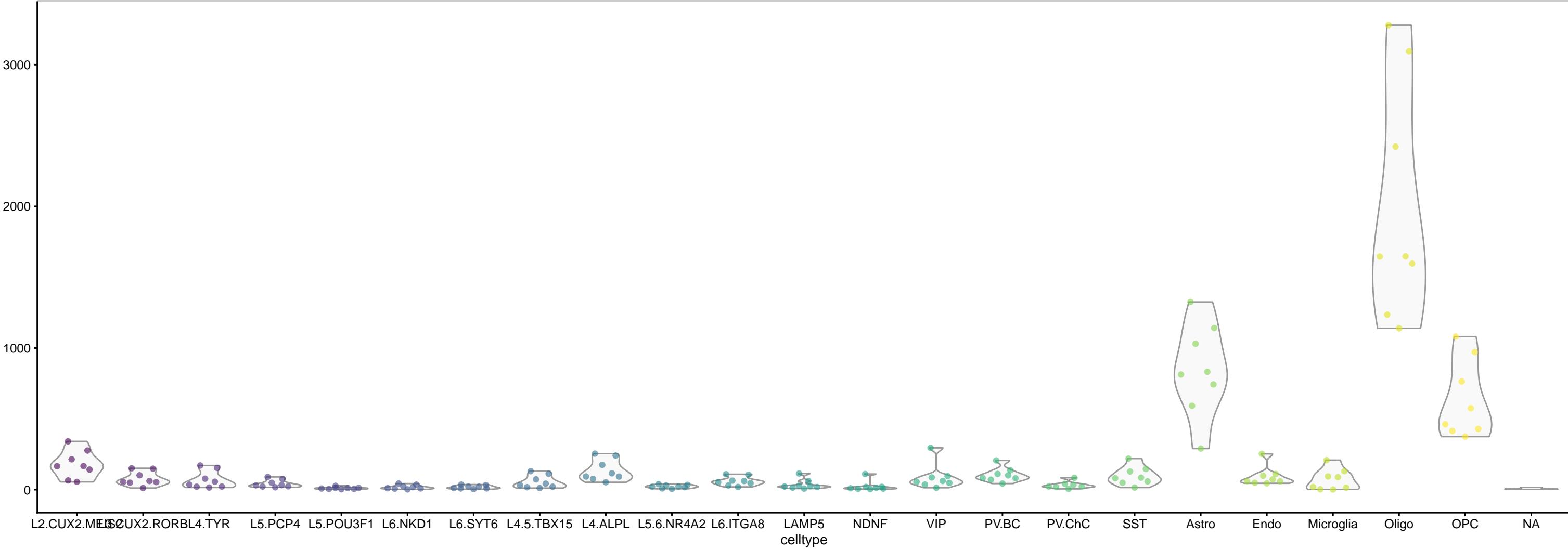


celltype: VIP, gene: PHLDB1, peak:VIP\_2\_PHLDB1,TREH1

PHLDB1

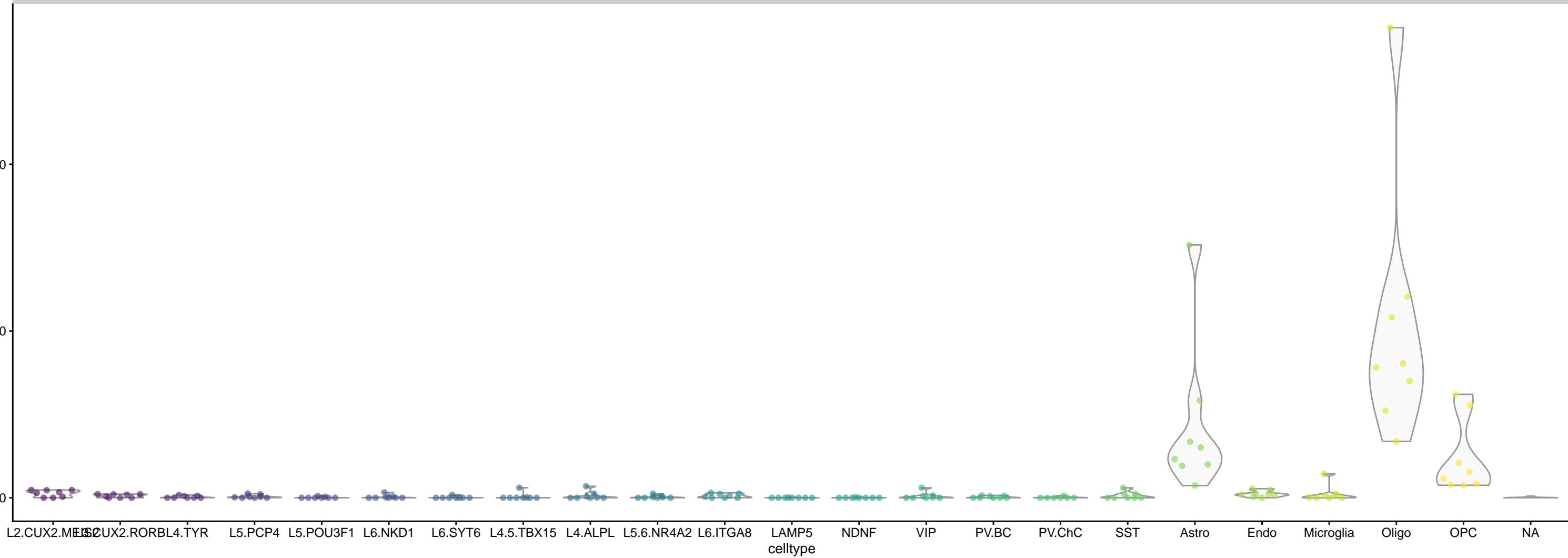
Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: TREH, peak:VIP\_2\_PHLDB1,TREH2

TREH

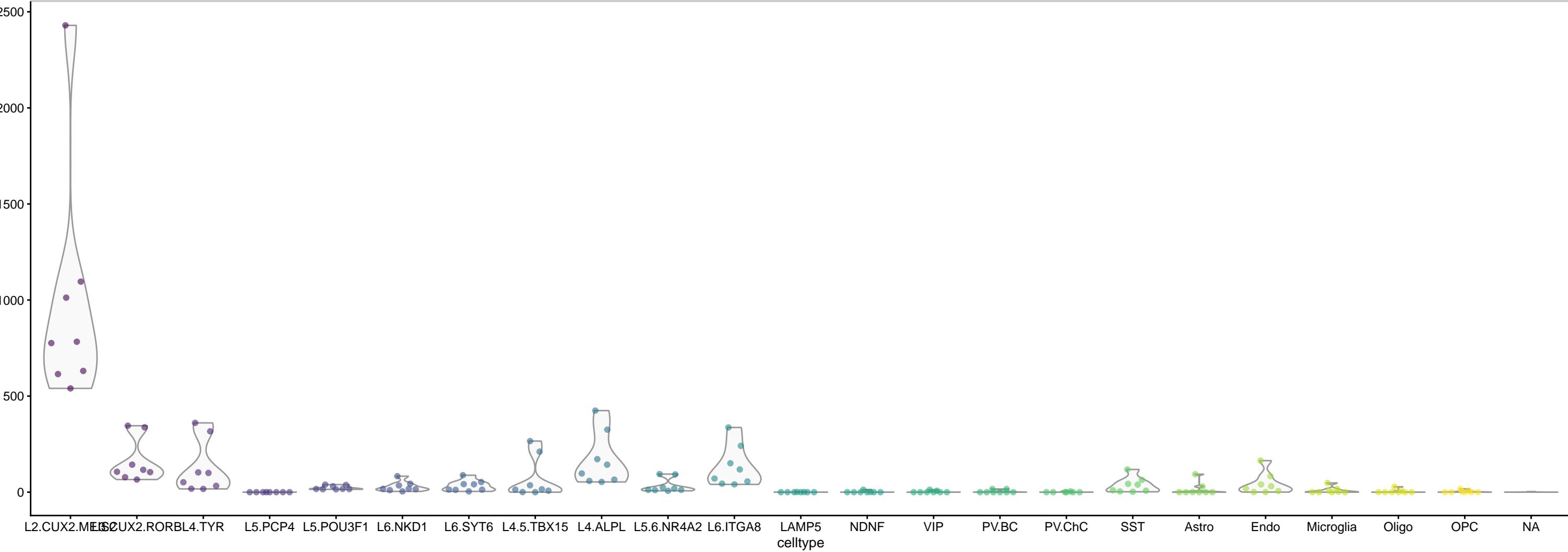
Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: CAPN12, peak:VIP\_5\_CAPN12,LGALS7B1

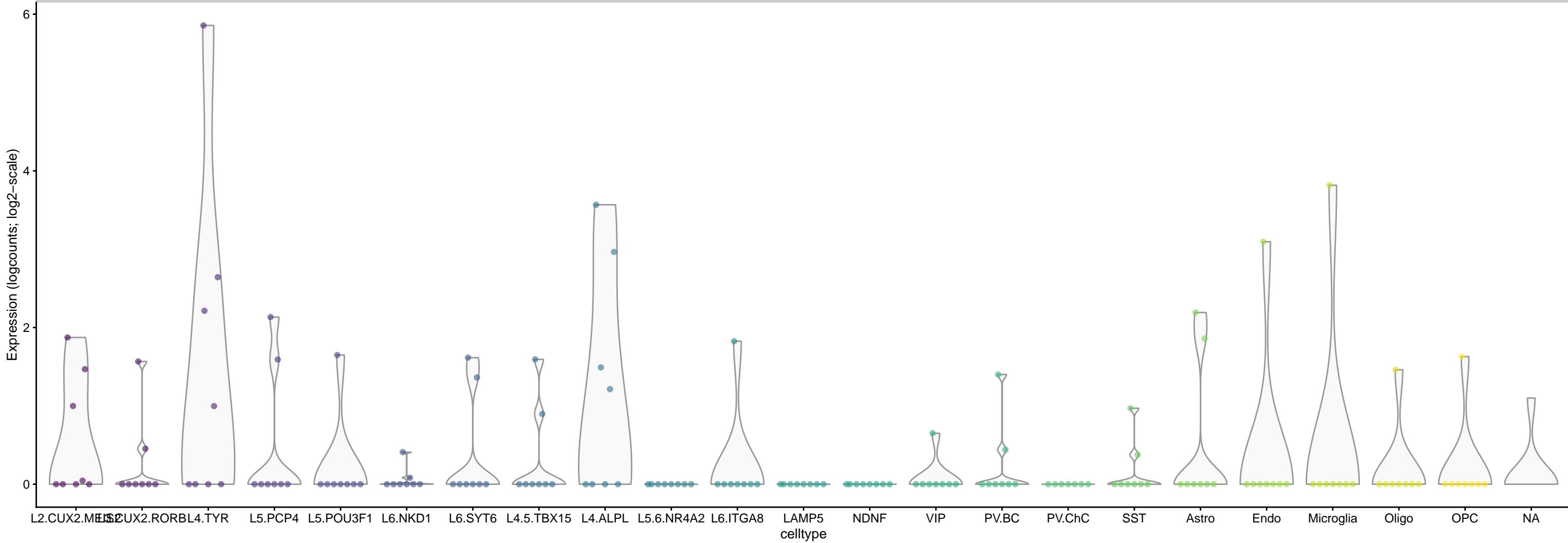
CAPN12

Expression (logcounts; log<sub>2</sub>-scale)



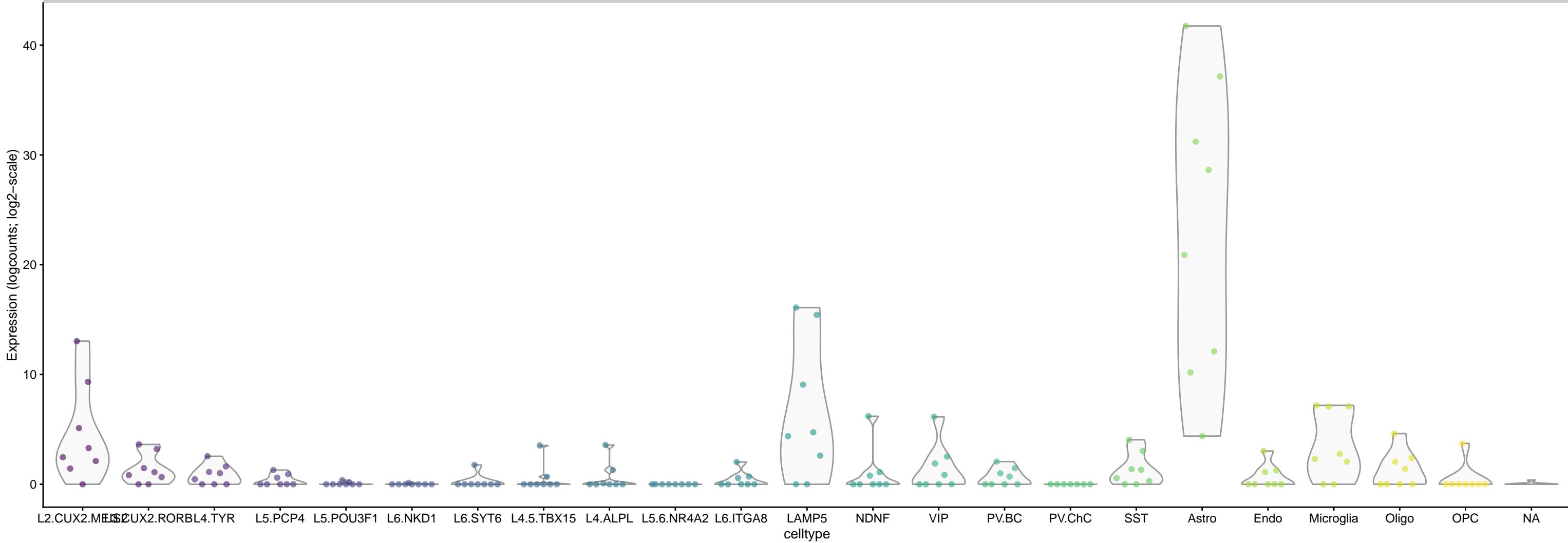
celltype: VIP, gene: LGALS7B, peak:VIP\_5\_CAPN12,LGALS7B2

LGALS7B

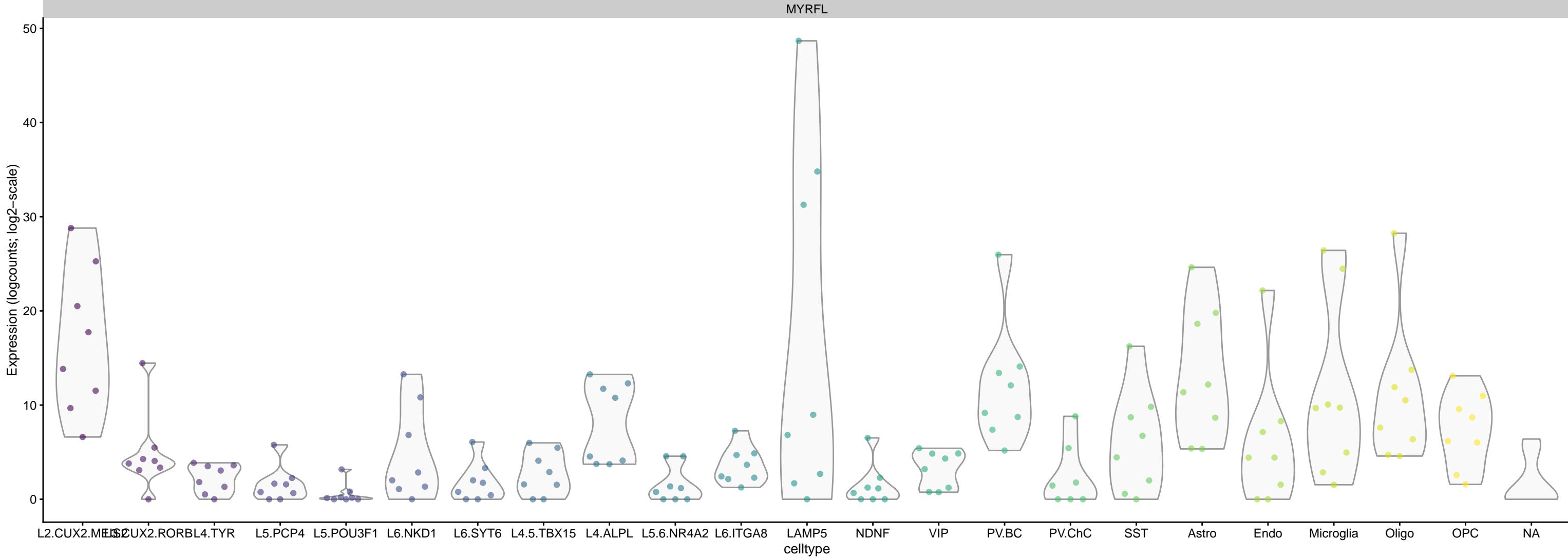


celltype: VIP, gene: FAM181A-AS1, peak:VIP\_17\_FAM181A-AS1

FAM181A-AS1



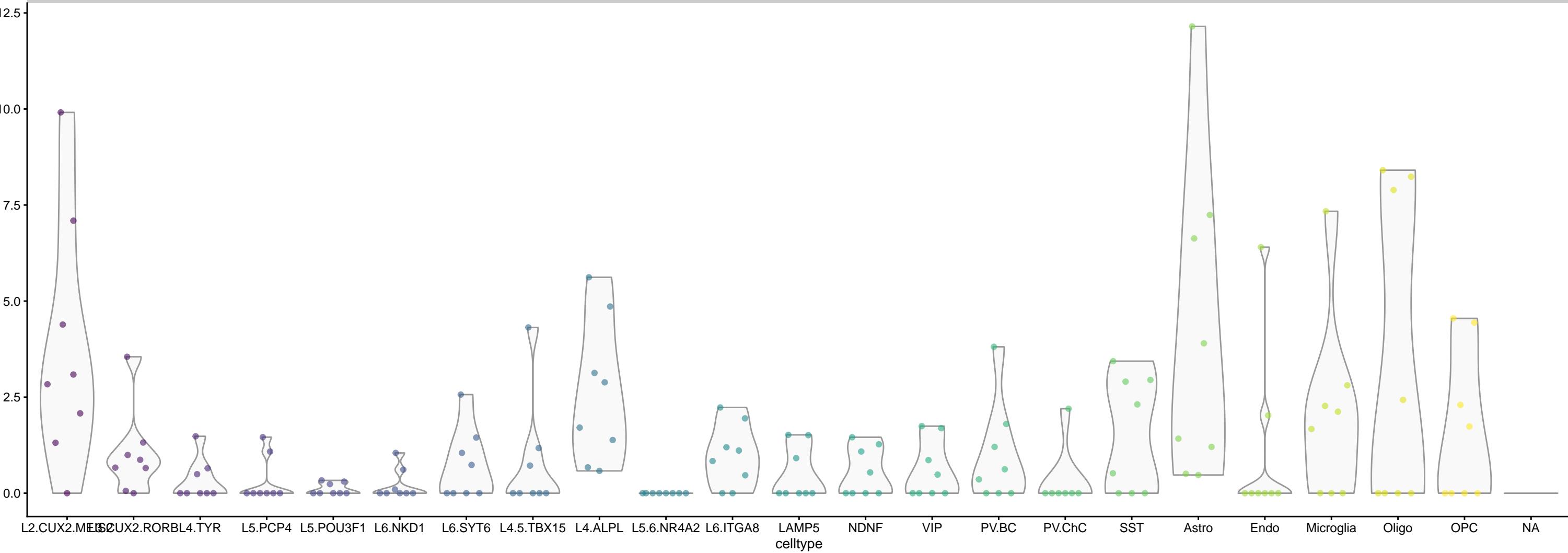
celltype: VIP, gene: MYRFL, peak:VIP\_29\_MYRFL



celltype: VIP, gene: DRC7, peak:VIP\_30\_DRC7

DRC7

Expression (logcounts; log2-scale)



celltype: VIP, gene: PACSIN2, peak:VIP\_32\_PACSIN2

PACSIN2

Expression (logcounts; log<sub>2</sub>-scale)

3000

2000

1000

0

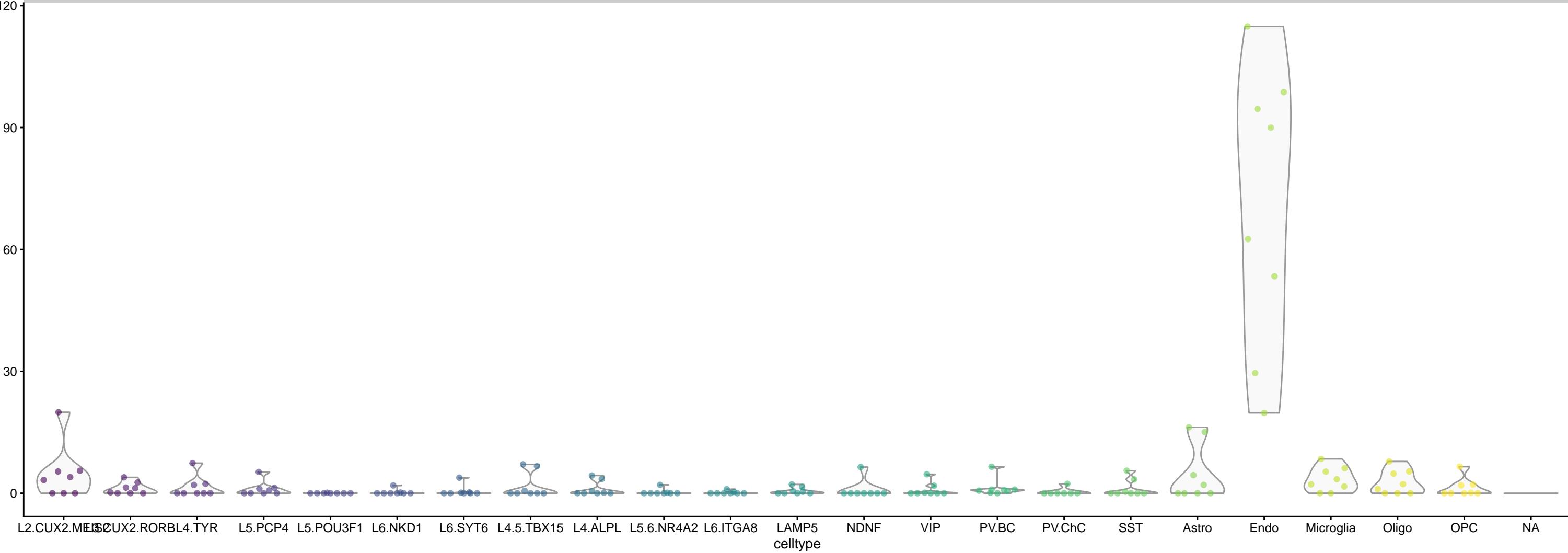
L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

celltype: VIP, gene: CLDN5, peak:VIP\_33\_CLDN5

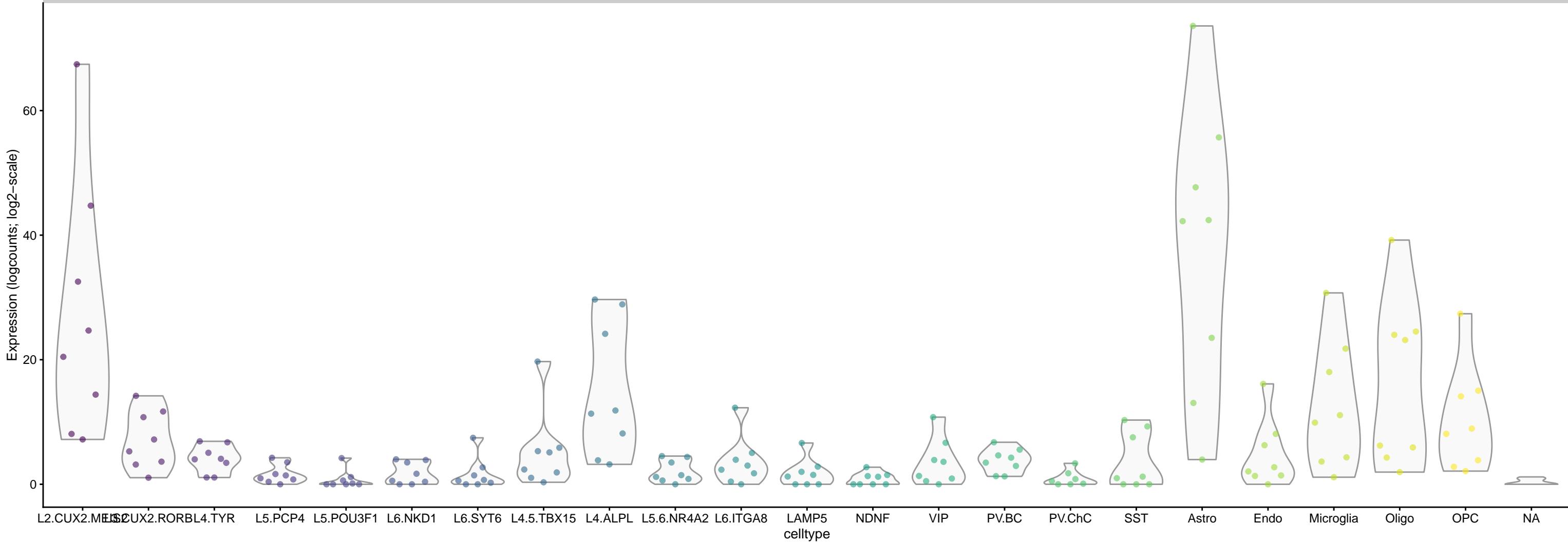
CLDN5

Expression (logcounts; log2-scale)



