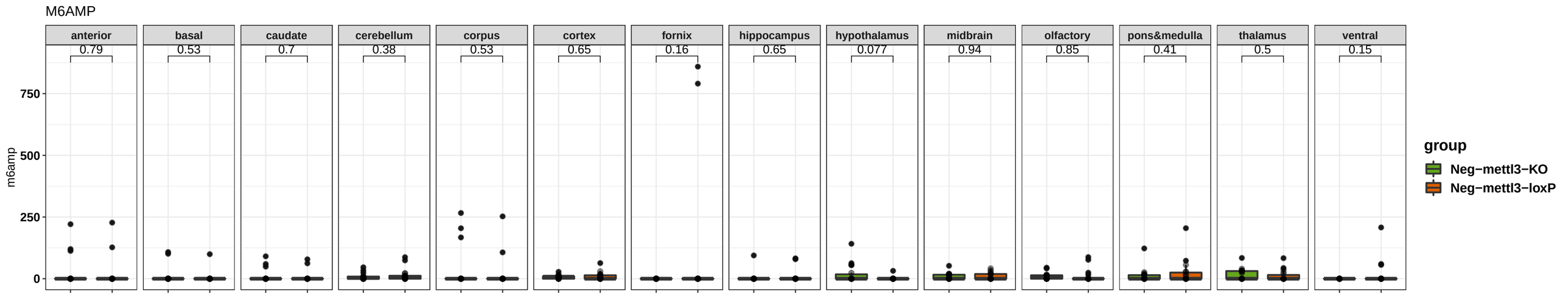

AMP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.88
0.96
0.46
0.44
0.96
0.76
0.61
0.91
0.75
0.73
0.65
0.6
0.88
0.88
amp
6e+05
4e+05
2e+05
0e+00
group
Neg−mettl3−KO
Neg−mettl3−loxP

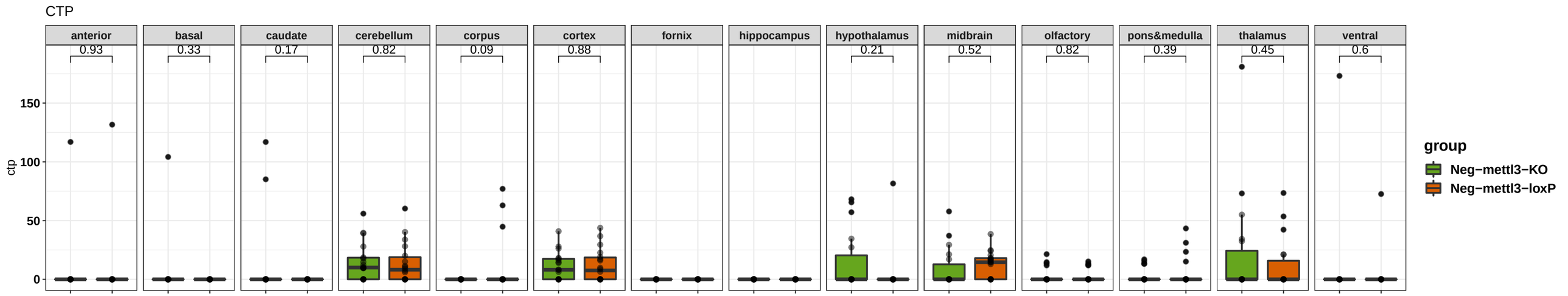

CMP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.94
0.92
0.68
0.47
0.54
0.53
0.69
0.83
0.84
0.78
0.68
0.66
0.73
0.6
6000
4000
2000
0
cmp
group
Neg−mettl3−KO
Neg−mettl3−loxP