celltype: VIP, gene: RTL6, peak:VIP\_48\_RTL6

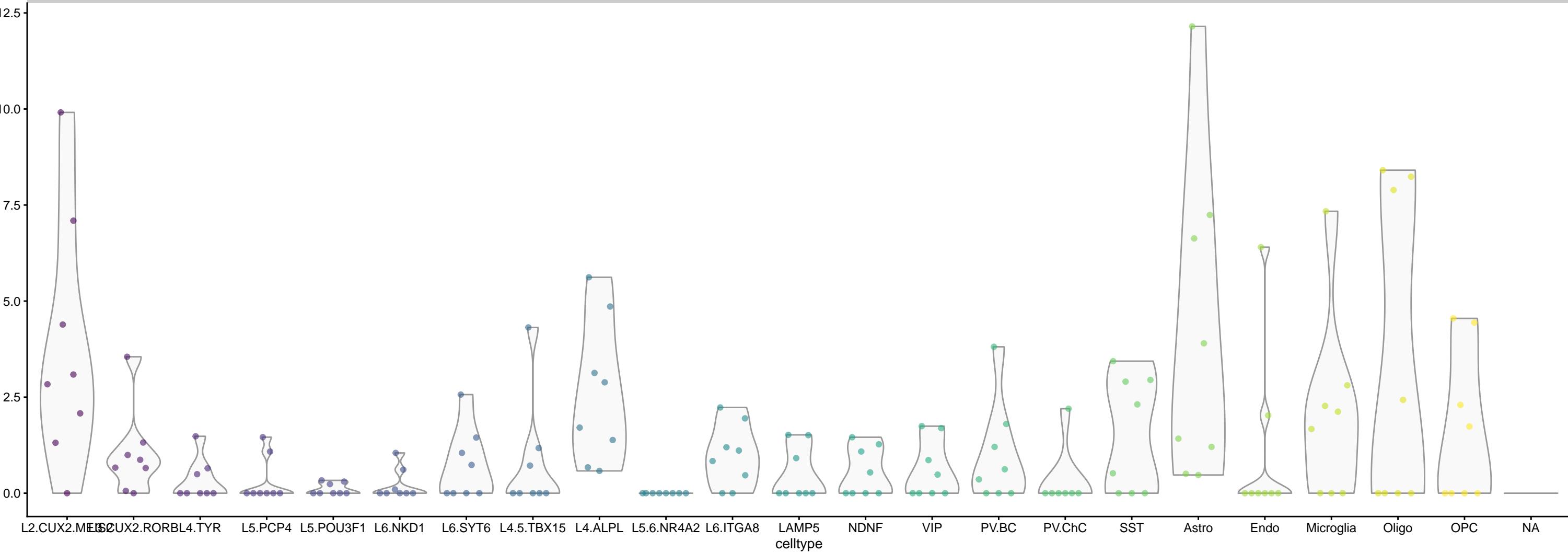
RTL6



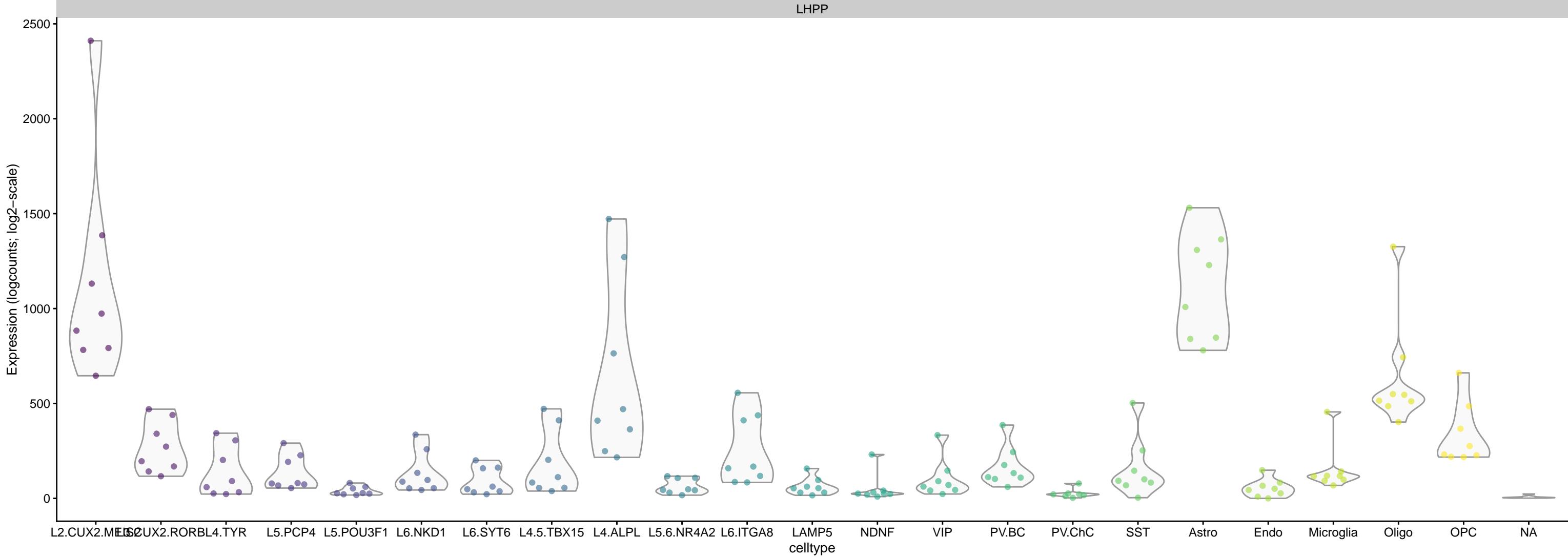
celltype: VIP, gene: DRC7, peak:VIP\_68\_DRC7

DRC7

Expression (logcounts; log2-scale)



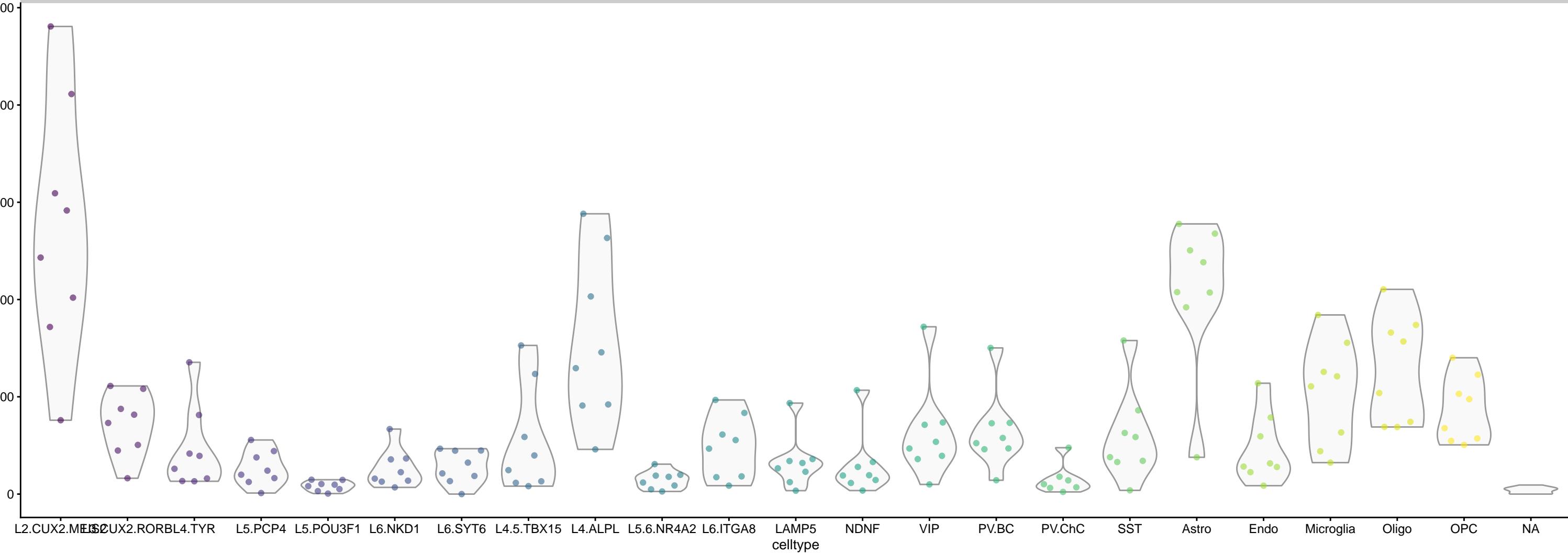
celltype: VIP, gene: LHPP, peak:VIP\_75\_LHPP



celltype: VIP, gene: CERS5, peak:VIP\_85\_CERS5,GPD1,SMARCD11

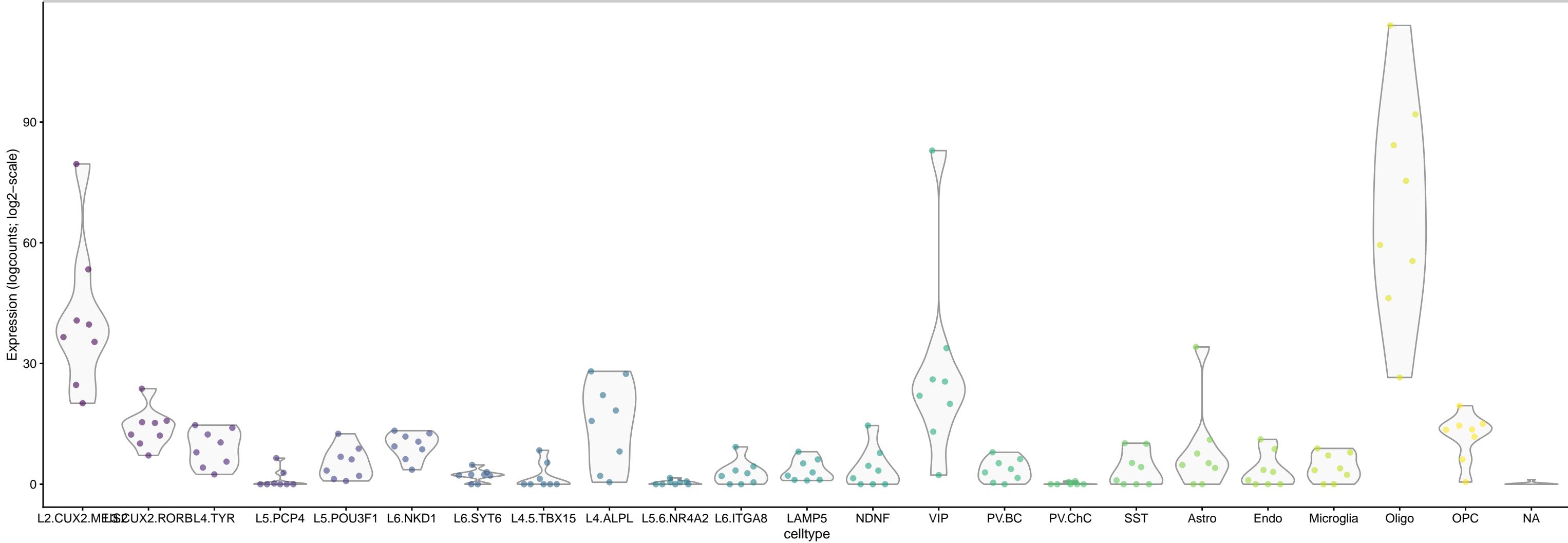
CERS5

Expression (logcounts; log<sub>2</sub>-scale)



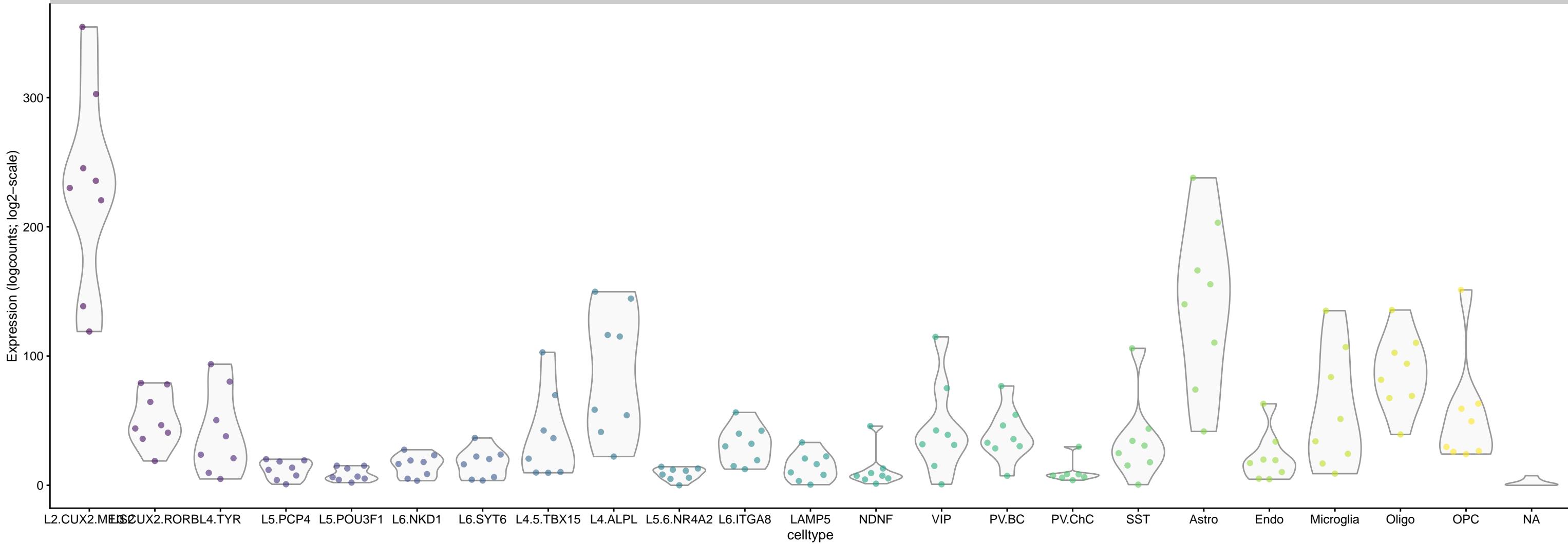
celltype: VIP, gene: GPD1, peak:VIP\_85\_CERS5,GPD1,SMARCD12

GPD1

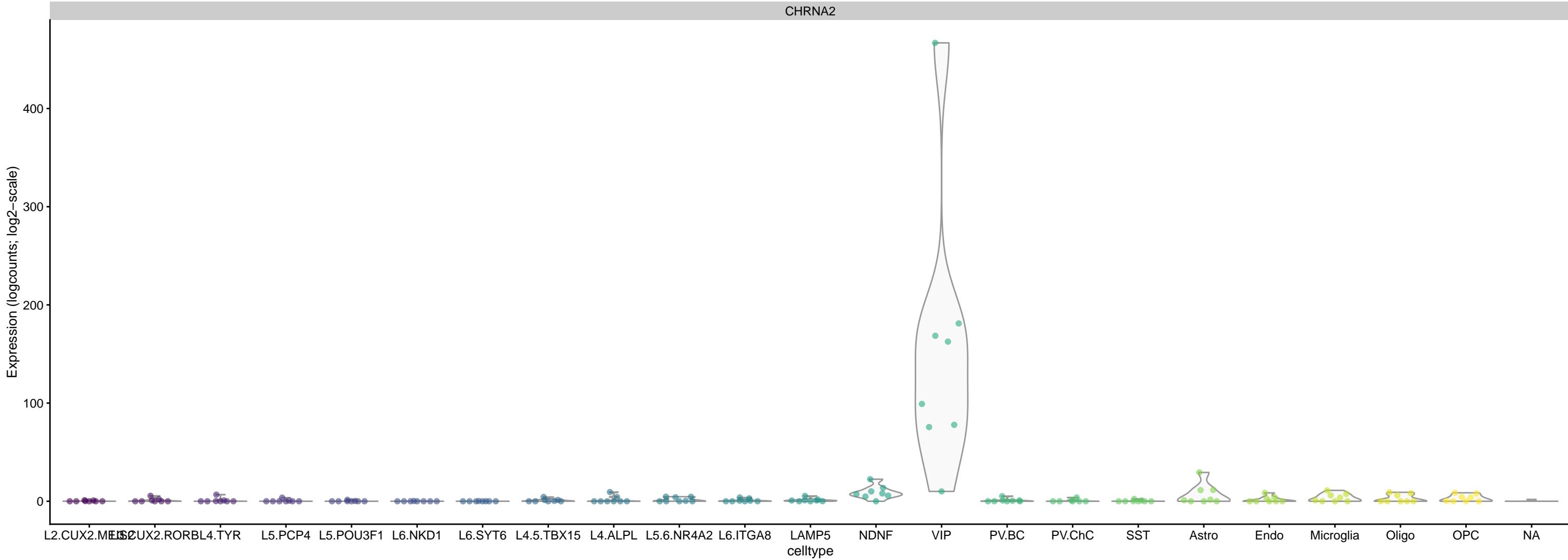


celltype: VIP, gene: SMARCD1, peak:VIP\_85\_CERS5,GPD1,SMARCD13

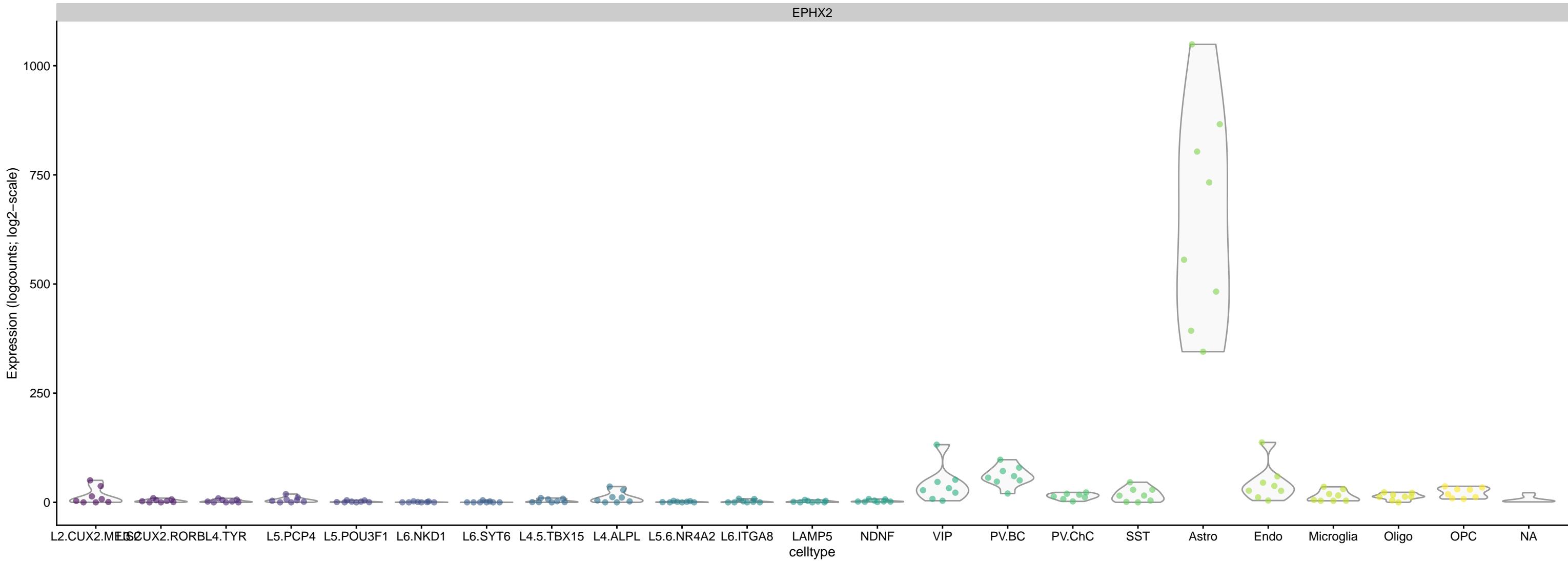
SMARCD1



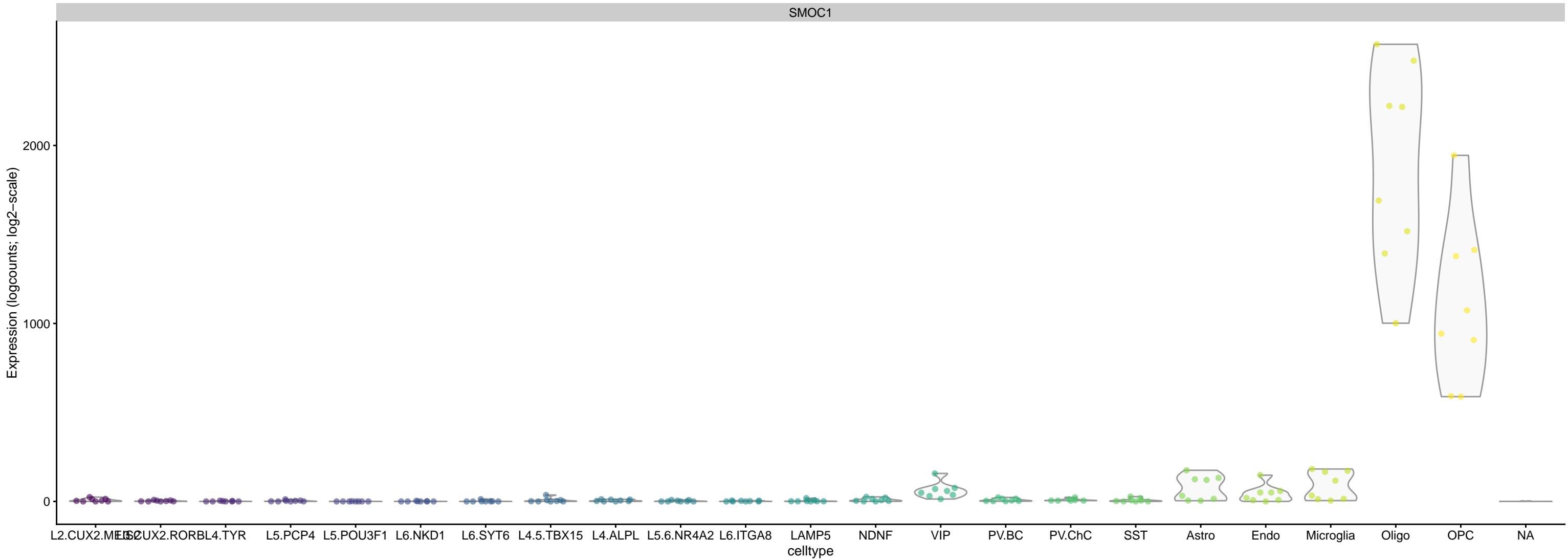
celltype: VIP, gene: CHRNA2, peak:VIP\_106\_CHRNA2,EPHX2,MIR68431



celltype: VIP, gene: EPHX2, peak:VIP\_106\_CHRNA2,EPHX2,MIR68432

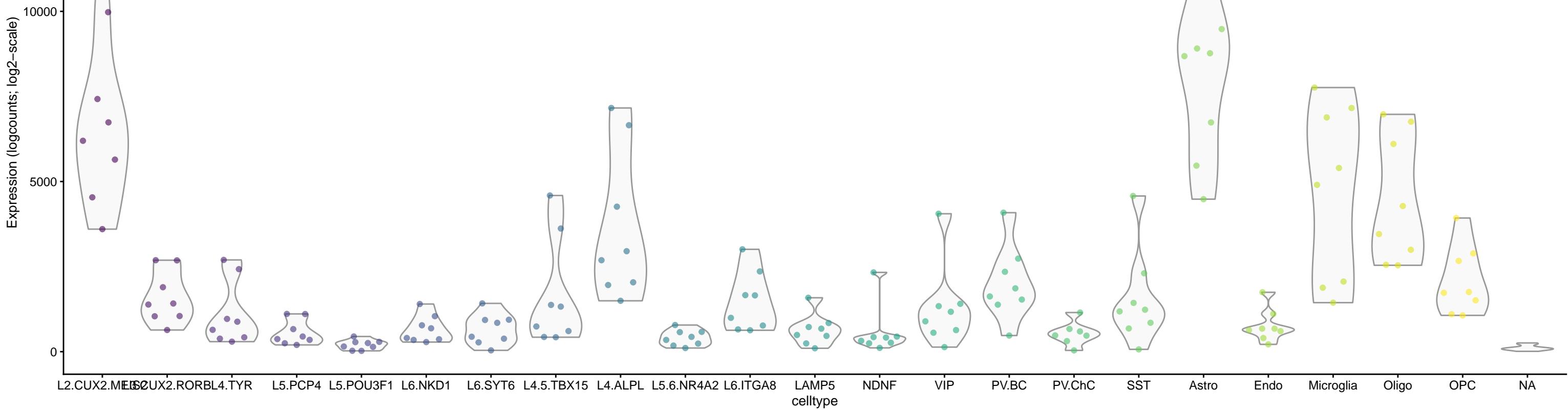


celltype: VIP, gene: SMOC1, peak:VIP\_112\_SMOC1



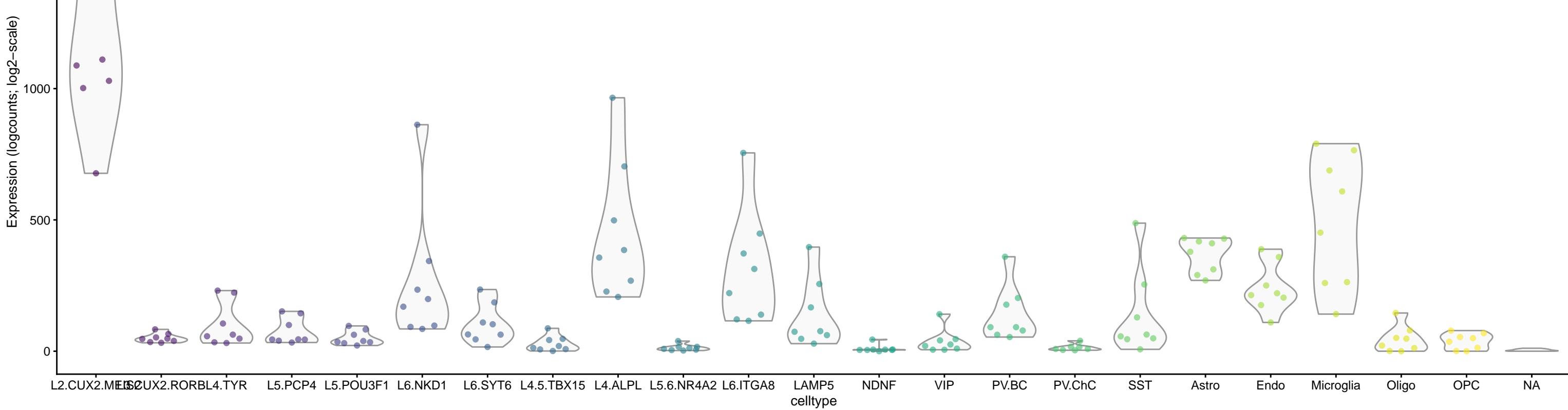
celltype: VIP, gene: EIF4G3, peak:VIP\_115\_EIF4G3

EIF4G3

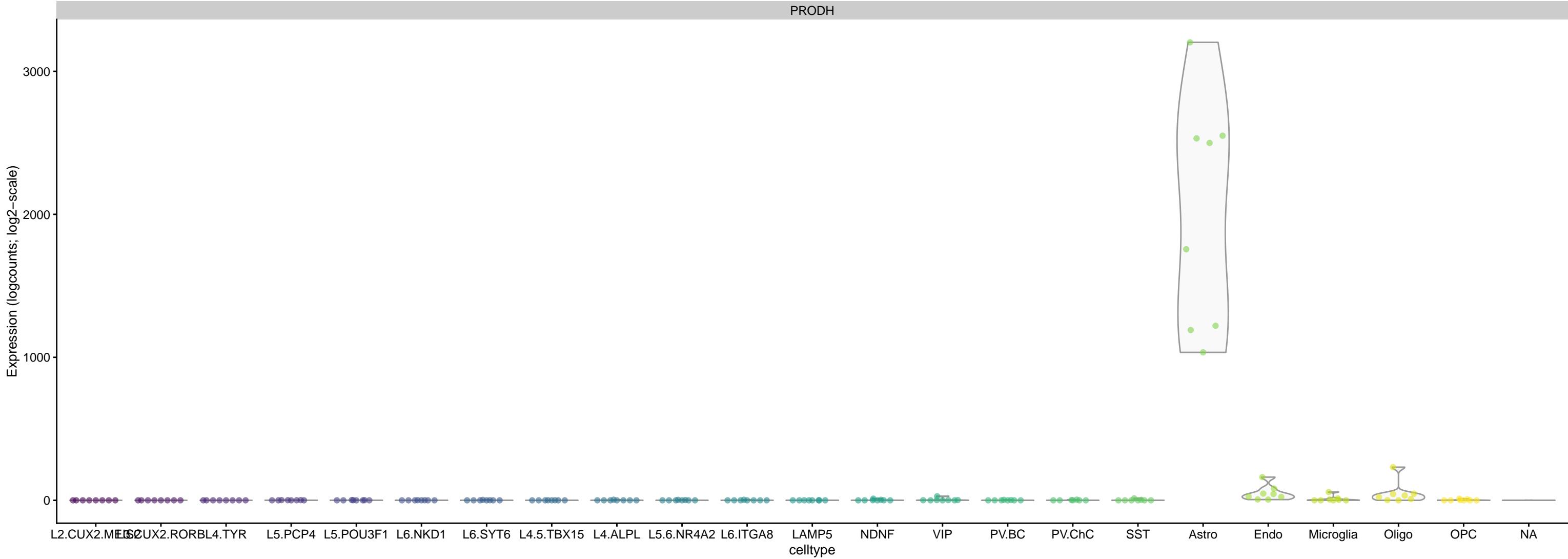


celltype: VIP, gene: ST3GAL1, peak:VIP\_116\_ST3GAL1

ST3GAL1



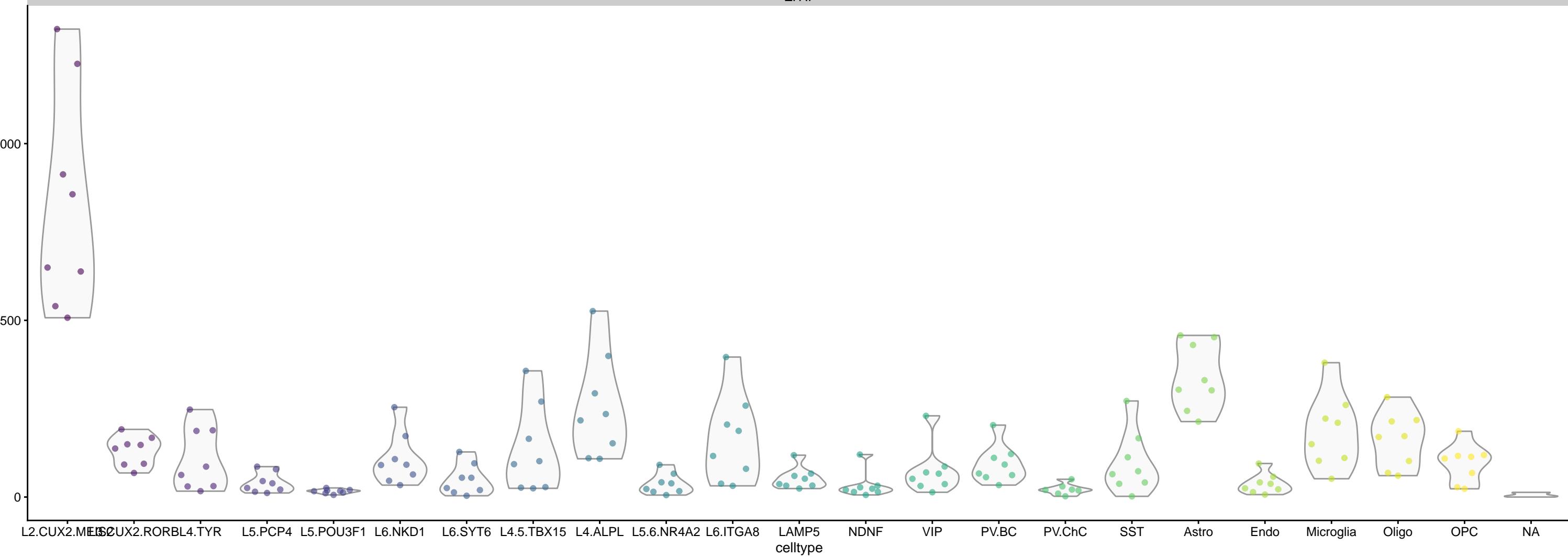
celltype: VIP, gene: PRODH, peak:VIP\_123\_GGT2,PRODH2



celltype: VIP, gene: ZFAT, peak:VIP\_127\_ZFAT

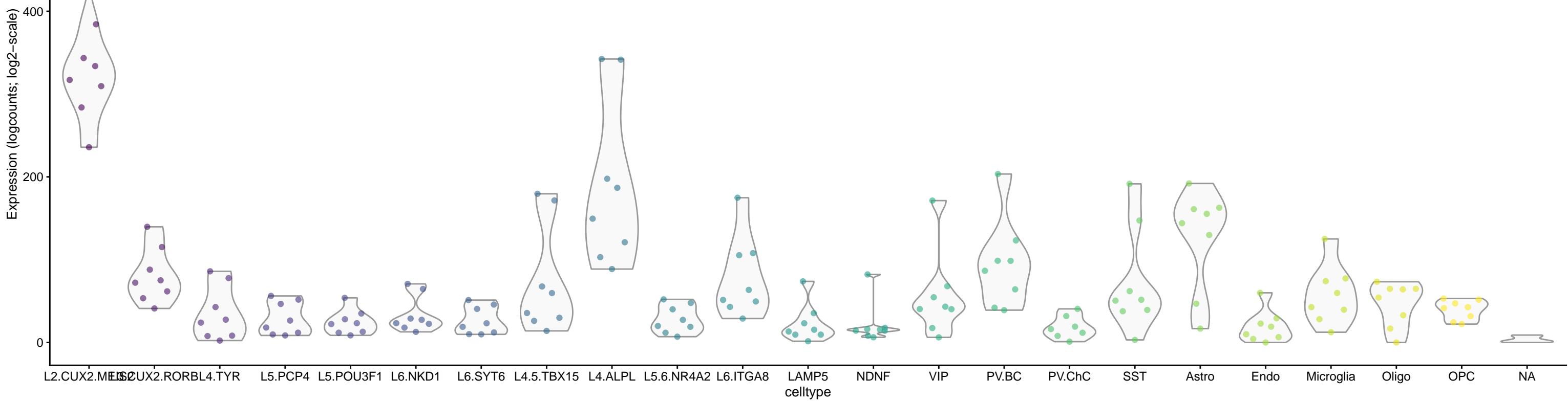
ZFAT

Expression (logcounts; log2-scale)



celltype: VIP, gene: DRG2, peak:VIP\_134\_DRG2

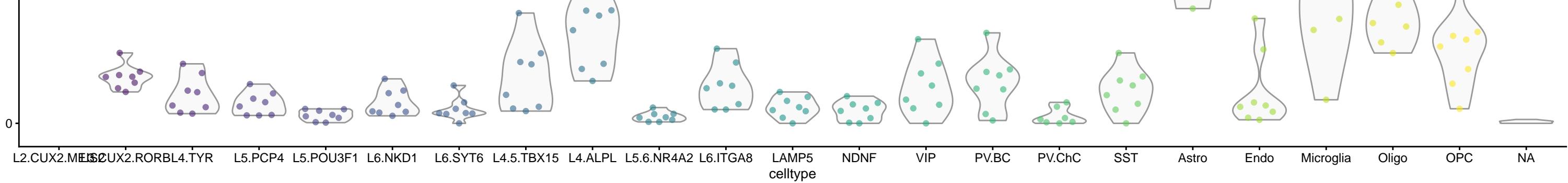
DRG2



celltype: VIP, gene: CCT5, peak:VIP\_140\_CCT5

CCT5

Expression (logcounts; log2-scale)



celltype: VIP, gene: ALDH1A2, peak:VIP\_144\_ALDH1A2

ALDH1A2

Expression (logcounts; log2-scale)

900

600

300

0

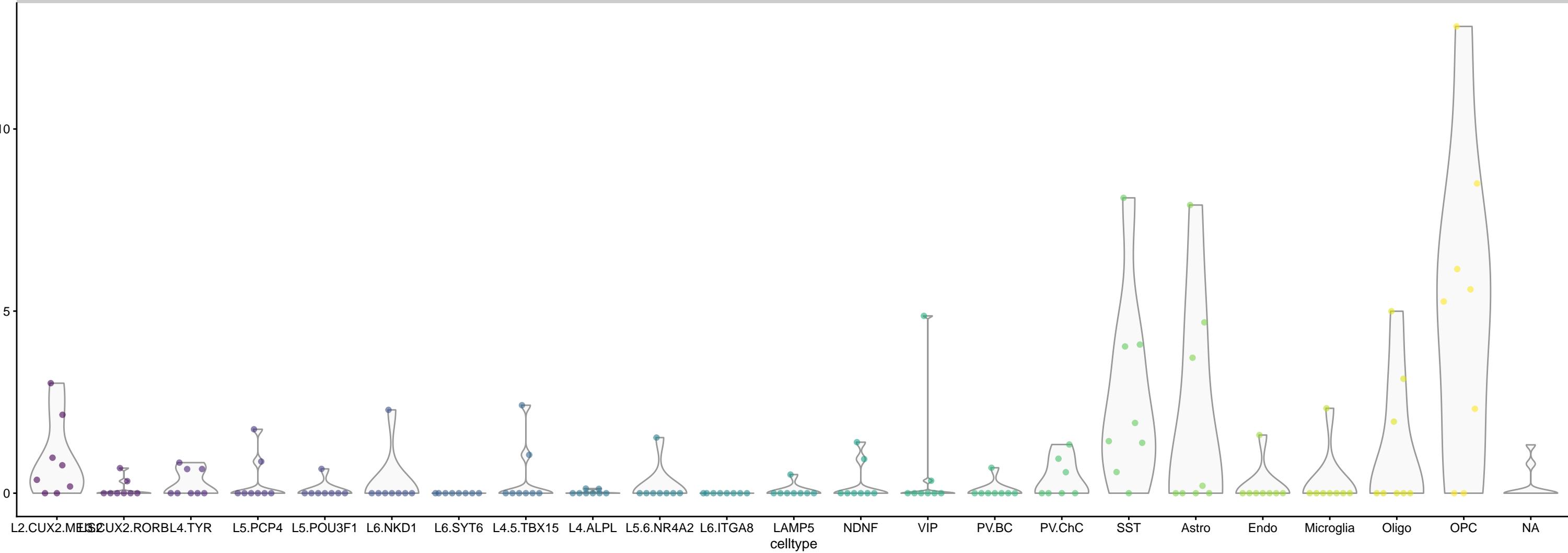
L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

celltype: VIP, gene: CHRNA3, peak:VIP\_150\_CHRNA3

CHRNA3

Expression (logcounts; log2-scale)



celltype: VIP, gene: LYVE1, peak:VIP\_154\_LYVE1,RNF1411

LYVE1

Expression (logcounts; log<sub>2</sub>-scale)

200

150

100

50

0

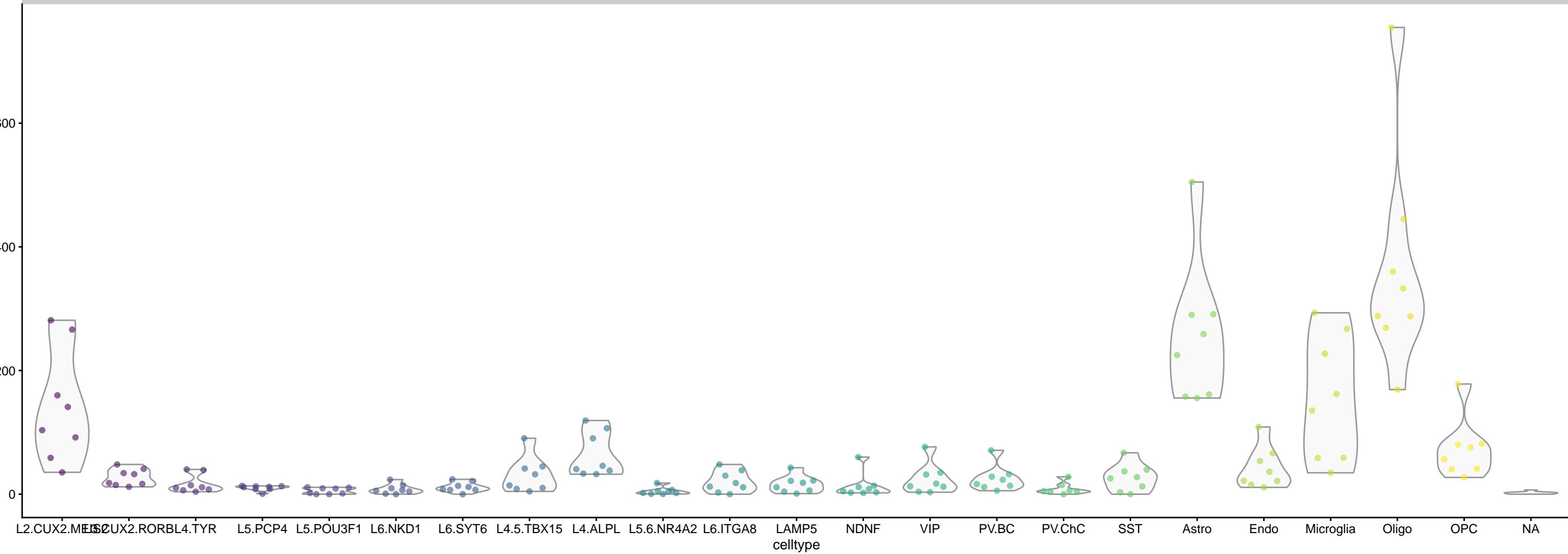
L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

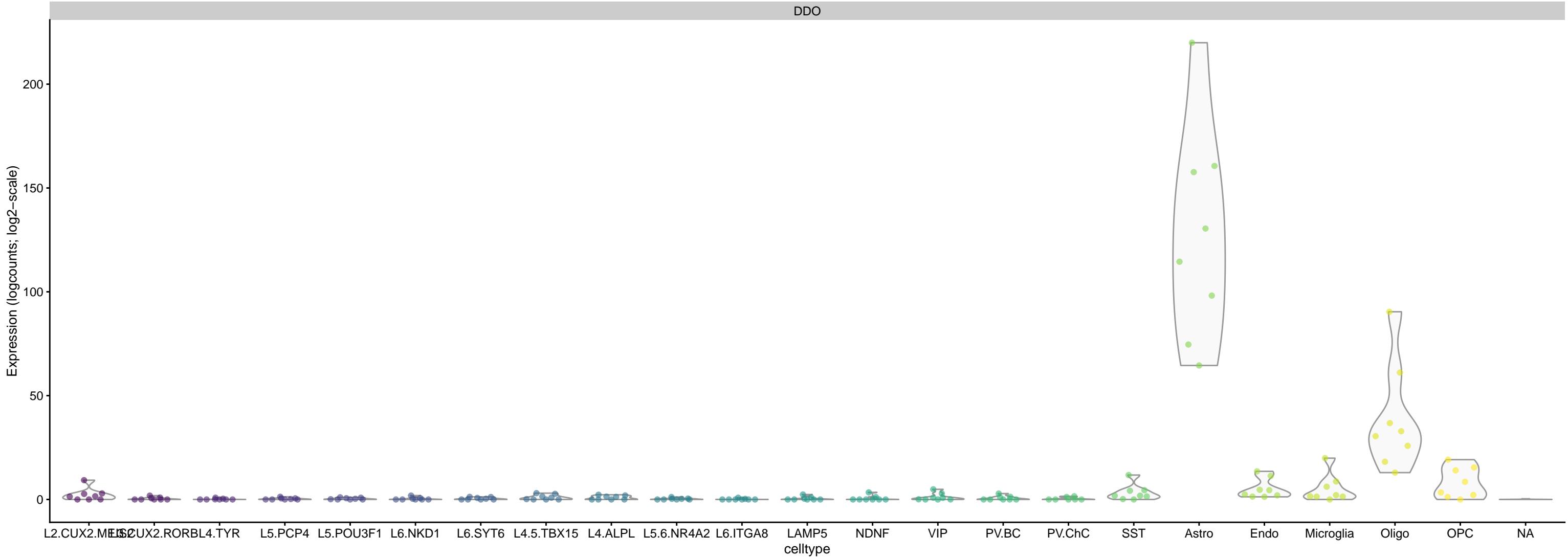
celltype: VIP, gene: RNF141, peak:VIP\_154\_LYVE1,RNF1412

RNF141

Expression (logcounts; log2-scale)

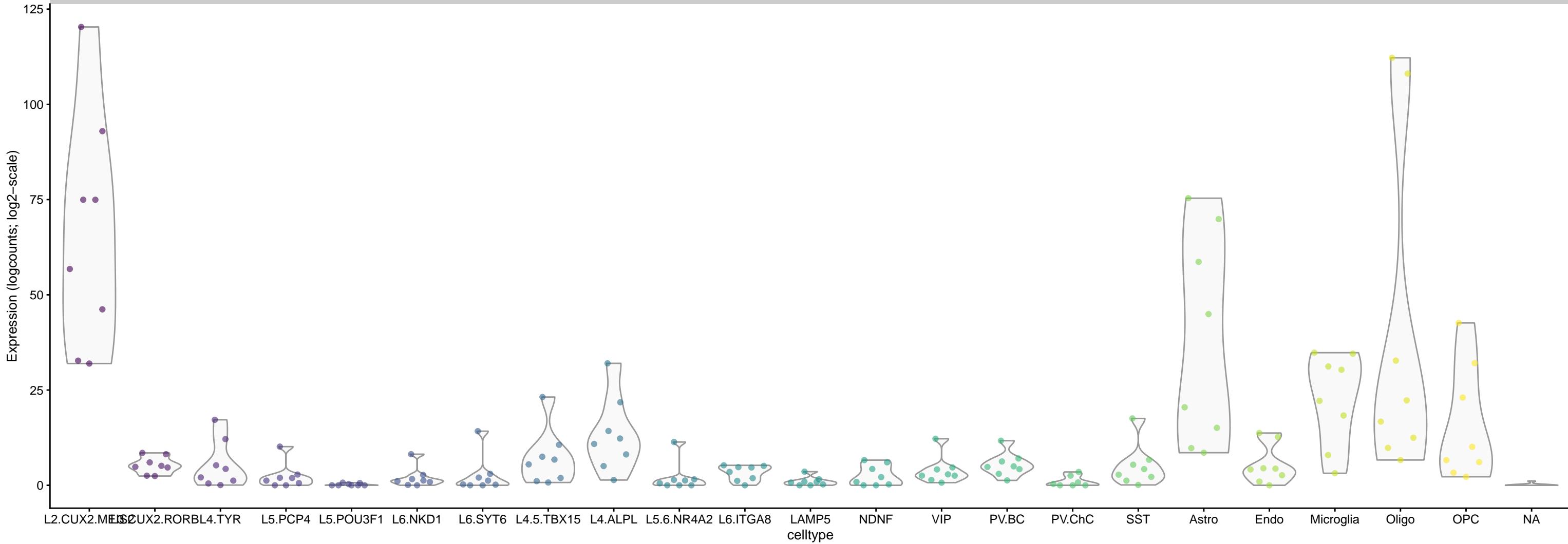


celltype: VIP, gene: DDO, peak:VIP\_160\_DDO

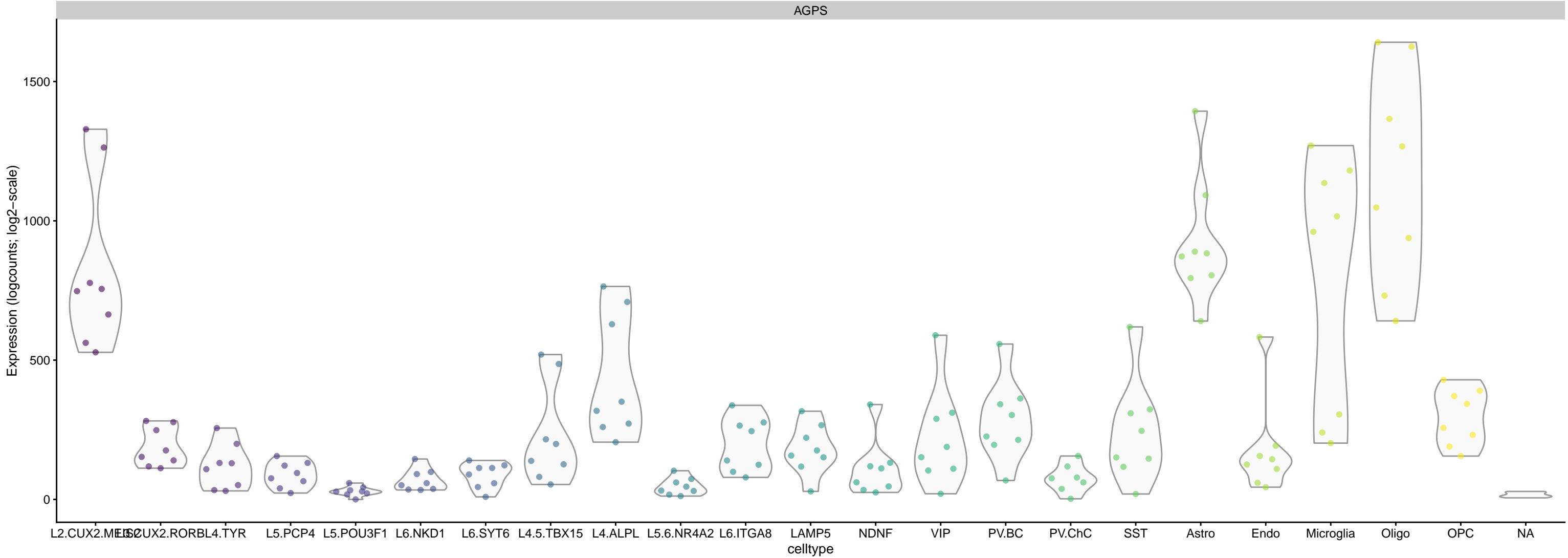


celltype: VIP, gene: MORC1, peak:VIP\_163\_MORC1

MORC1

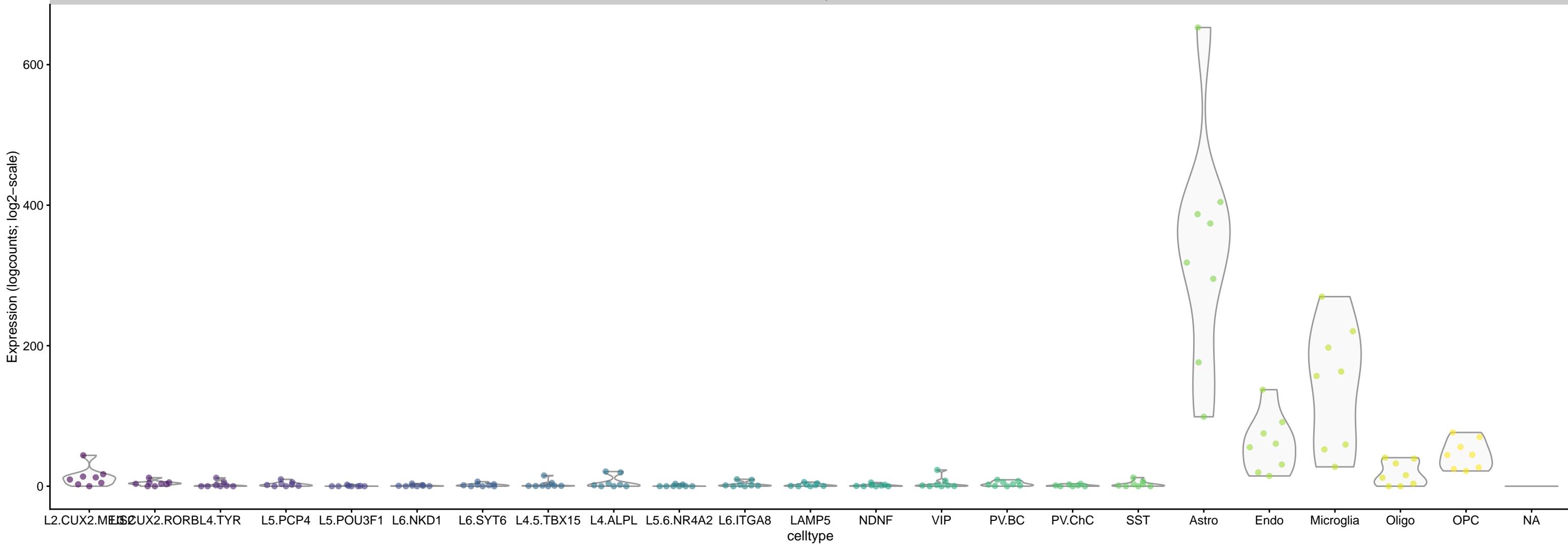


celltype: VIP, gene: AGPS, peak:VIP\_175\_AGPS



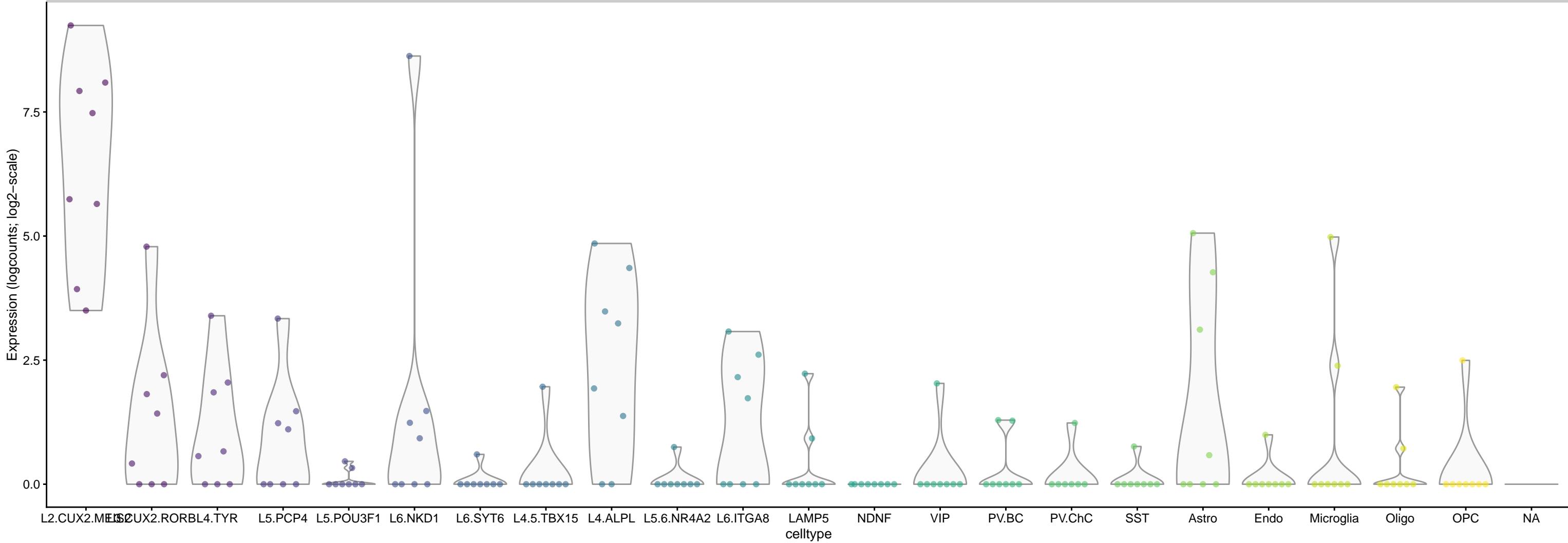
celltype: VIP, gene: PARP9, peak:VIP\_183\_PARP9