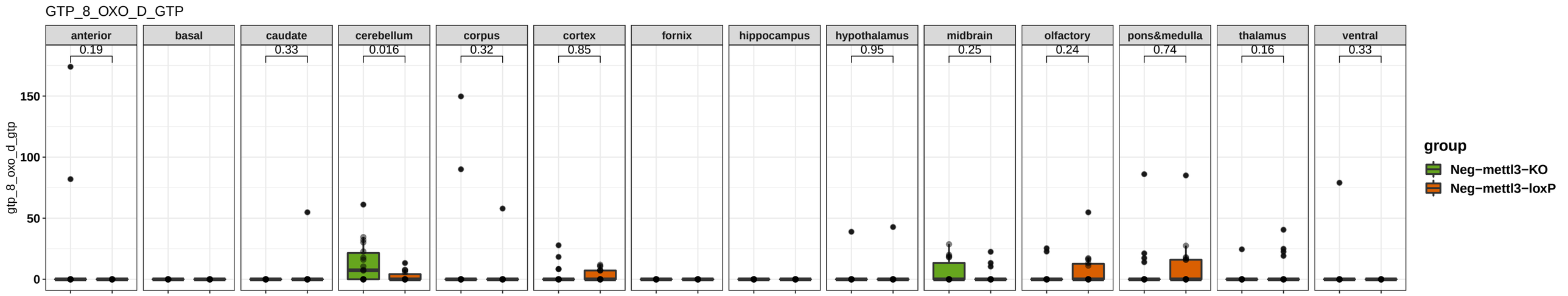

GMP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.75
0.88
0.6
0.63
0.95
0.97
0.91
0.88
0.9
0.82
0.82
0.78
0.98
0.72
gmp
75000
50000
25000
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

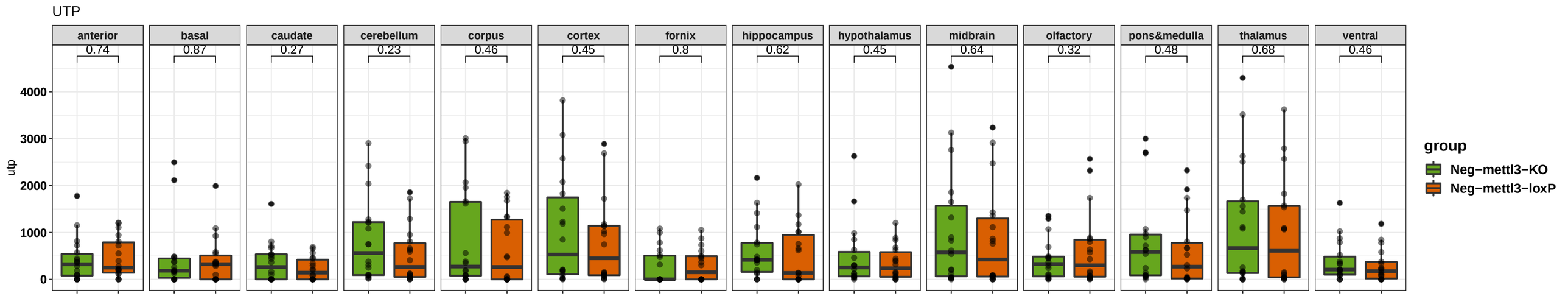

UMP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.81
0.67
0.5
0.47
0.72
0.81
0.81
0.94
0.87
0.84
0.72
0.72
0.9
0.71
ump
30000
20000
10000
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

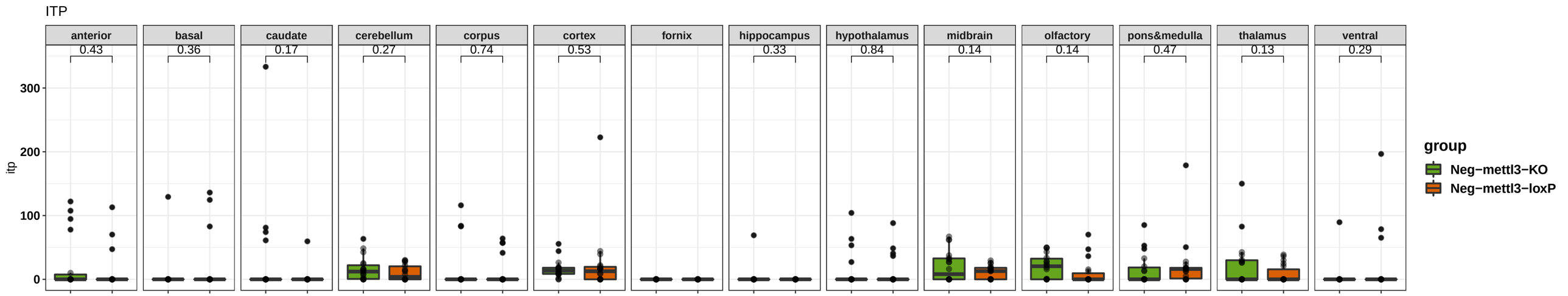

M5CMP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.33
0.52
0.24
0.17
0.85
0.33
0.35
0.34
0.19
0.56
0.92
0.78
m5cmp
150
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