PARP9

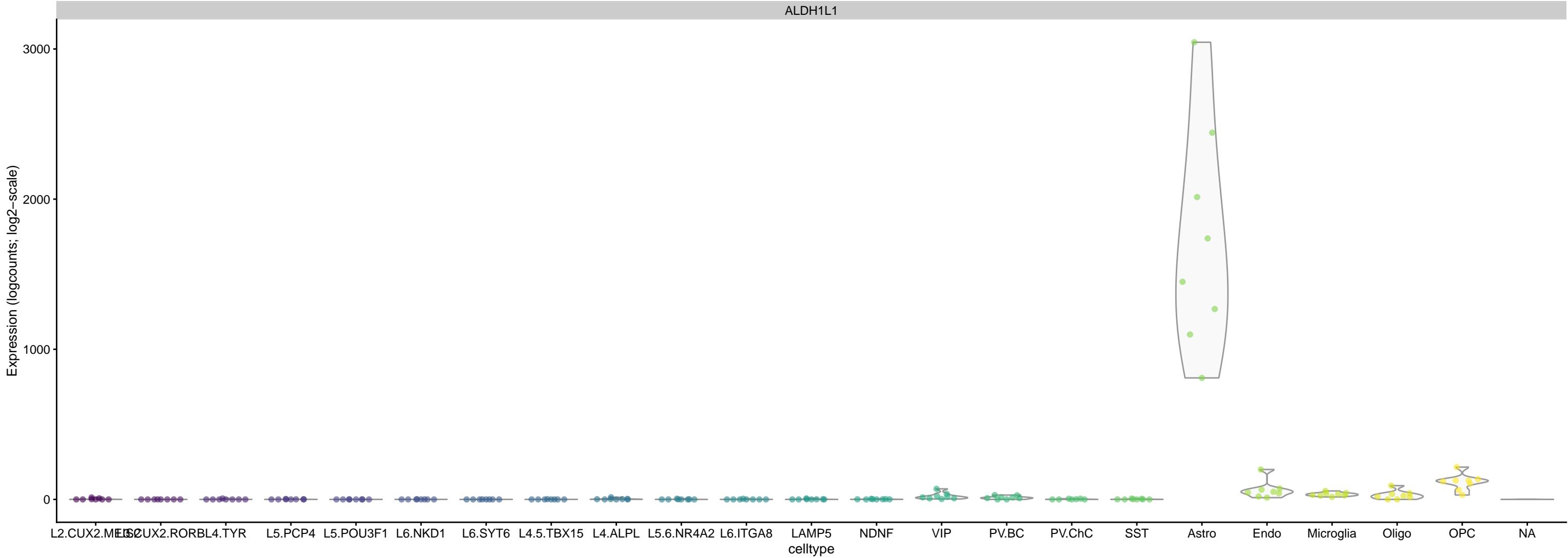


celltype: VIP, gene: INSL3, peak:VIP\_185\_INSL3

INSL3

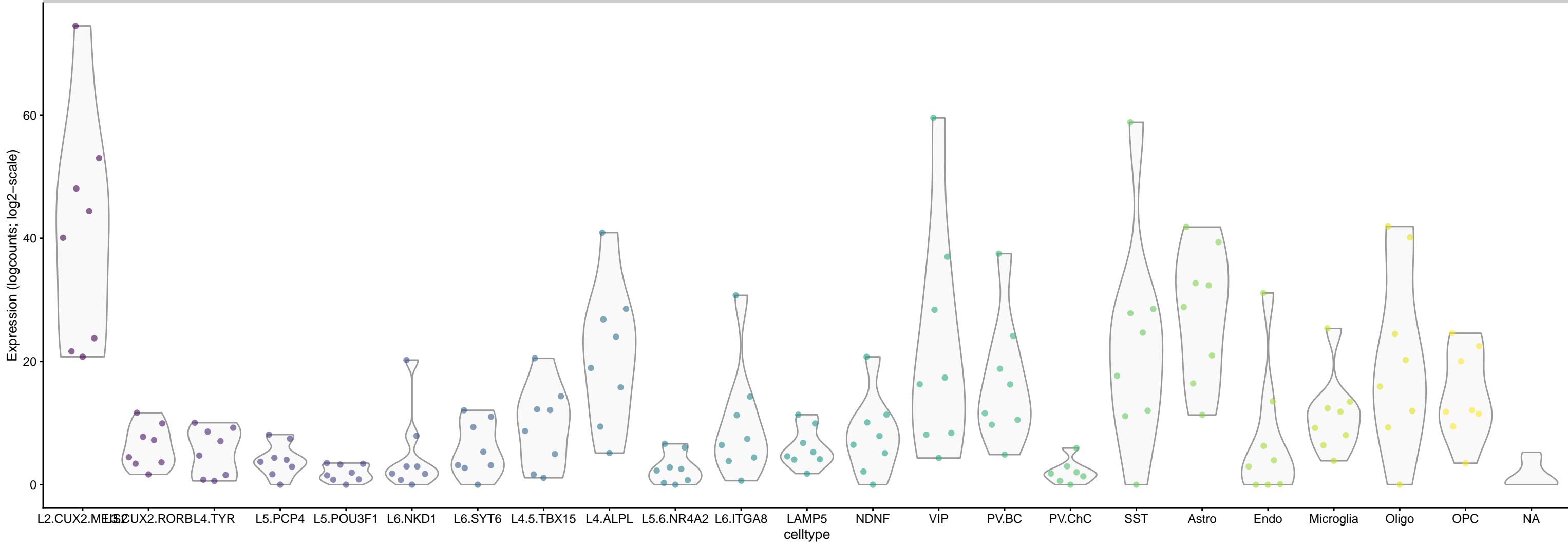


celltype: VIP, gene: ALDH1L1, peak:VIP\_189\_ALDH1L1



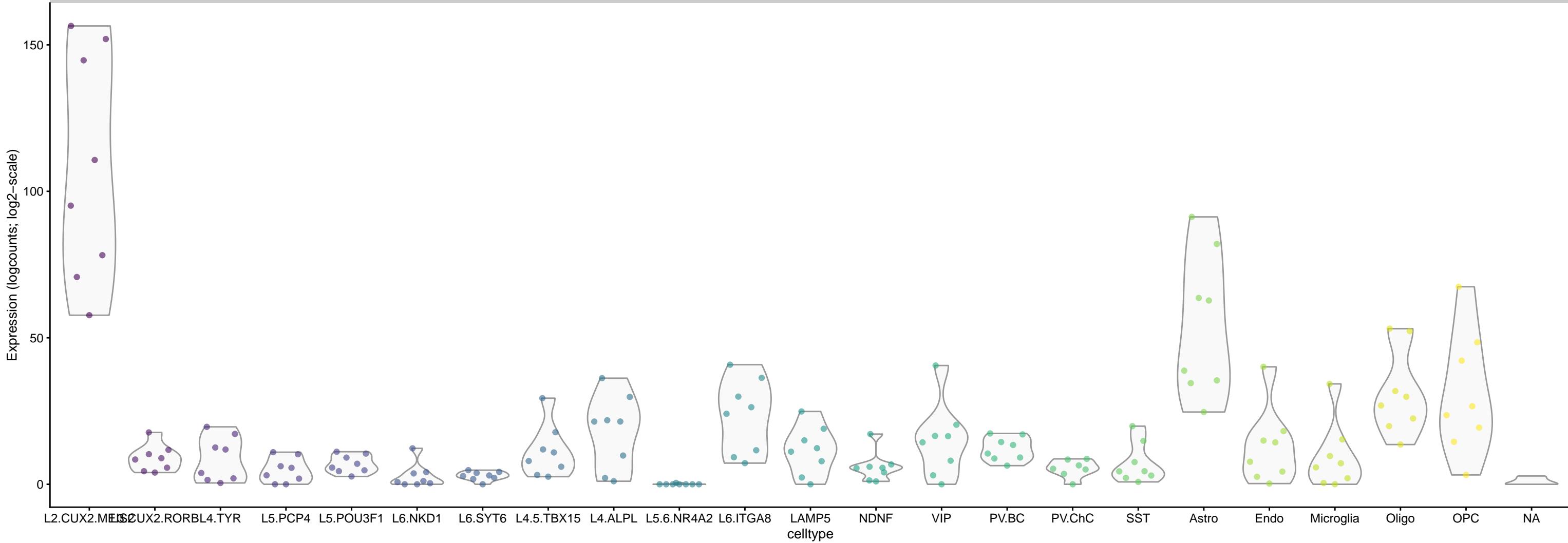
celltype: VIP, gene: MFSD9, peak:VIP\_201\_MFSD9

MFSD9



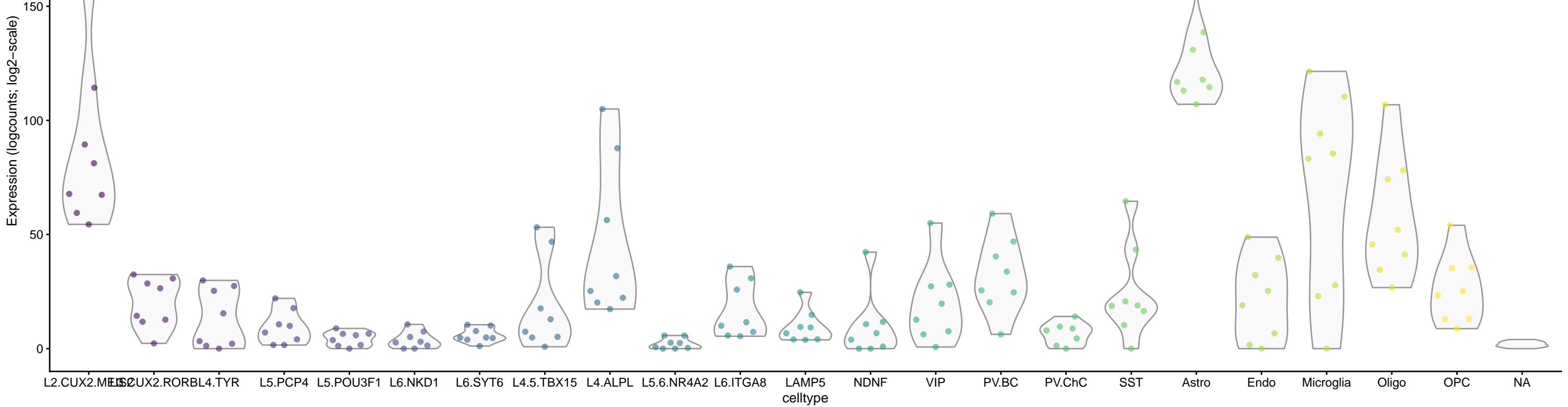
celltype: VIP, gene: GNAS-AS1, peak:VIP\_202\_GNAS-AS1

GNAS-AS1



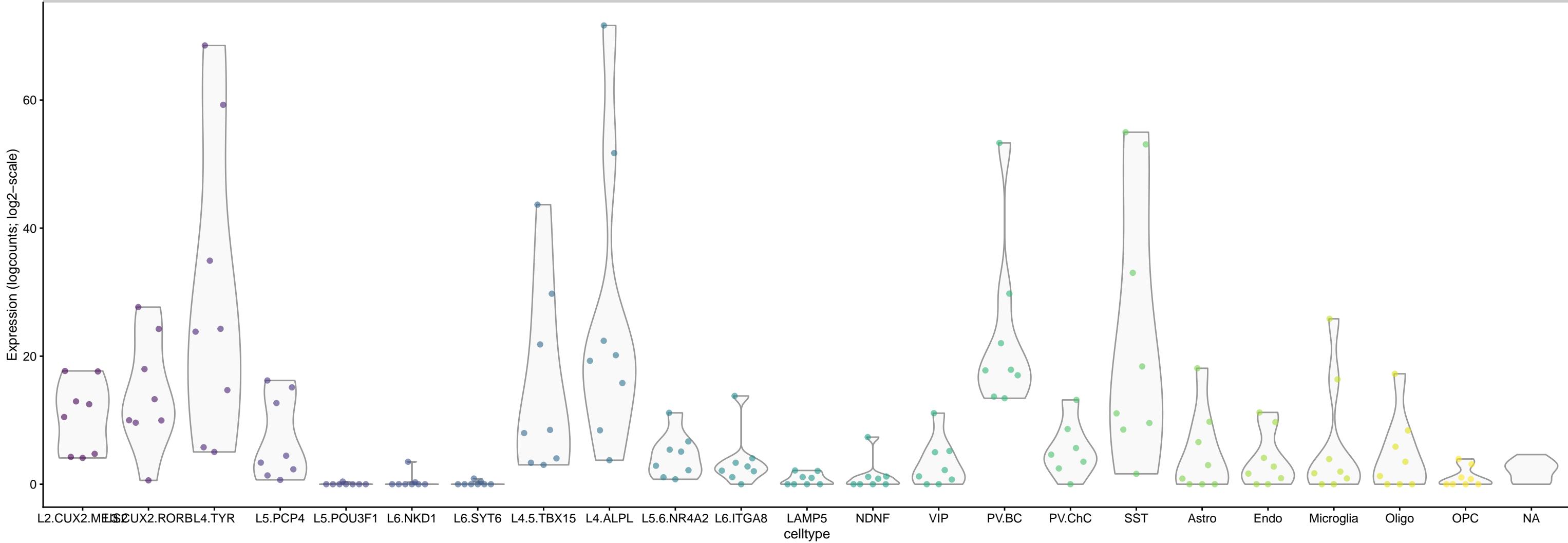
celltype: VIP, gene: GLOD4, peak:VIP\_205\_GLOD4

GLOD4



celltype: VIP, gene: KLHDC8A, peak:VIP\_217\_KLHDC8A

KLHDC8A



celltype: VIP, gene: EMX2, peak:VIP\_218\_EMX2,EMX2OS1

EMX2

Expression (logcounts; log2-scale)

750

500

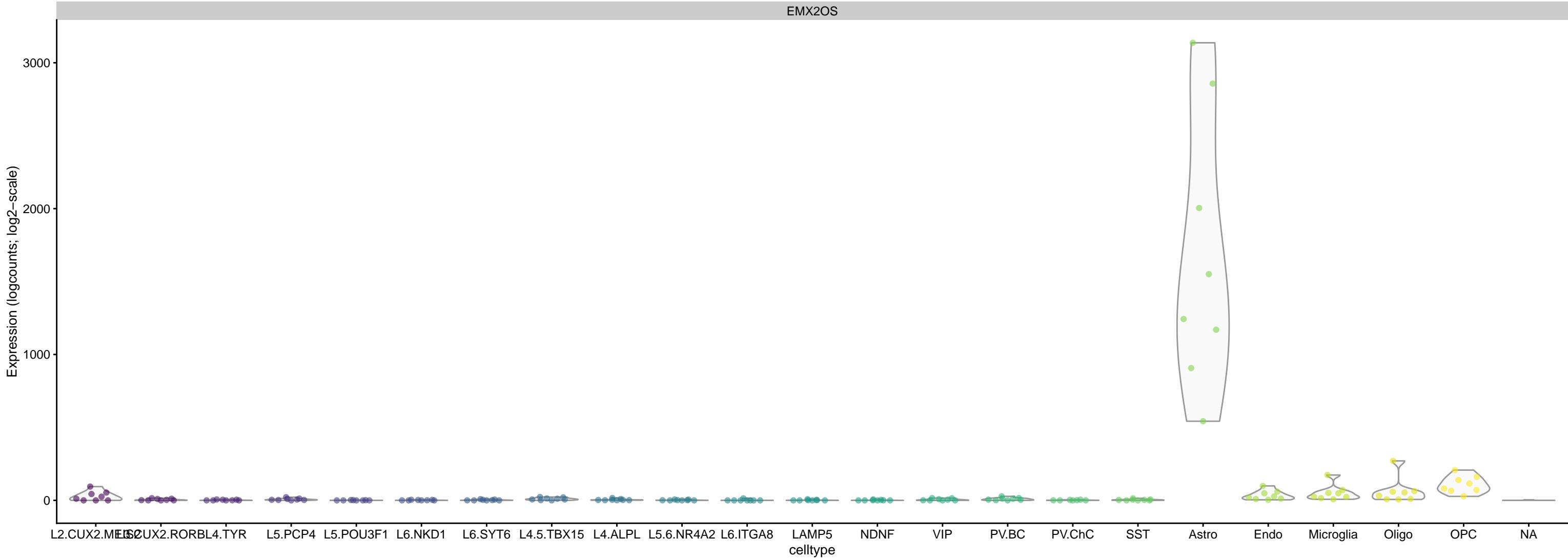
250

0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

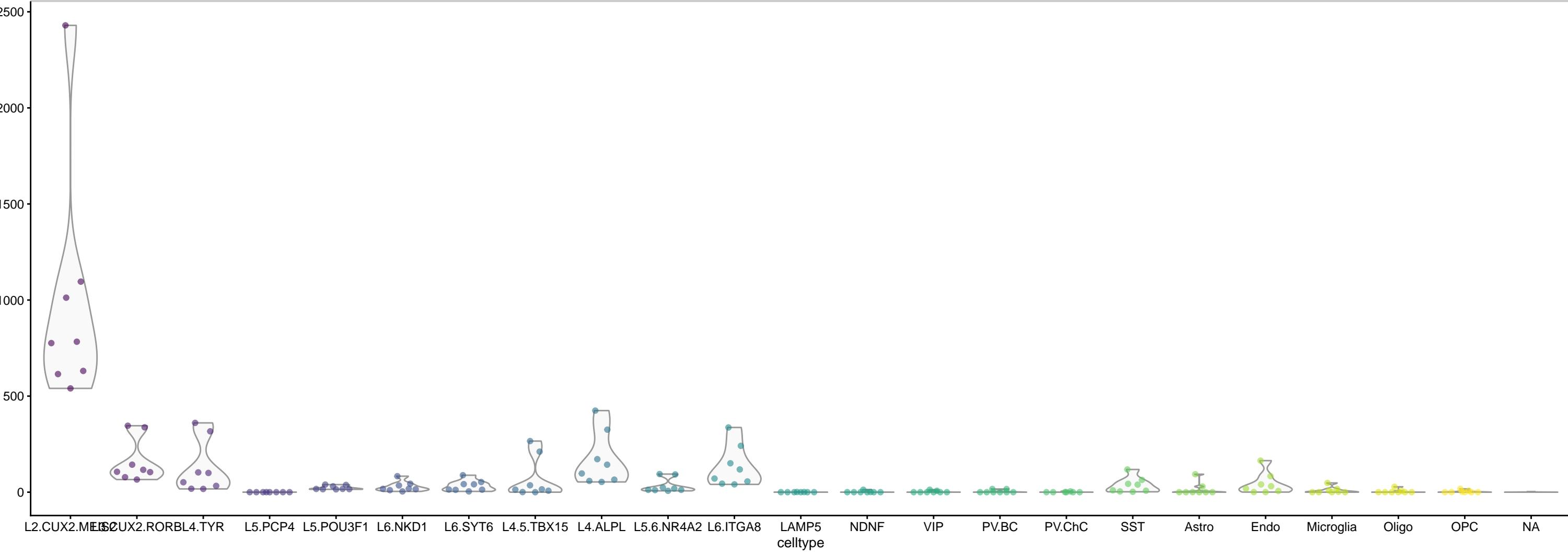
celltype: VIP, gene: EMX2OS, peak:VIP\_218\_EMX2,EMX2OS2



celltype: VIP, gene: CAPN12, peak:VIP\_225\_CAPN12

CAPN12

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: TMC7, peak:VIP\_226\_TMC7

TMC7

Expression (logcounts; log<sub>2</sub>-scale)

300

200

100

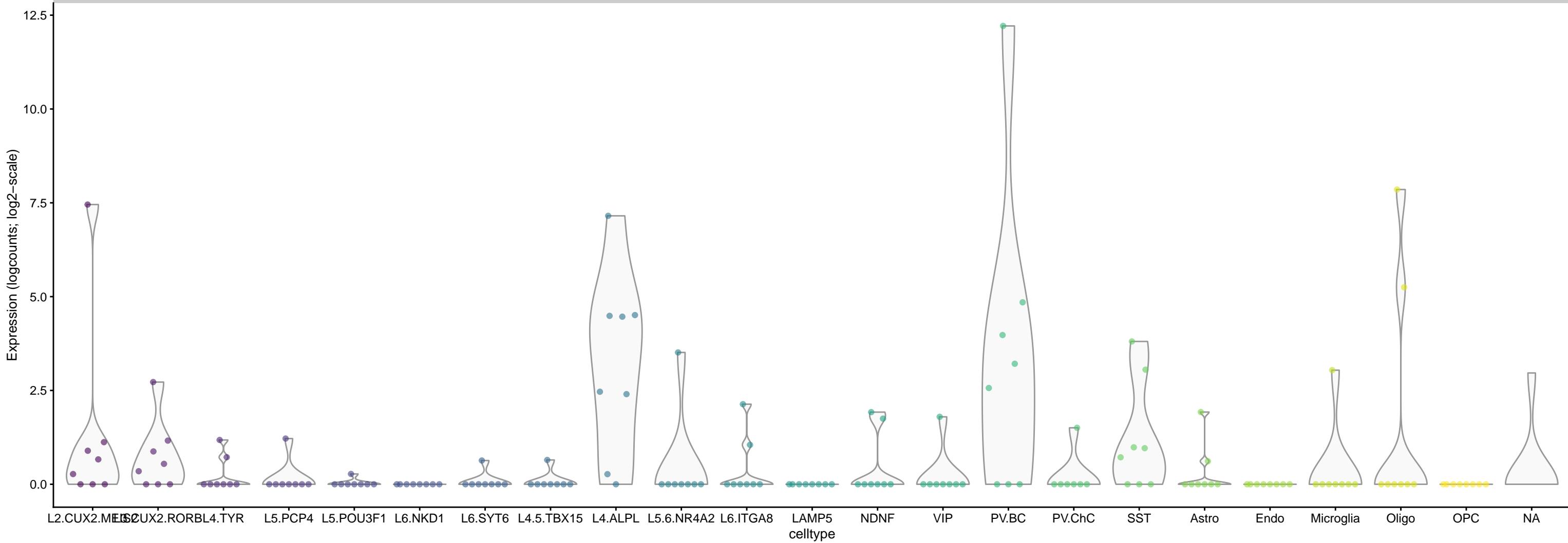
0

L2.CUX2.MES L5.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

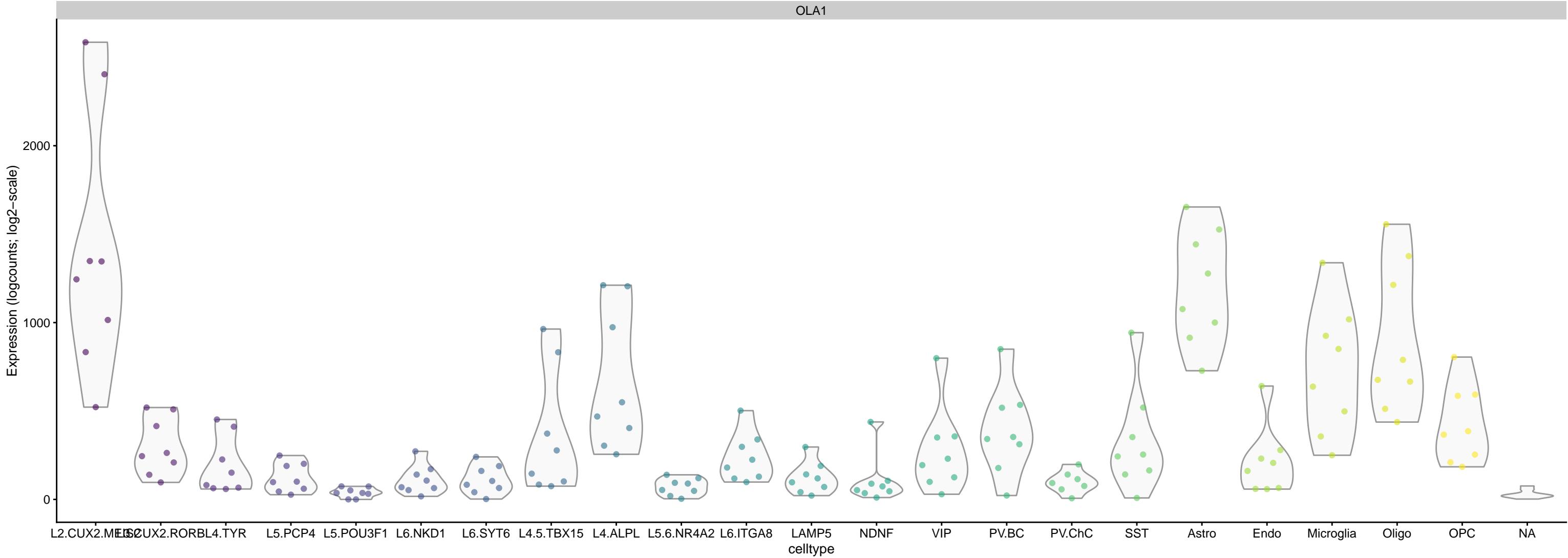
celltype

celltype: VIP, gene: LINC01168, peak:VIP\_227\_LINC01168

LINC01168



celltype: VIP, gene: OLA1, peak:VIP\_229\_OLA1



celltype: VIP, gene: DERL3, peak:VIP\_231\_DERL3,SMARCB11

DERL3

Expression (logcounts; log<sub>2</sub>-scale)

120

80

40

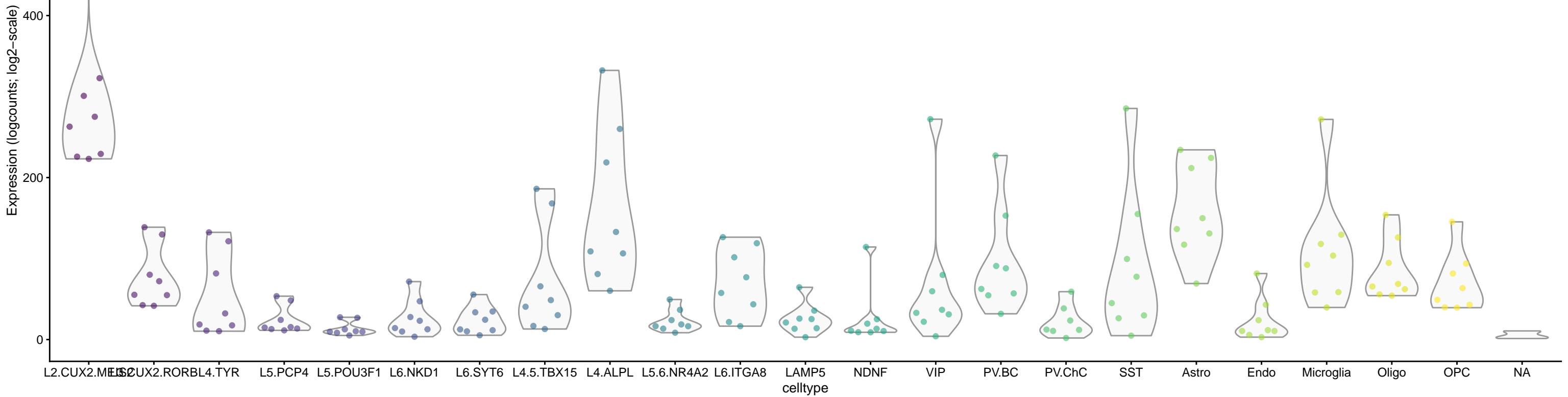
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

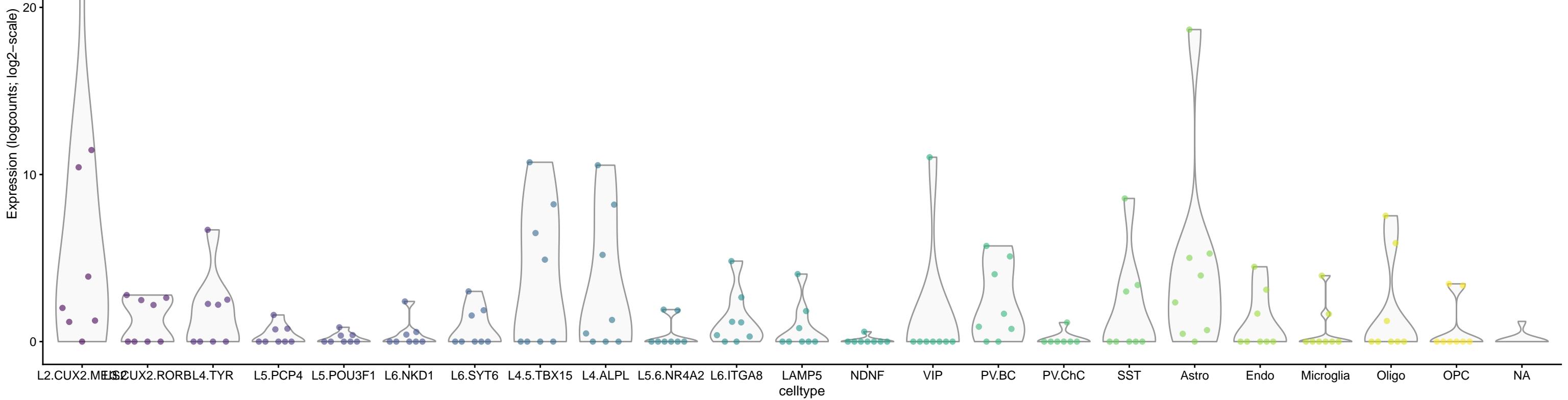
celltype: VIP, gene: SMARCB1, peak:VIP\_231\_DERL3,SMARCB12

SMARCB1



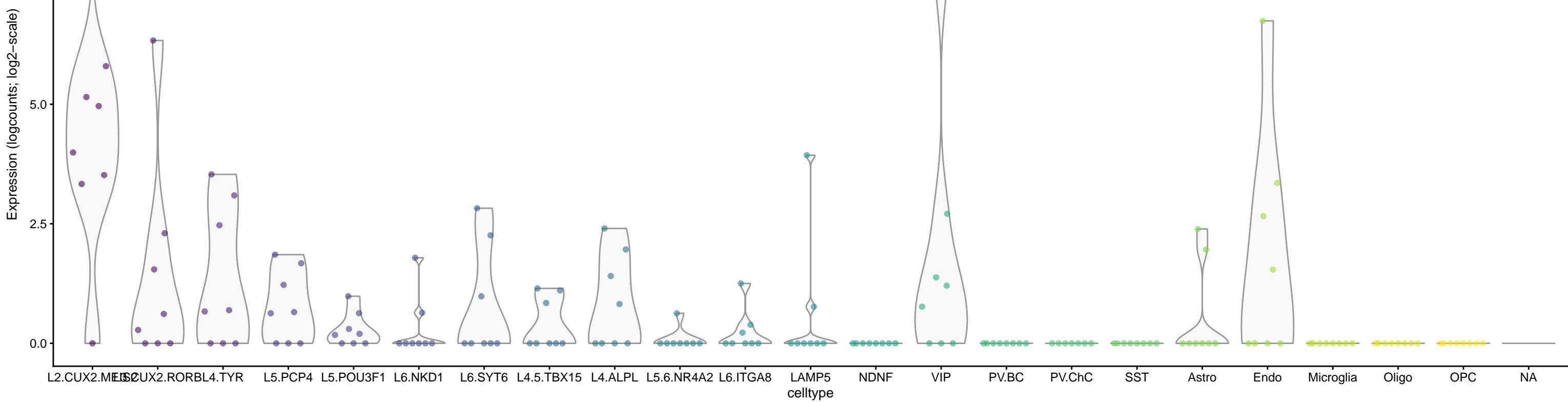
celltype: VIP, gene: S100P, peak:VIP\_235\_S100P

S100P



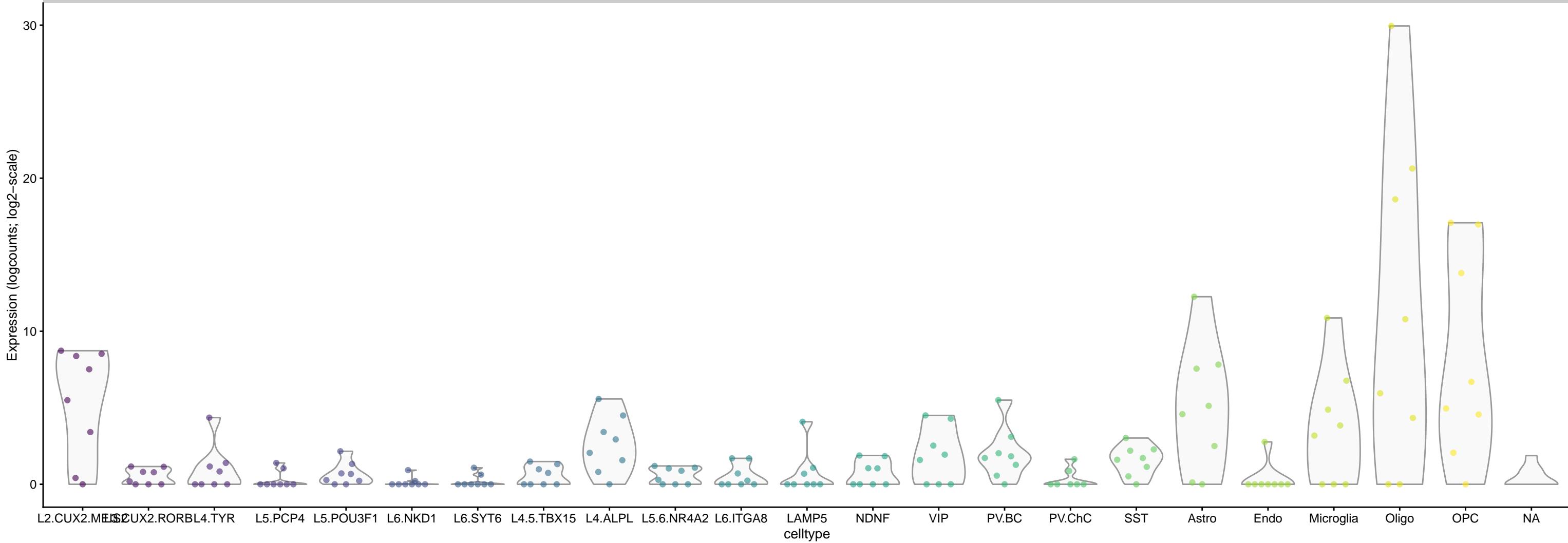
celltype: VIP, gene: PICART1, peak:VIP\_239\_PICART1,SGCA1

PICAF



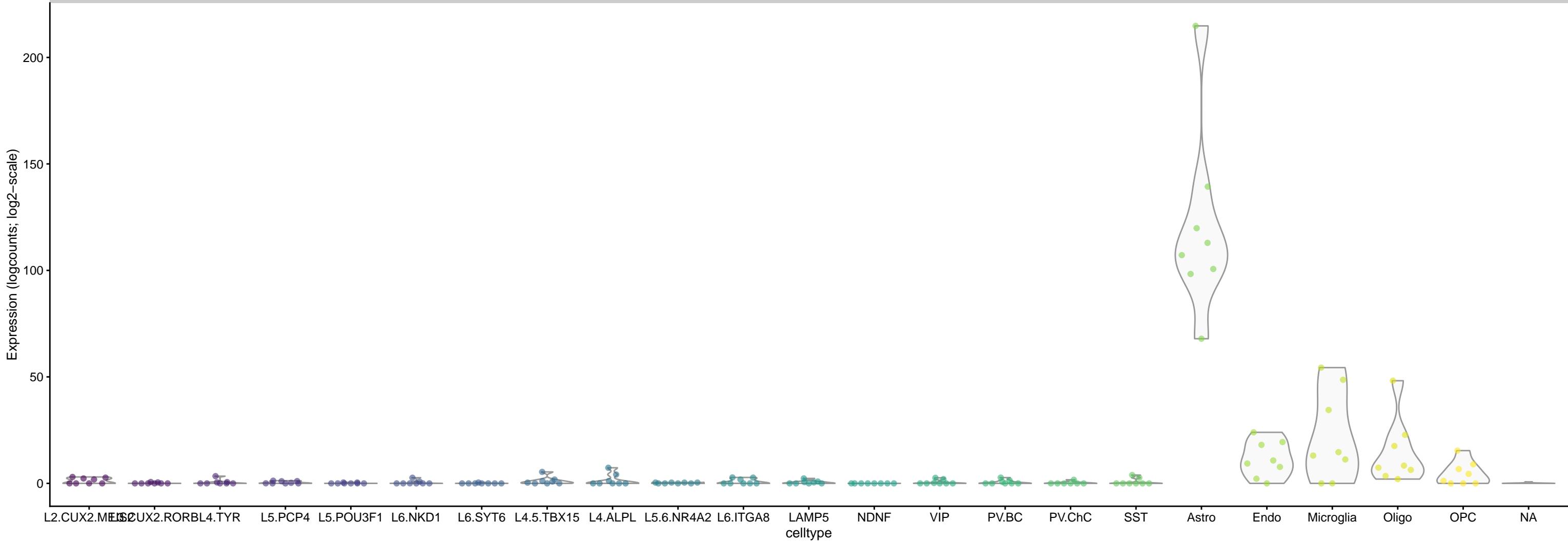
celltype: VIP, gene: SGCA, peak:VIP\_239\_PICART1,SGCA2

SGCA



celltype: VIP, gene: BAG3, peak:VIP\_240\_BAG3,INPP5F1

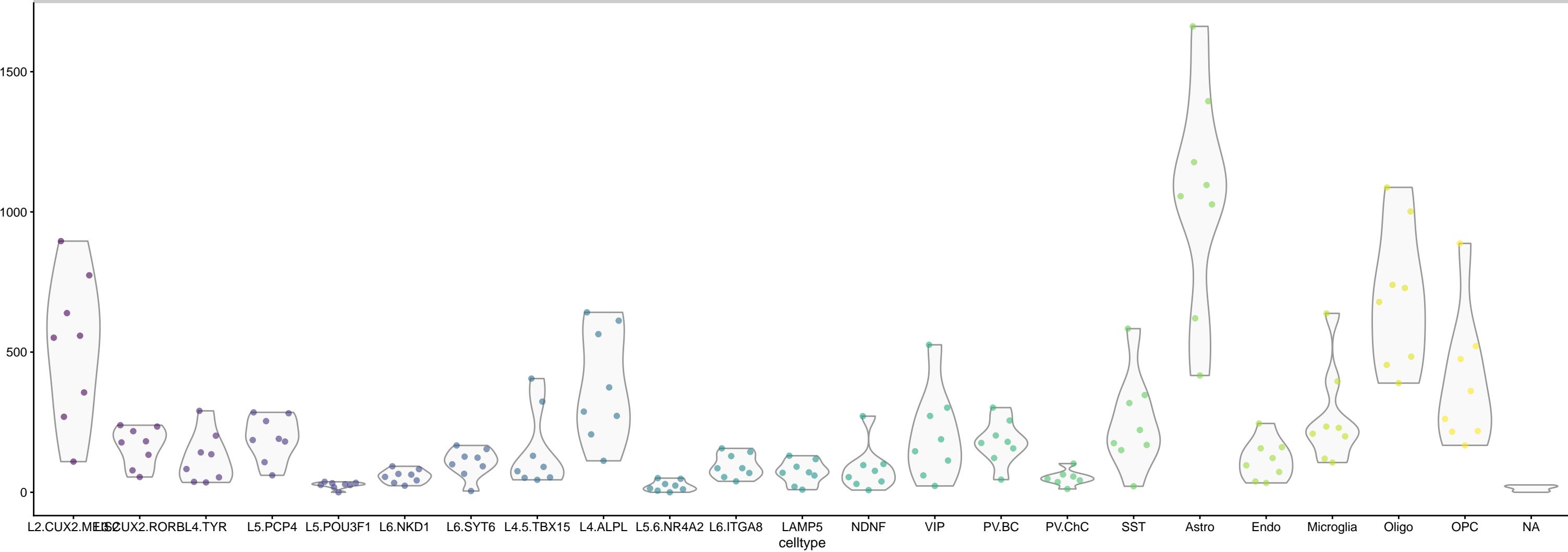
BAG3



celltype: VIP, gene: INPP5F, peak:VIP\_240\_BAG3,INPP5F2

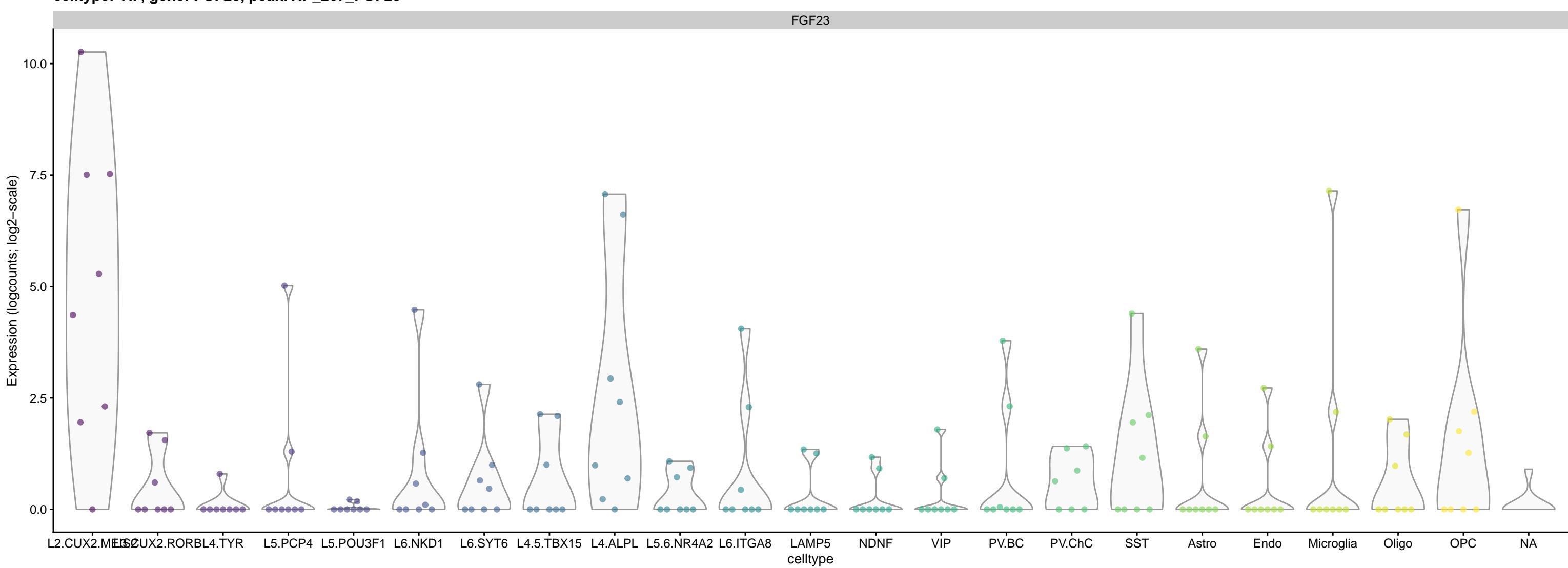
INPP5F

Expression (logcounts; log2-scale)



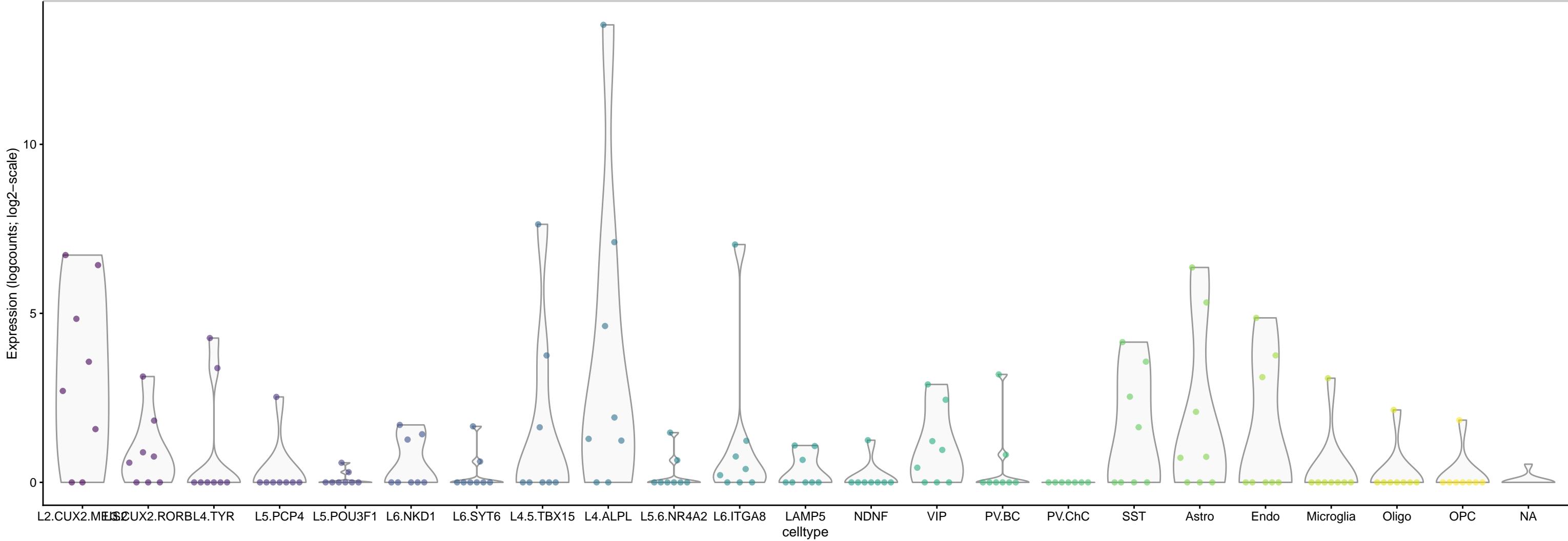
celltype: VIP, gene: FGF23, peak:VIP\_267\_FGF23

FGF23



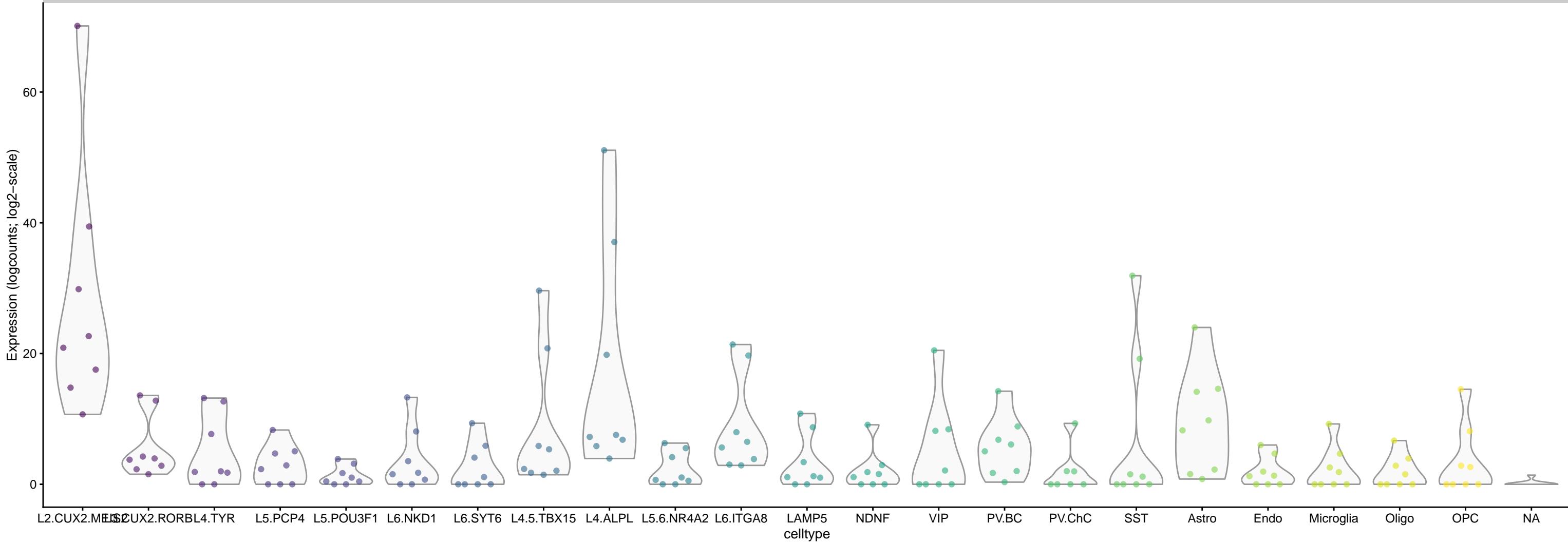
celltype: VIP, gene: GLIS2-AS1, peak:VIP\_271,GLIS2-AS1,PAM161

GLIS2-AS1



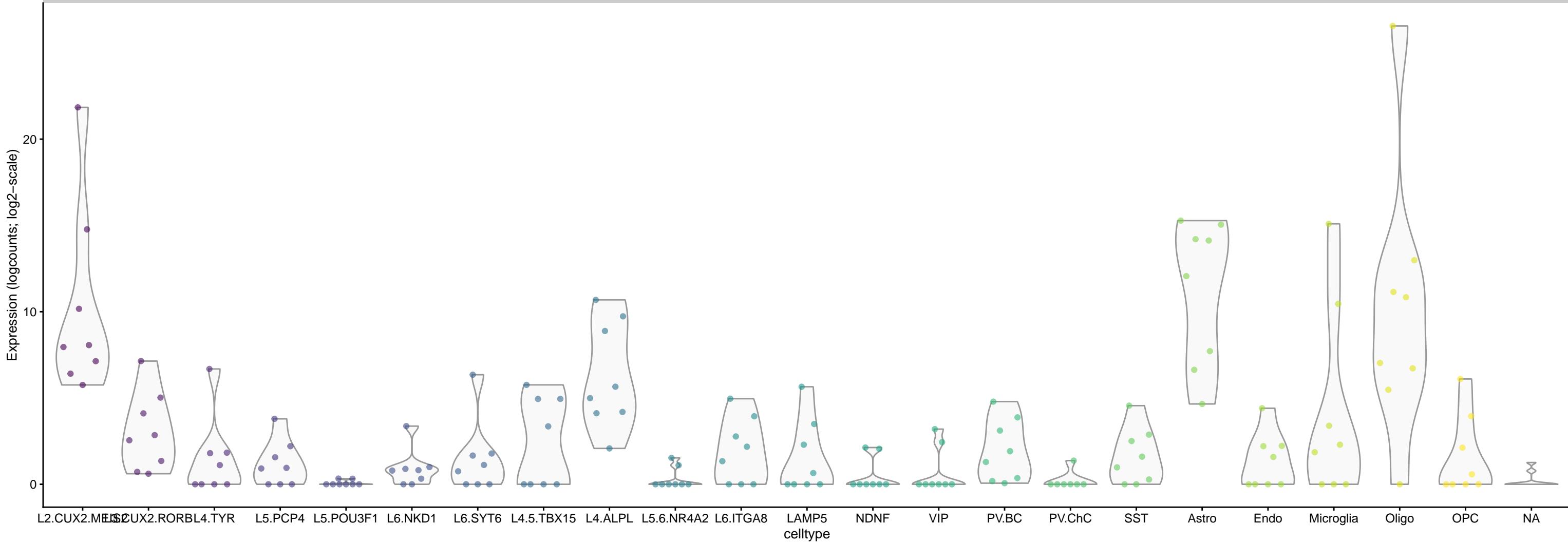
celltype: VIP, gene: PAM16, peak:VIP\_271,GLIS2-AS1,PAM162