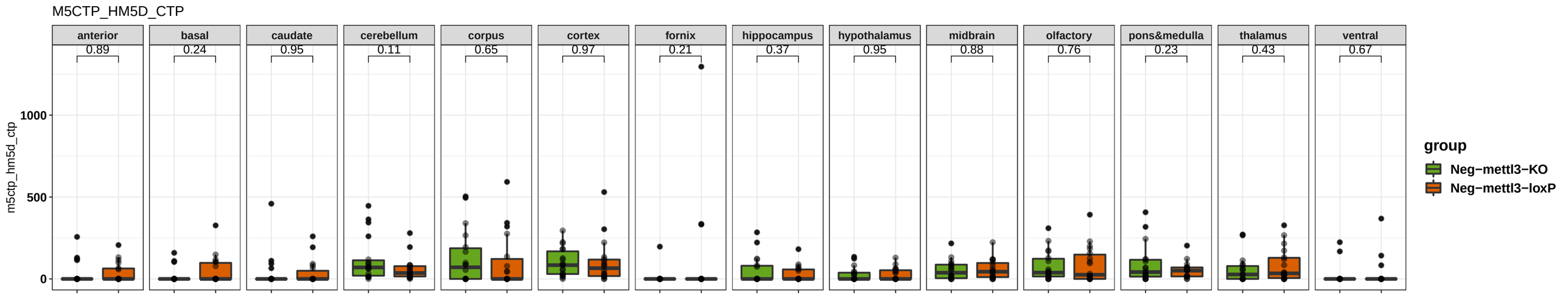

M6AMP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.79
0.53
0.7
0.38
0.53
0.65
0.16
0.65
0.077
0.94
0.85
0.41
0.5
0.15
m6amp
750
500
250
0
group
Neg−mettl3−KO
Neg−mettl3−loxP

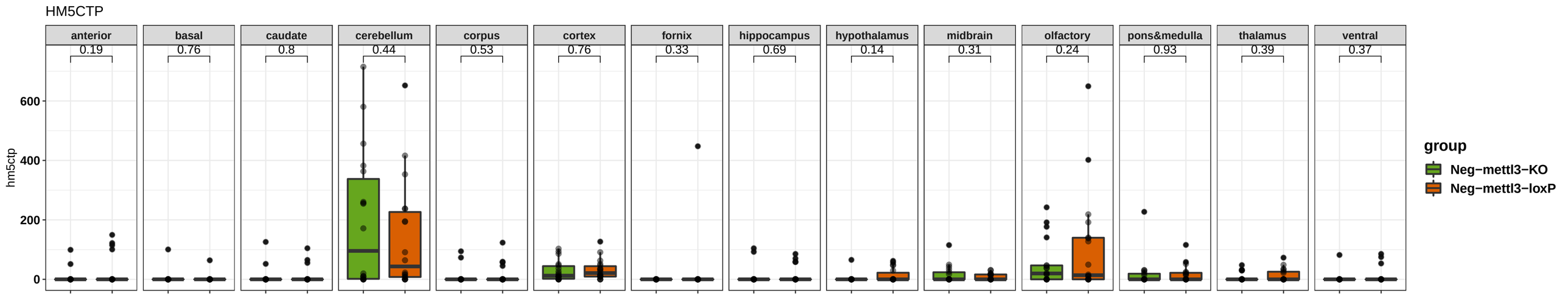

CTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.93
0.33
0.17
0.82
0.09
0.88
0.21
0.52
0.82
0.39
0.45
0.6
ctp
150
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


GTP_8_OXO_D_GTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.19
0.33
0.016
0.32
0.85
0.95
0.25
0.24
0.74
0.16
0.33
gtp_8_oxo_d_gtp
150
100
50
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


UTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.74
0.87
0.27
0.23
0.46
0.45
0.8
0.62
0.45
0.64
0.32
0.48
0.68
0.46
utp
0
1000
2000
3000
4000
group
Neg−mettl3−KO
Neg−mettl3−loxP


ITP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.43
0.36
0.17
0.27
0.74
0.53
0.33
0.84
0.14
0.14
0.47
0.13
0.29
itp
300
200
100
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


M5CTP_HM5D_CTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.89
0.24
0.95
0.11
0.65
0.97
0.21
0.37
0.95
0.88
0.76
0.23
0.43
0.67
m5ctp_hm5d_ctp
1000
500
0
group
Neg−mettl3−KO
Neg−mettl3−loxP


HM5CTP
anterior
basal
caudate
cerebellum
corpus
cortex
fornix
hippocampus
hypothalamus
midbrain
olfactory
pons&medulla
thalamus
ventral
0.19
0.76
0.8
0.44
0.53
0.76
0.33
0.69
0.14
0.31
0.24
0.93
0.39
0.37
hm5ctp
600
400
200
0
group
Neg−mettl3−KO
Neg−mettl3−loxP