PAM16



celltype: VIP, gene: EXTL3-AS1, peak:VIP\_291\_EXTL3-AS1

EXTL3-AS1



celltype: VIP, gene: ELP3, peak:VIP\_293\_ELP3

ELP3

Expression (logcounts; log<sub>2</sub>-scale)

600

400

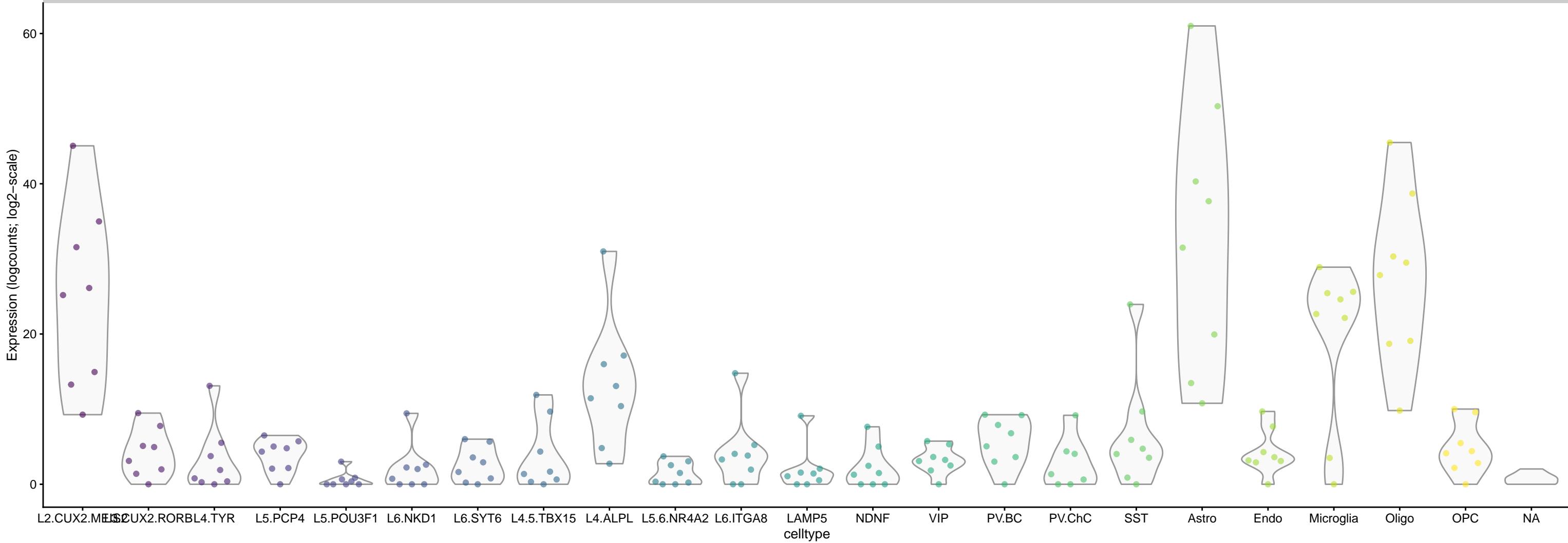
200

0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA celltype

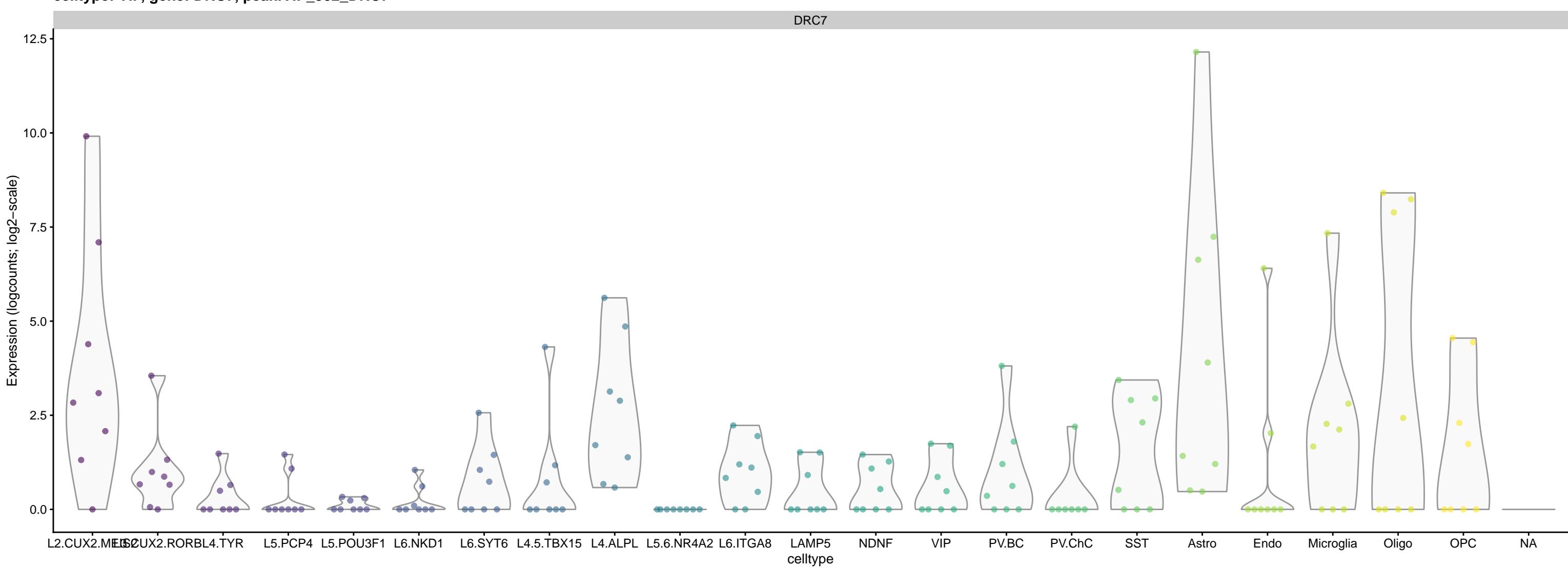
celltype: VIP, gene: C11orf71, peak:VIP\_297\_C11orf71

C11orf71



celltype: VIP, gene: DRC7, peak:VIP\_302\_DRC7

DRC7



celltype: VIP, gene: PCYT1B, peak:VIP\_305\_PCYT1B,PCYT1B-AS11

PCYT1B

Expression (logcounts; log<sub>2</sub>-scale)

900

600

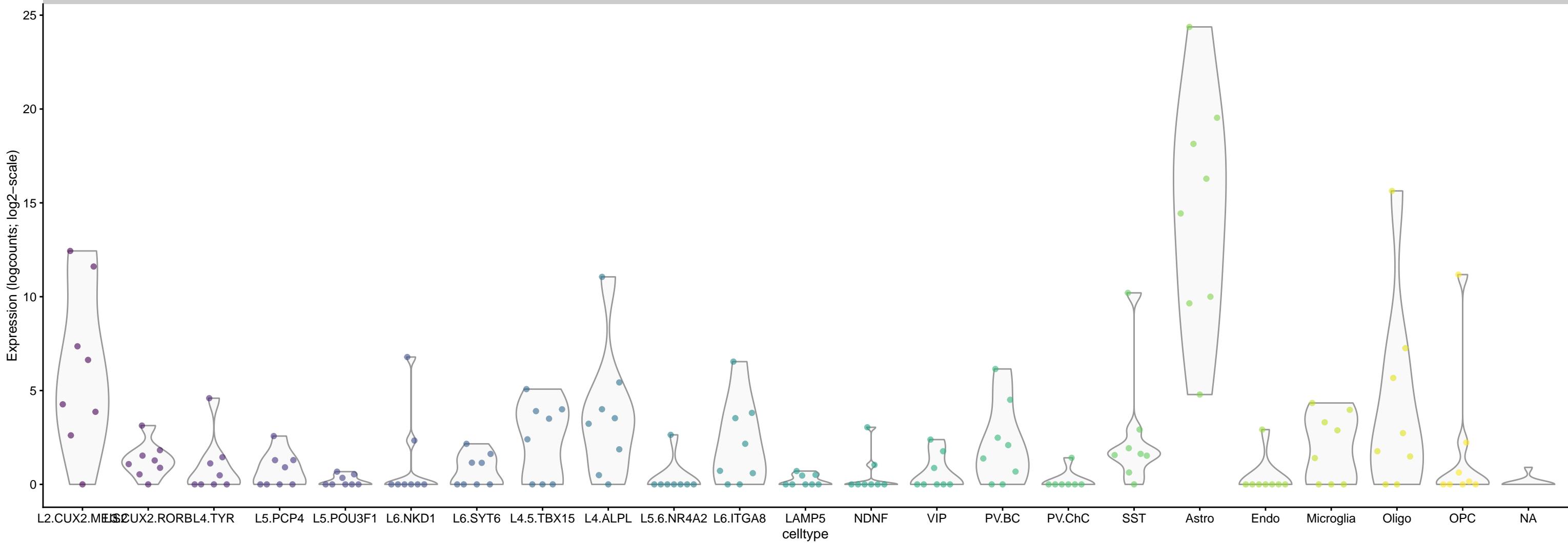
300

0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA celltype

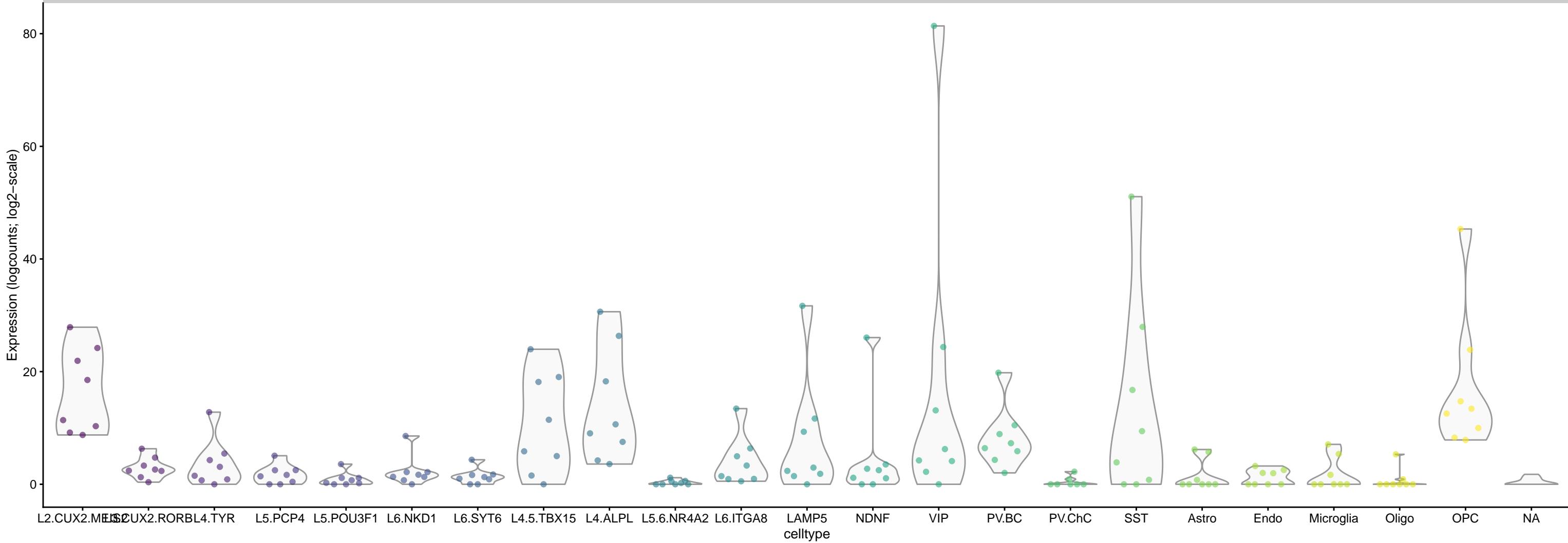
celltype: VIP, gene: PCYT1B-AS1, peak:VIP\_305\_PCYT1B,PCYT1B-AS12

PCYT1B-AS1



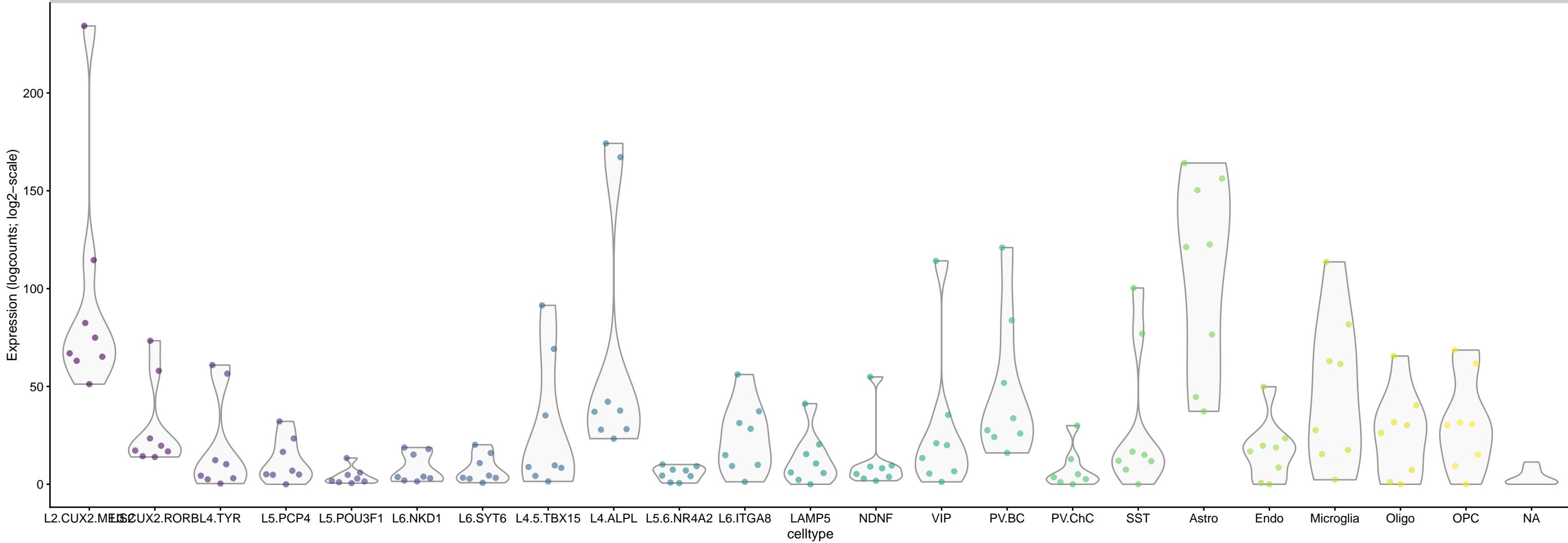
celltype: VIP, gene: FXYD6–FXYD2, peak:VIP\_312\_FXYD6–FXYD2

FXYD6–FXYD2



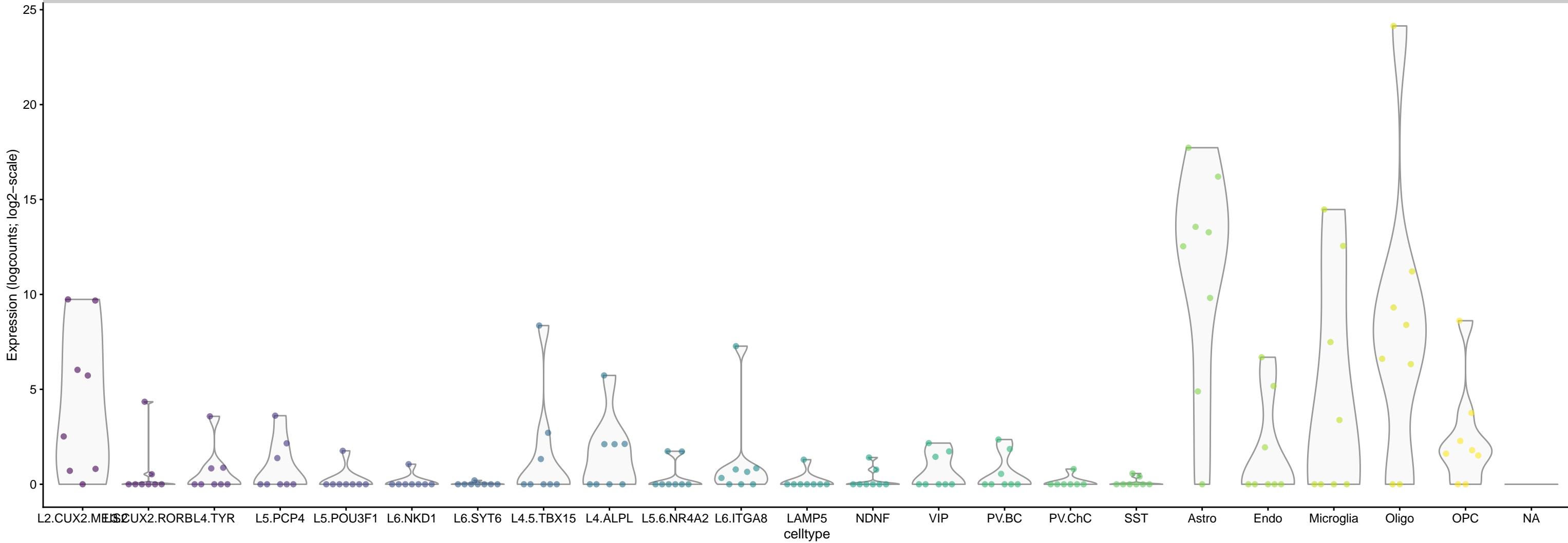
celltype: VIP, gene: PEX10, peak:VIP\_314\_PEX10

PEX10



celltype: VIP, gene: CTRB2, peak:VIP\_329\_CTRB2

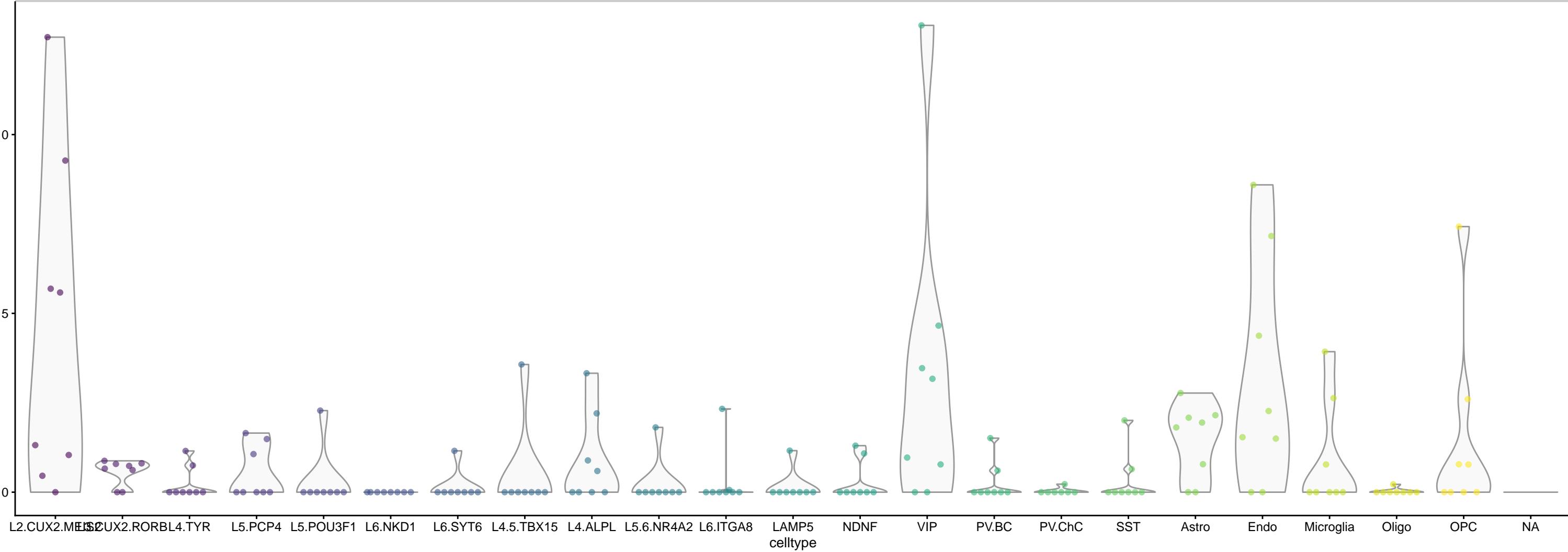
CTR2



celltype: VIP, gene: TCF15, peak:VIP\_337\_TCF15

TCF15

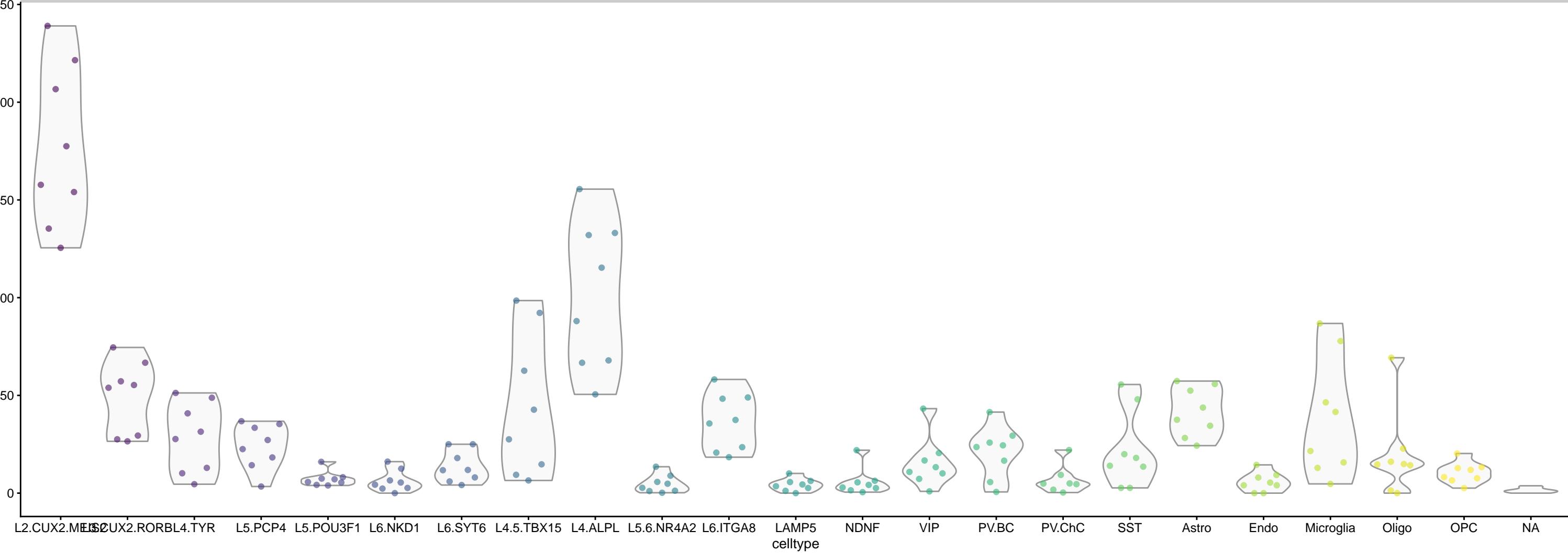
Expression (logcounts; log2-scale)



celltype: VIP, gene: CHAF1B, peak:VIP\_360\_CHAF1B,MORC31

CHAF1B

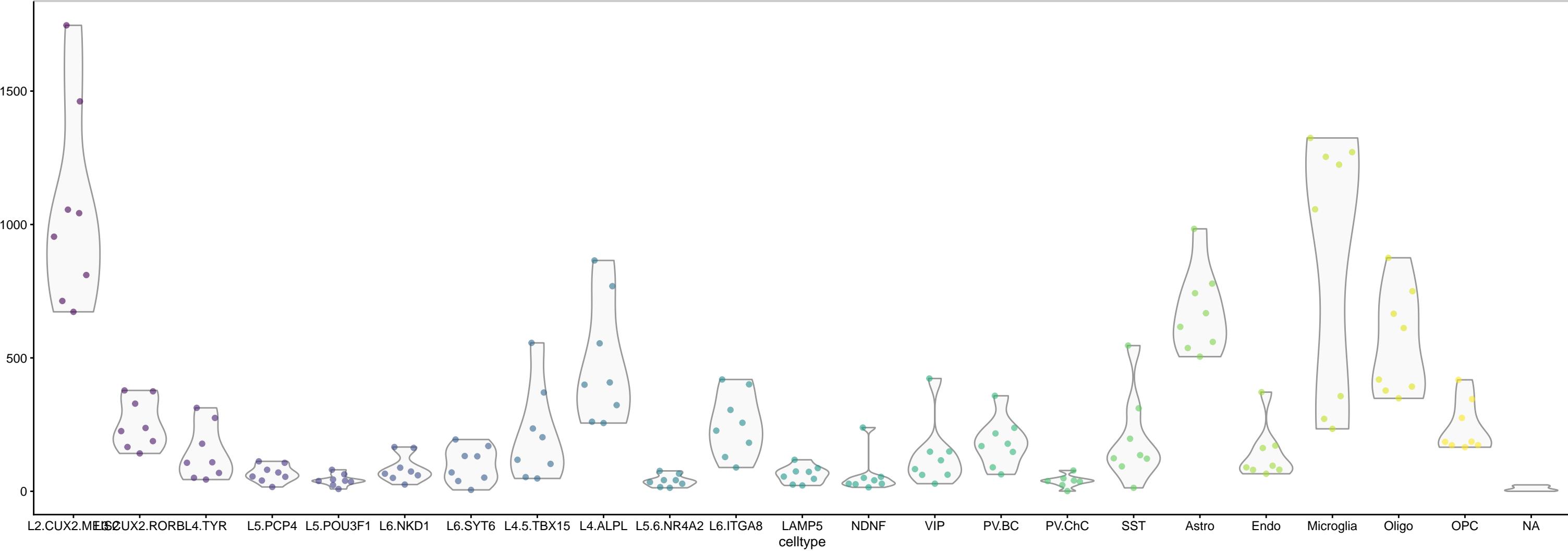
Expression (logcounts; log2-scale)



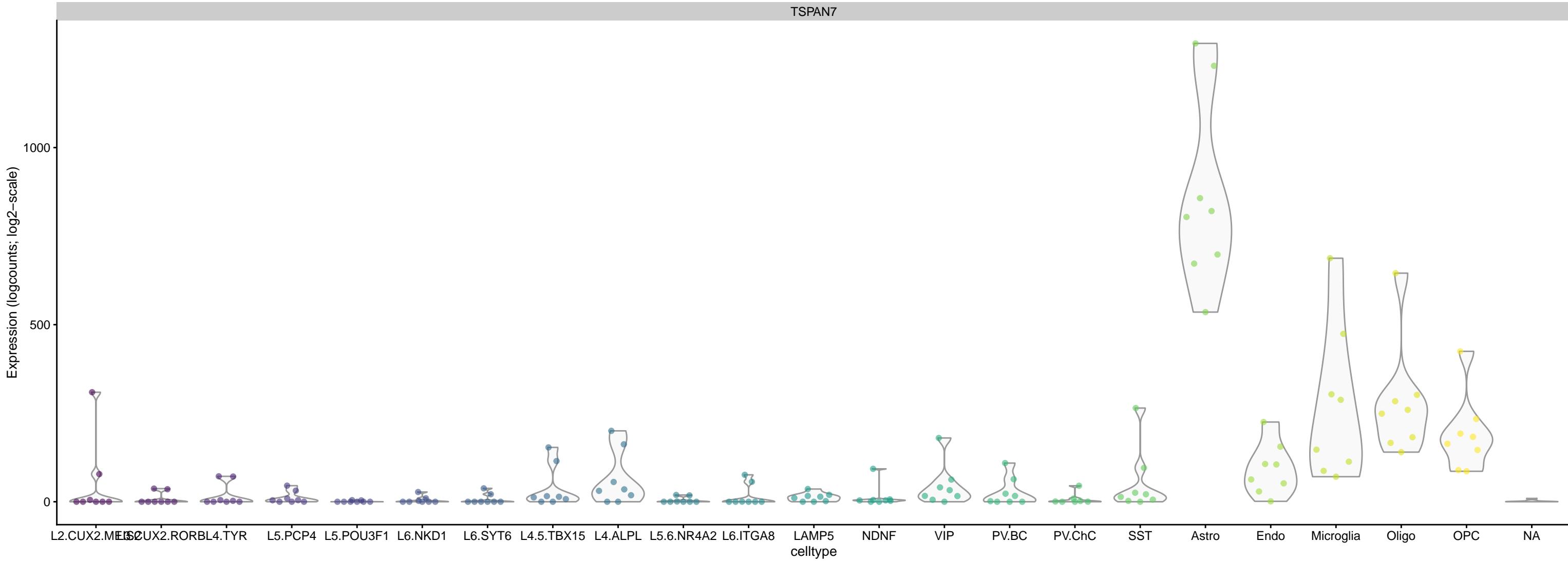
celltype: VIP, gene: MORC3, peak:VIP\_360\_CHAF1B,MORC32

MORC3

Expression (logcounts; log2-scale)

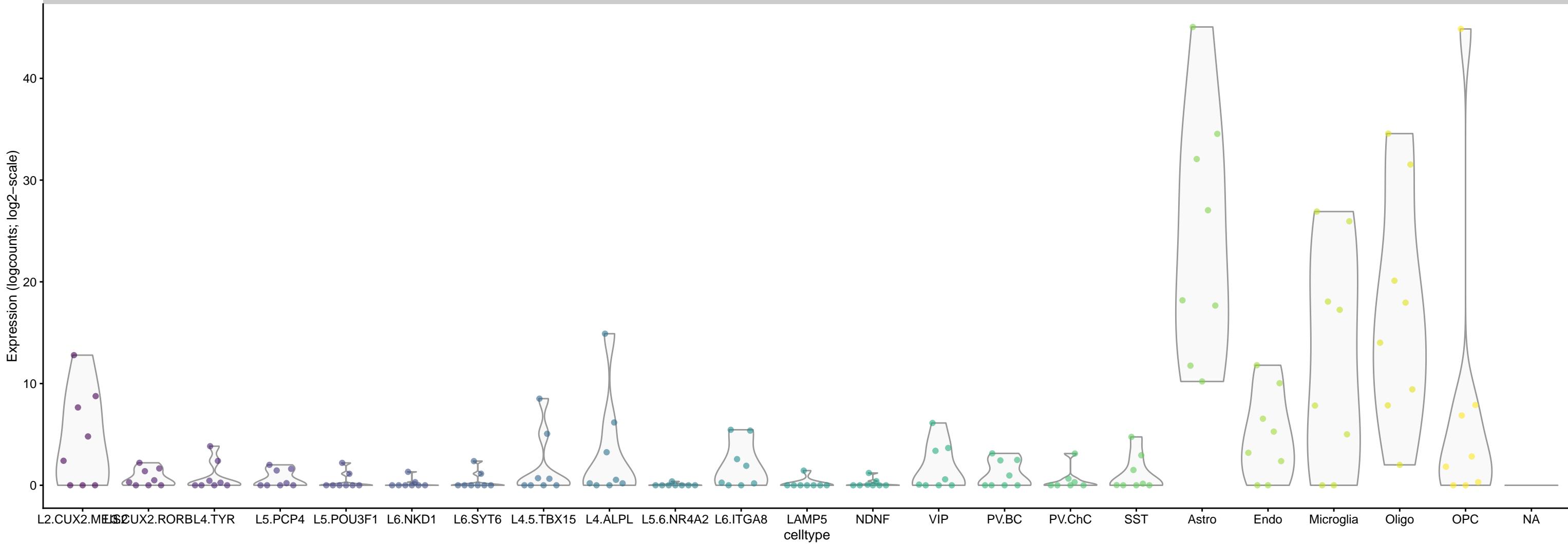


celltype: VIP, gene: TSPAN7, peak:VIP\_377\_TSPAN7

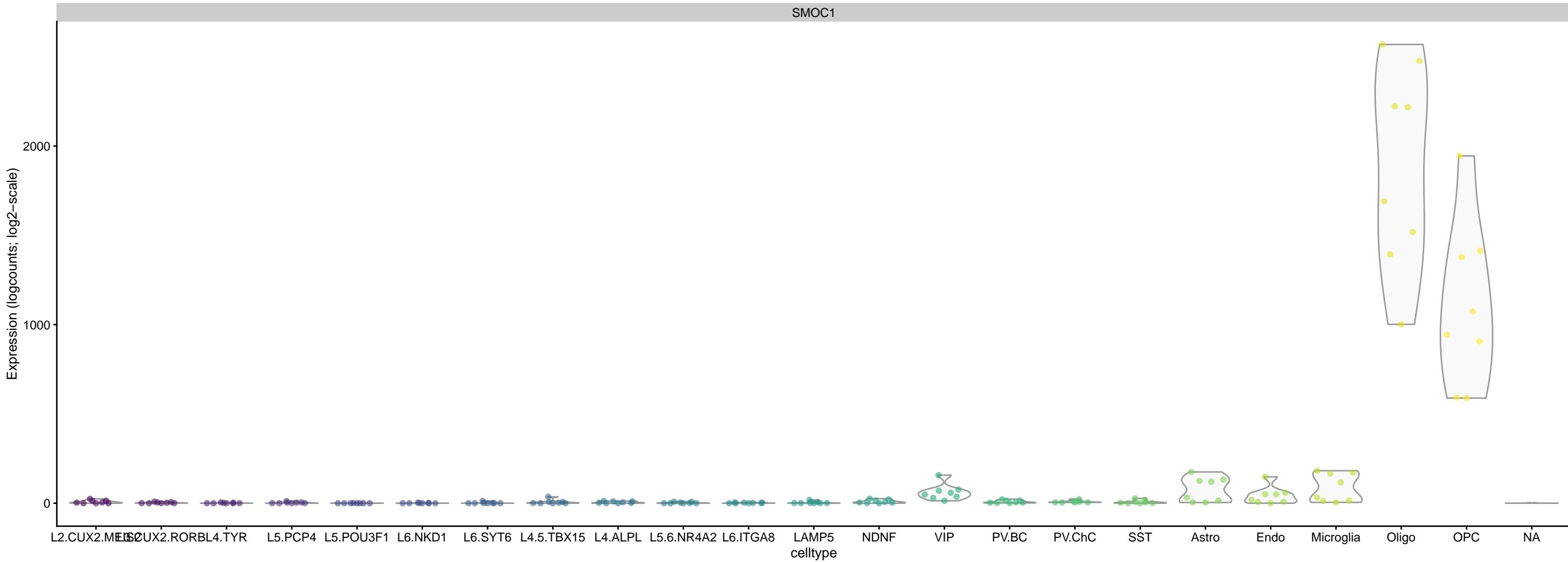


celltype: VIP, gene: MRPS28, peak:VIP\_386\_MRPS28

MRPS28



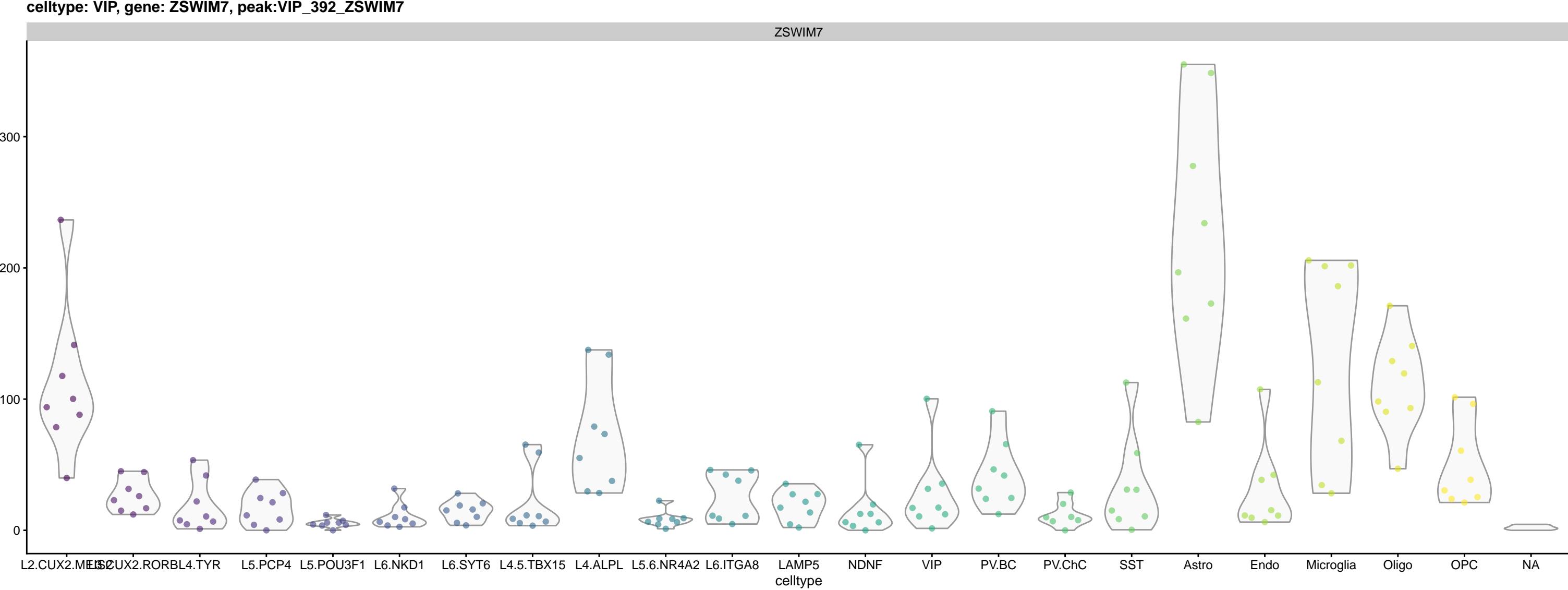
celltype: VIP, gene: SMOC1, peak:VIP\_387\_SMOC1



celltype: VIP, gene: ZSWIM7, peak:VIP\_392\_ZSWIM7

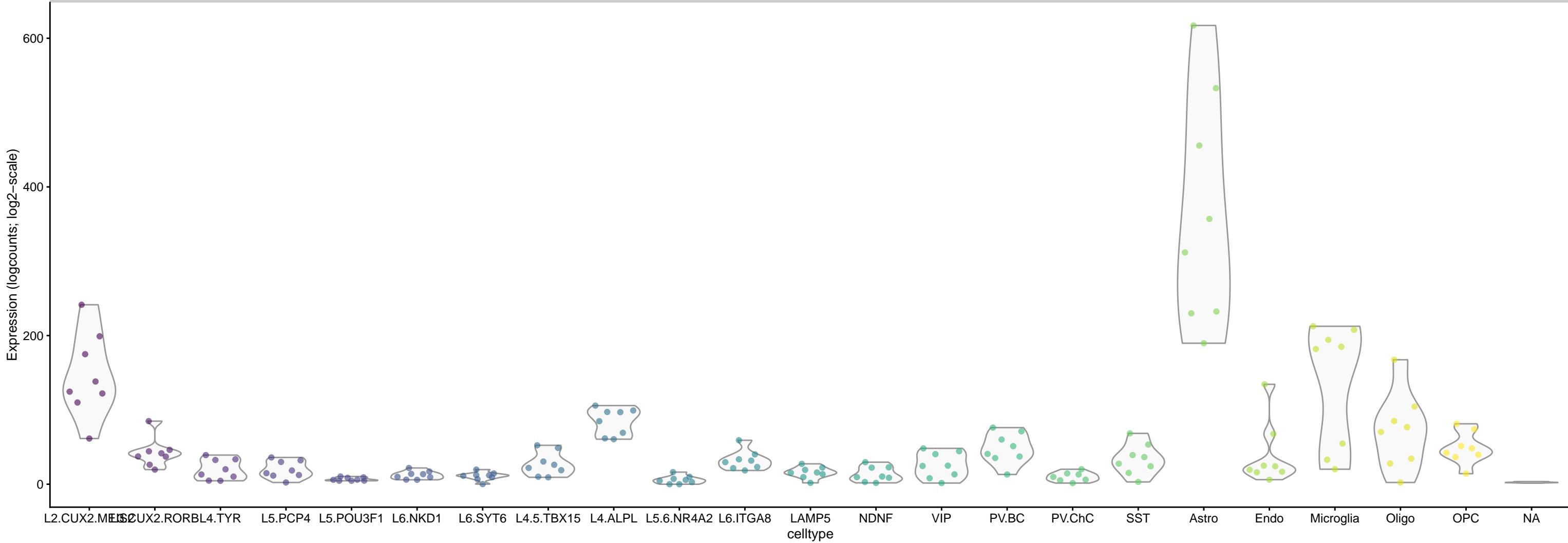
ZSWIM7

Expression (logcounts; log2-scale)



celltype: VIP, gene: MAFG, peak:VIP\_394\_MAFG

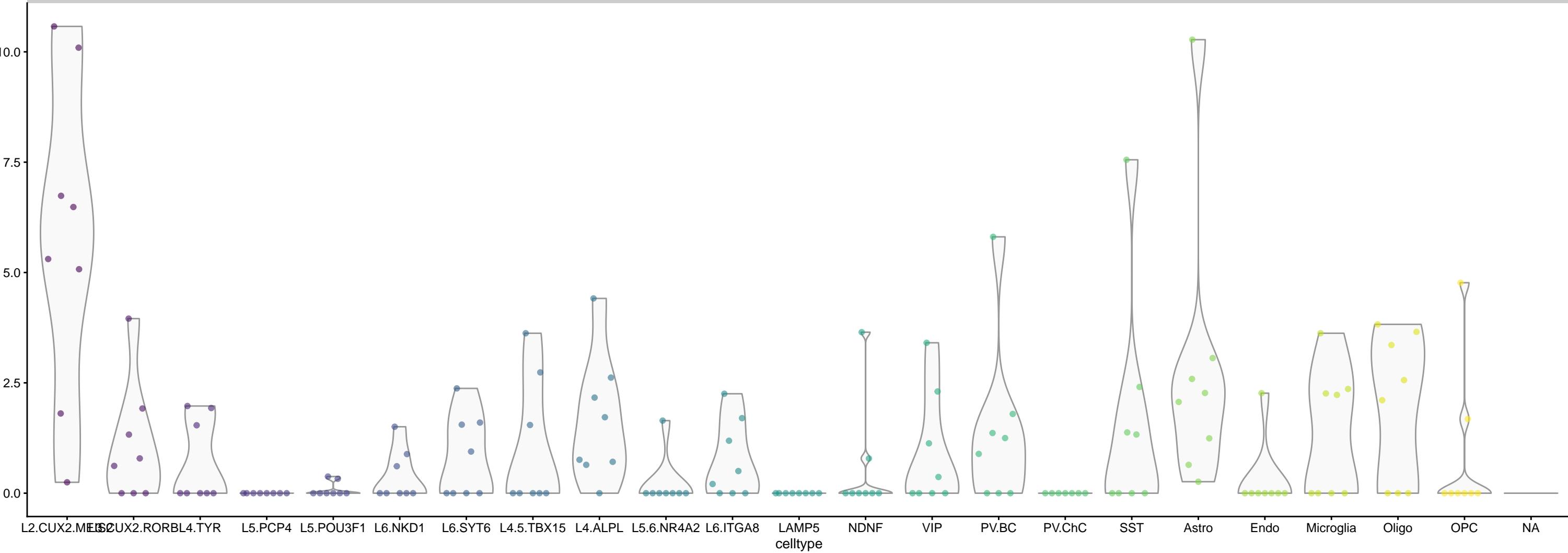
MAFG



celltype: VIP, gene: LINC02213, peak:VIP\_397\_LINC02213

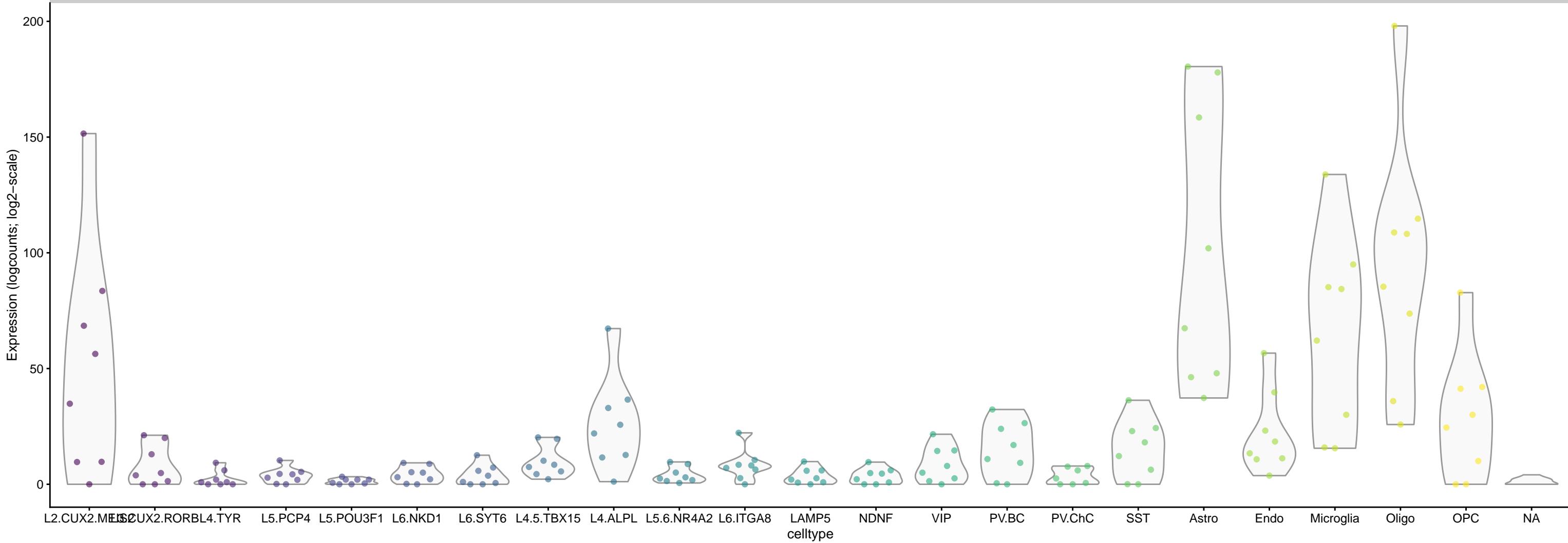
LINC02213

Expression (logcounts; log2-scale)



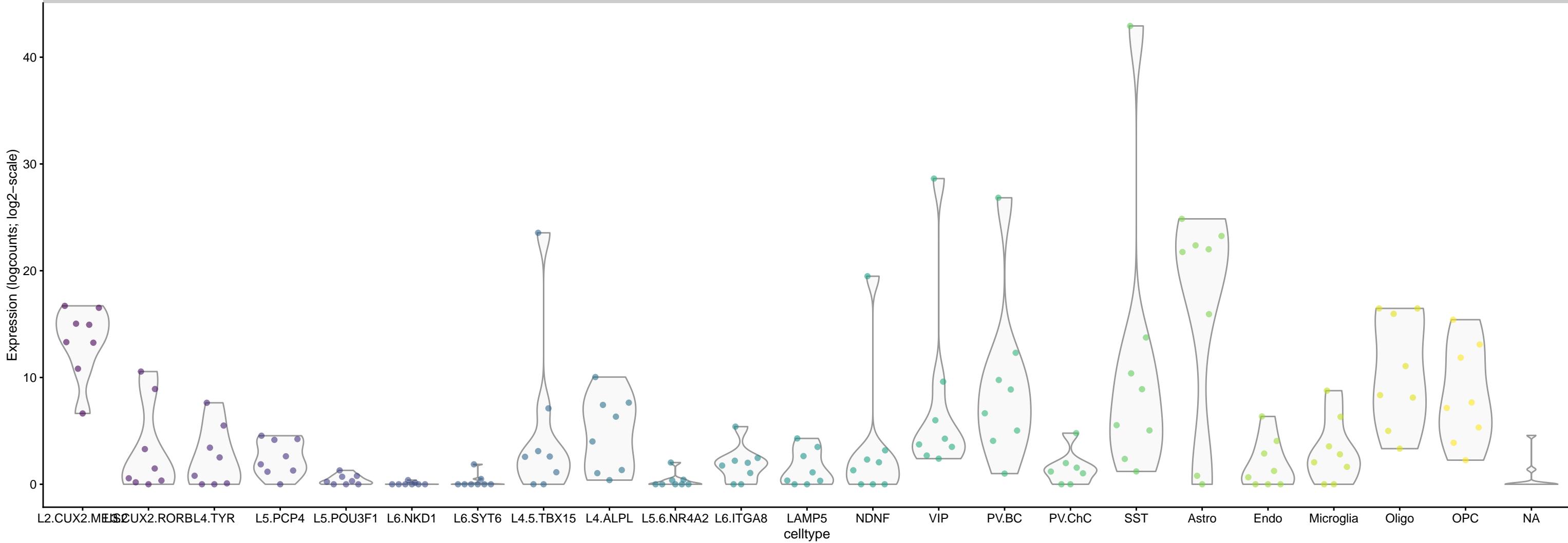
celltype: VIP, gene: BUB3, peak:VIP\_403\_BUB3

BUB3



celltype: VIP, gene: TCF4-AS1, peak:VIP\_415\_TCF4-AS1

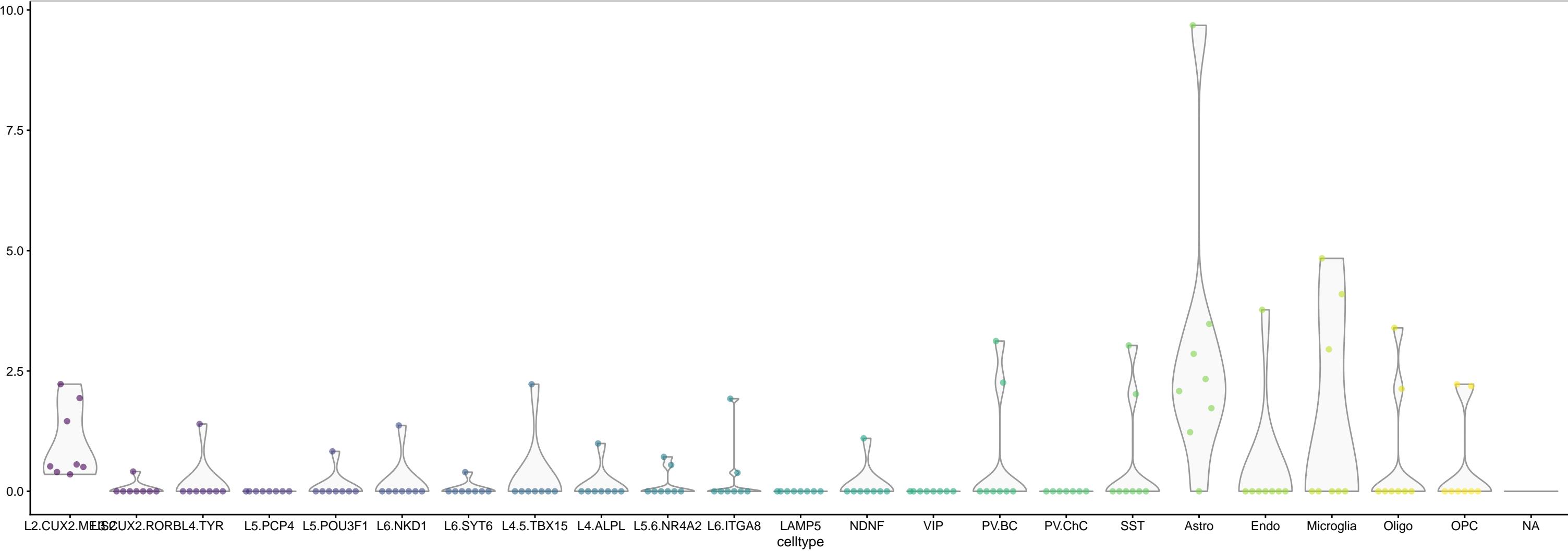
TCF4-AS1



celltype: VIP, gene: GPR142, peak:VIP\_421\_GPR142,GPRC5C1

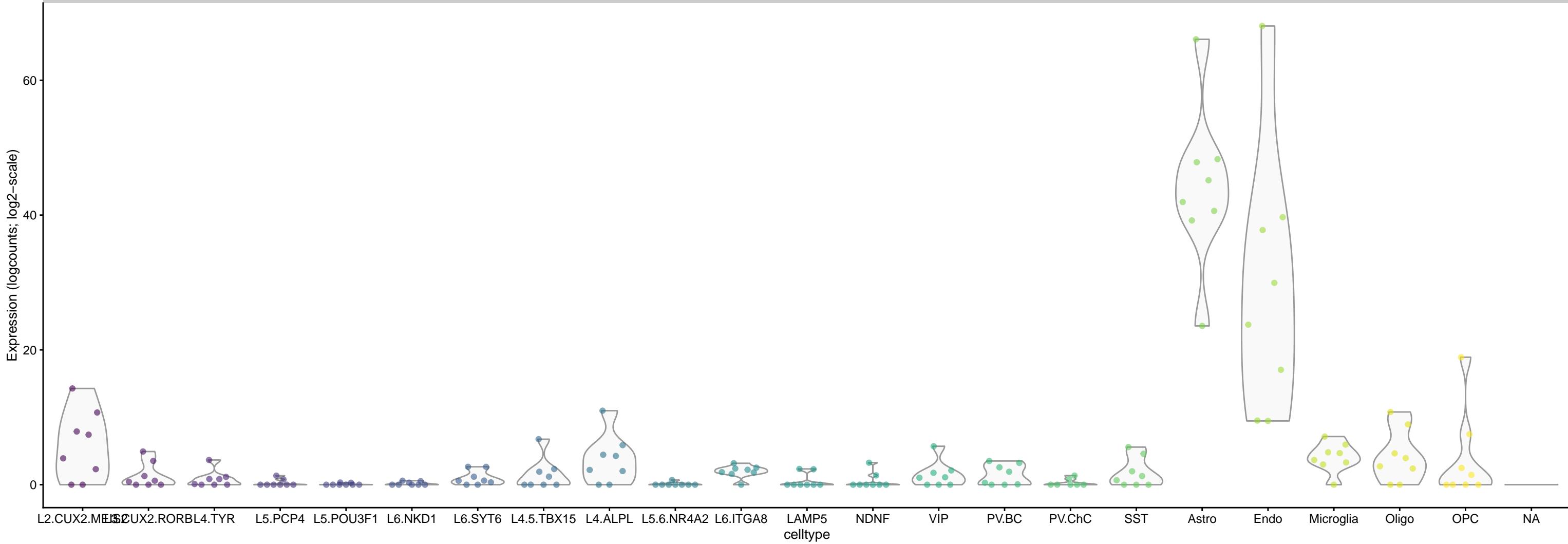
GPR142

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: GPRC5C, peak:VIP\_421\_GPR142,GPRC5C2

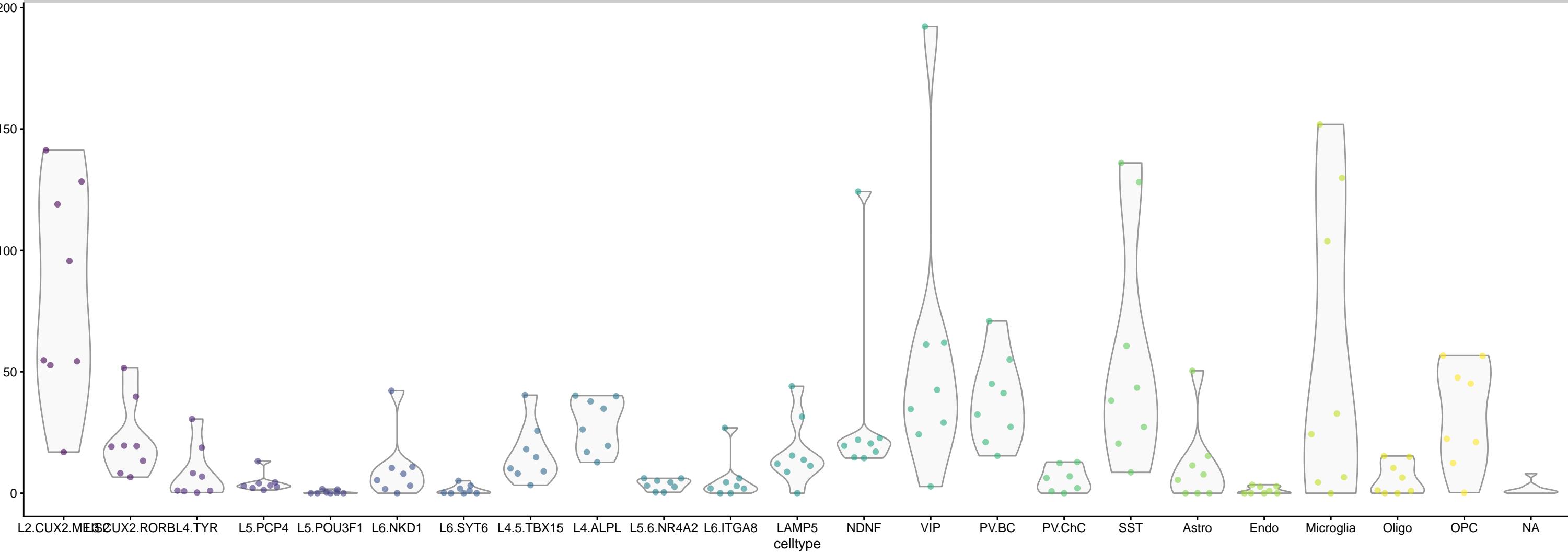
GPRC5C



celltype: VIP, gene: TMEM132E, peak:VIP\_424\_TMEM132E

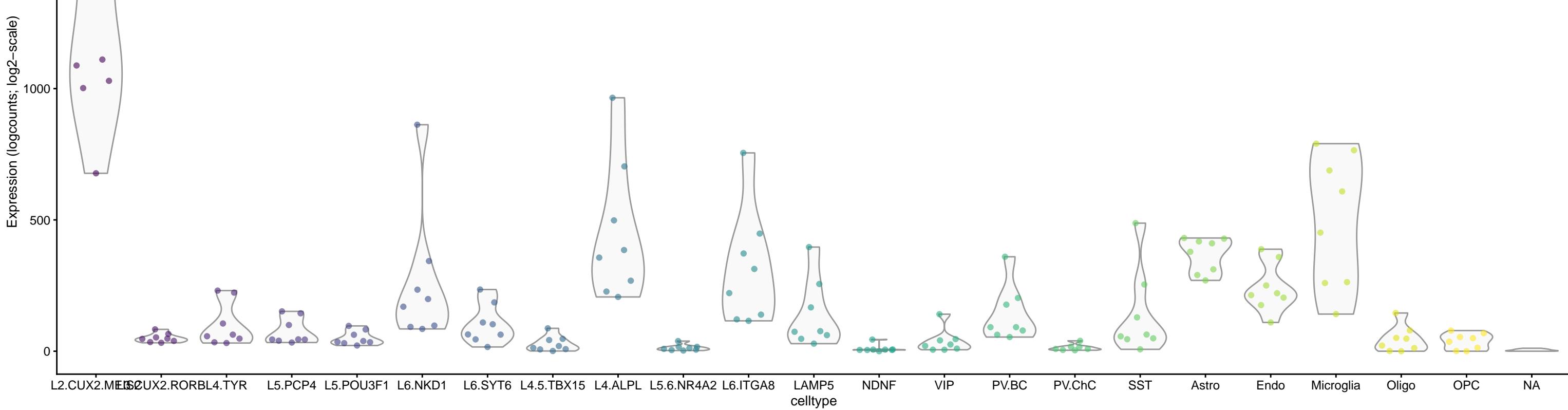
TMEM132E

Expression (logcounts; log2-scale)

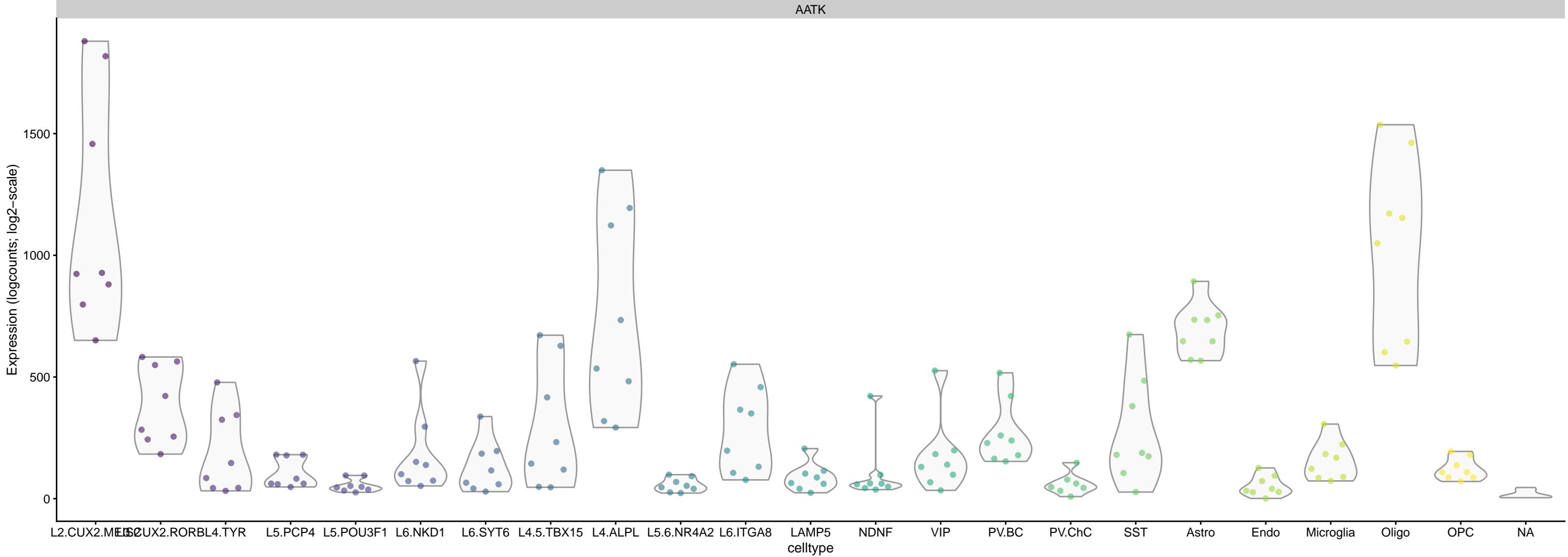


celltype: VIP, gene: ST3GAL1, peak:VIP\_432\_ST3GAL1

ST3GAL1

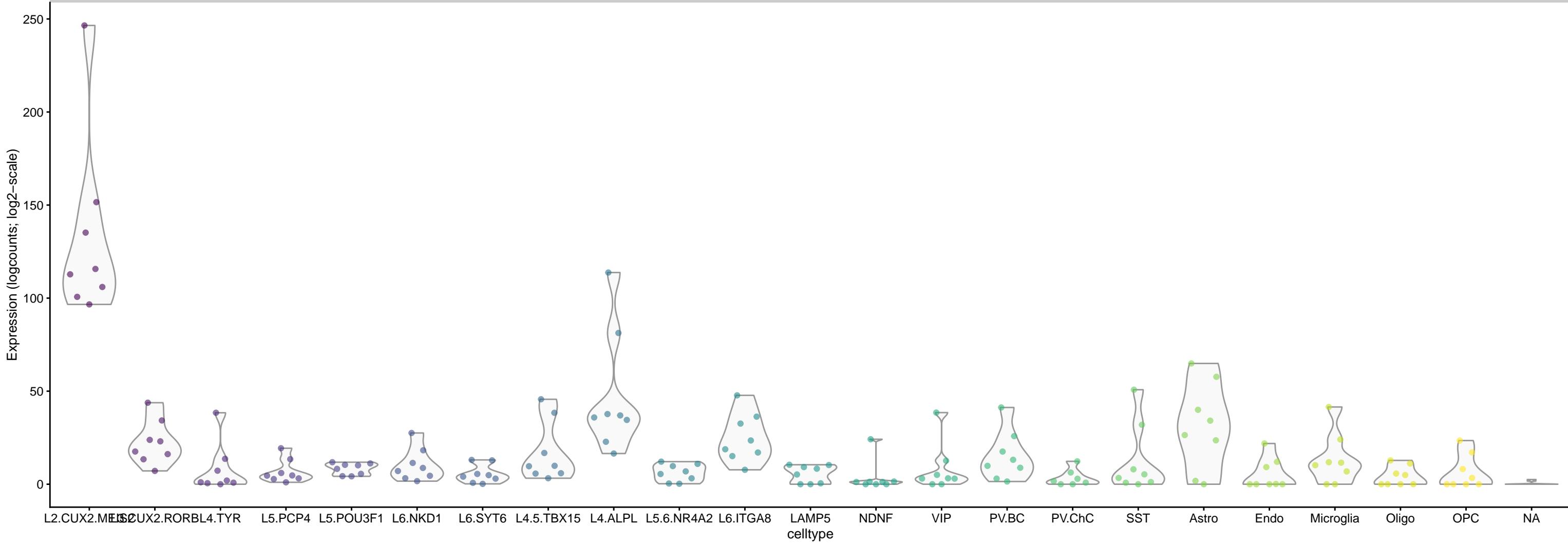


celltype: VIP, gene: AATK, peak:VIP\_436\_AATK



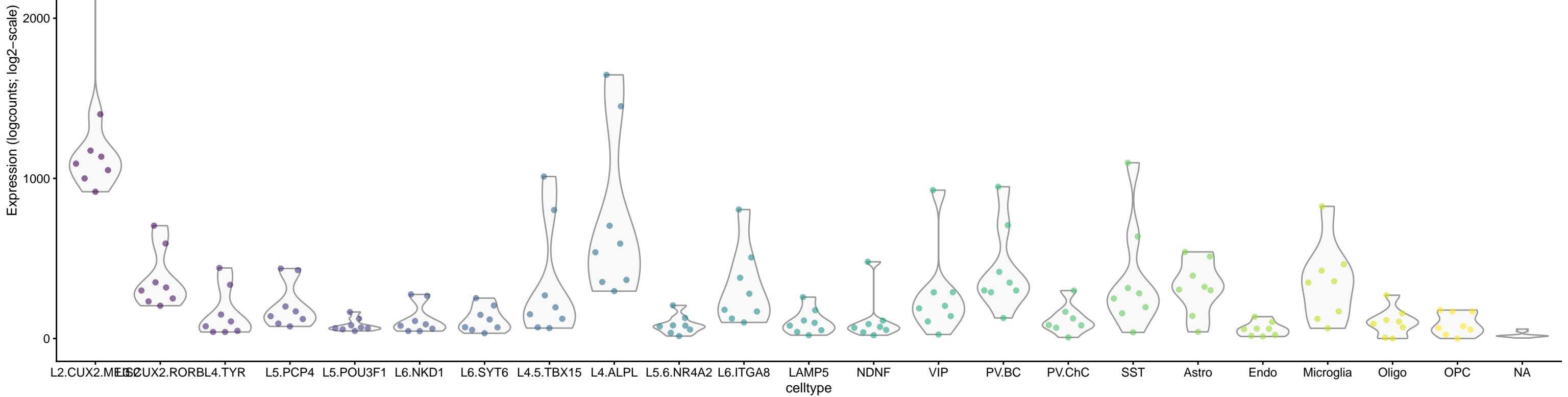
celltype: VIP, gene: RPUSD1, peak:VIP\_437\_RPUSD1

RPUSD1



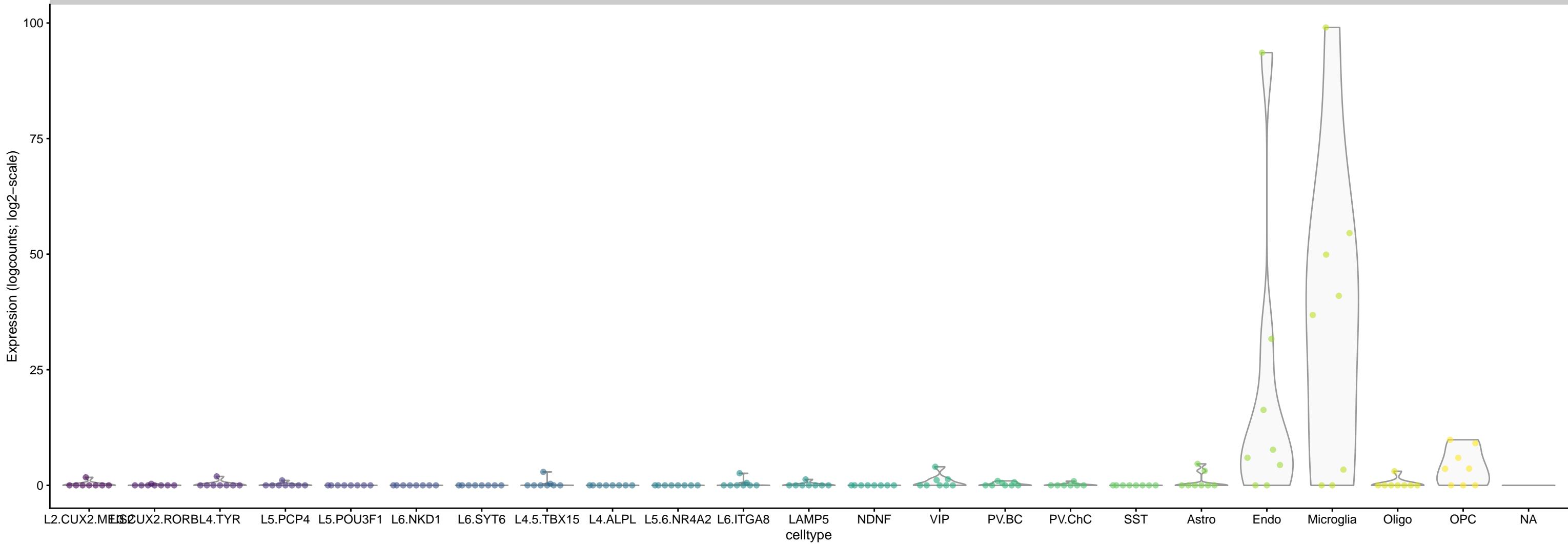
celltype: VIP, gene: ATP13A2, peak:VIP\_442\_ATP13A2, MFAP21

ATP13A2



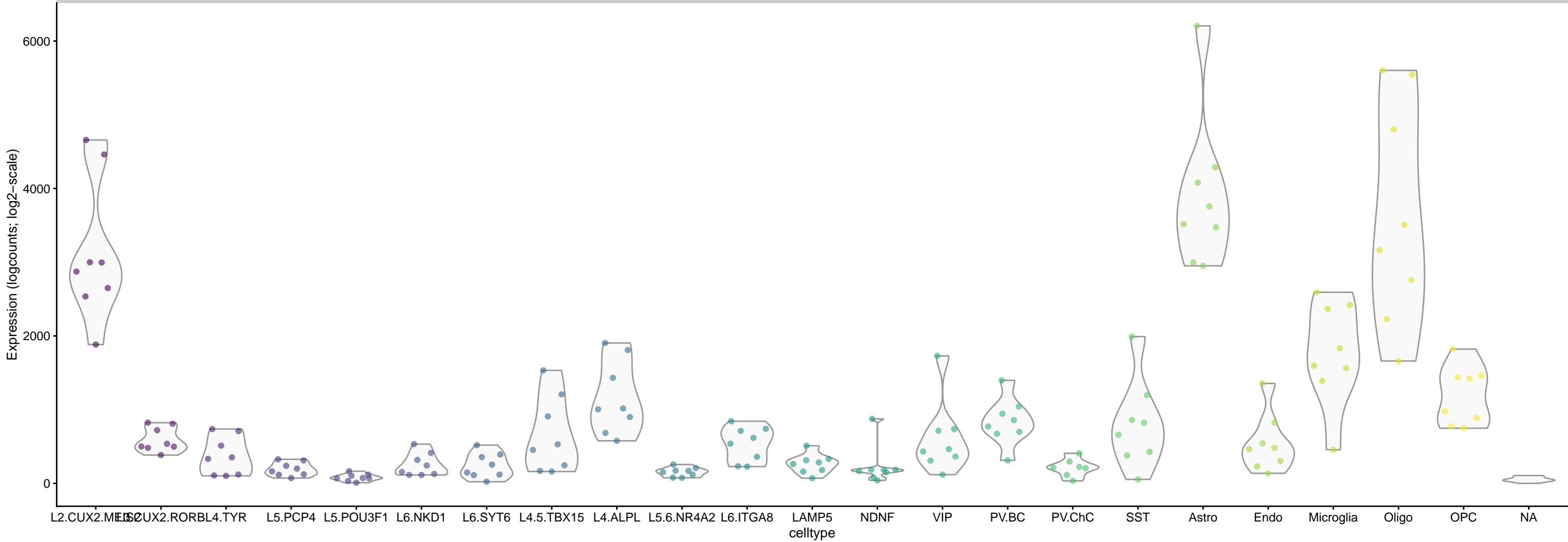
celltype: VIP, gene: MFAP2, peak:VIP\_442\_ATP13A2,MFAP22

MFAP2



celltype: VIP, gene: KDM4C, peak:VIP\_469\_KDM4C

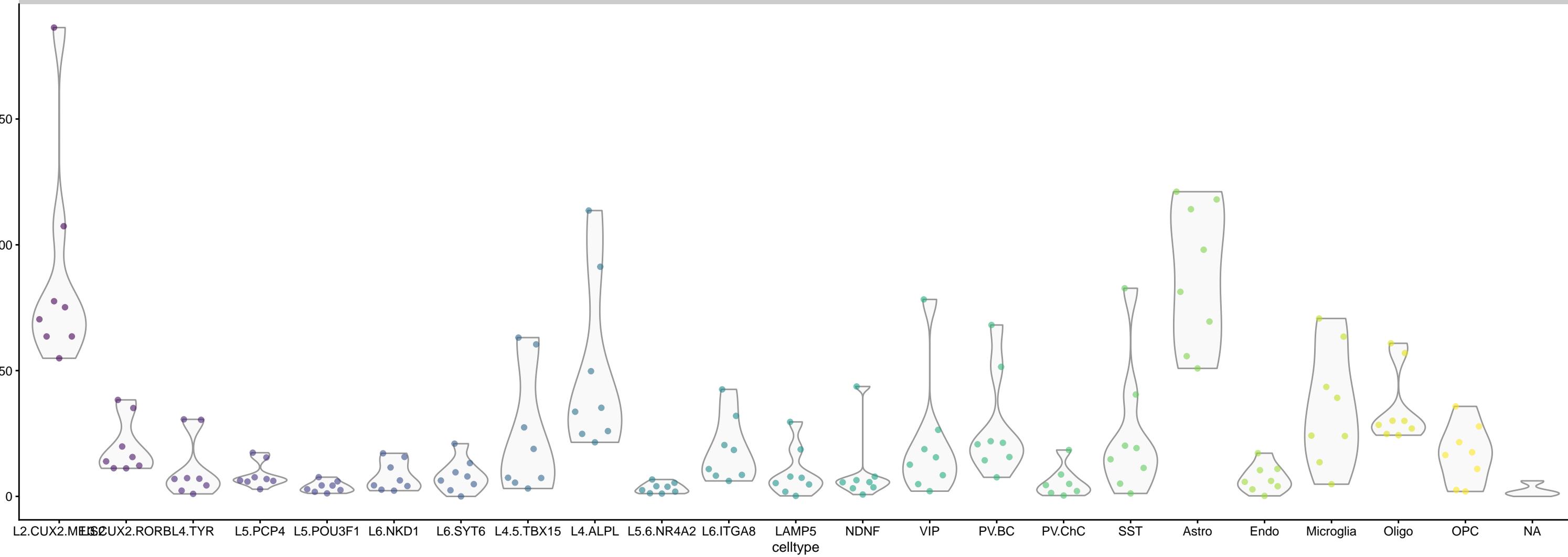
KDM4C



celltype: VIP, gene: UBE2F-SCLY, peak:VIP\_472\_UBE2F-SCLY

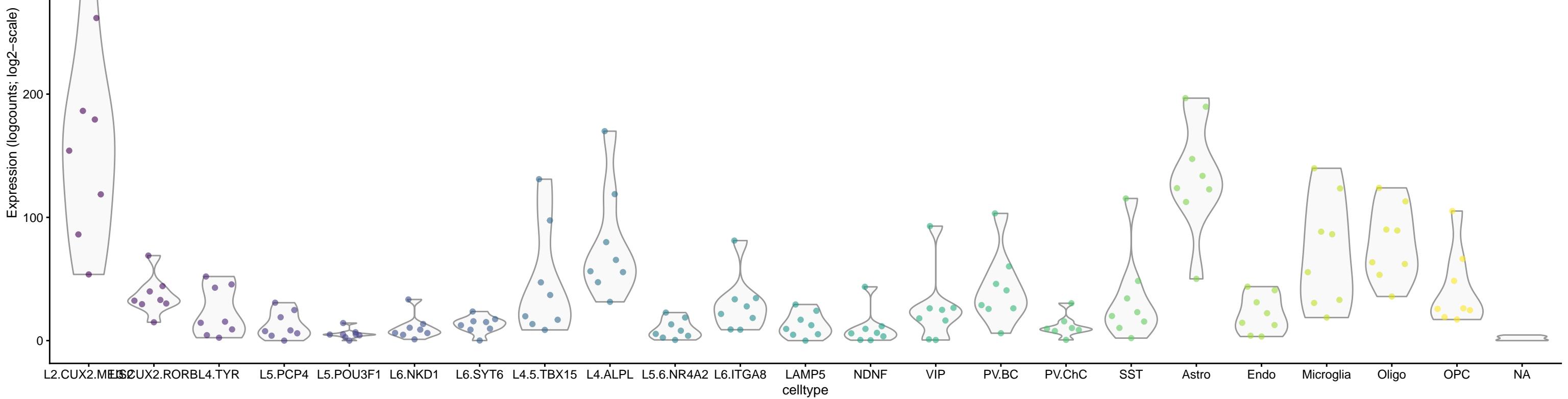
UBE2F-SCLY

Expression (logcounts; log2-scale)



celltype: VIP, gene: RAE1, peak:VIP\_488\_RAE1

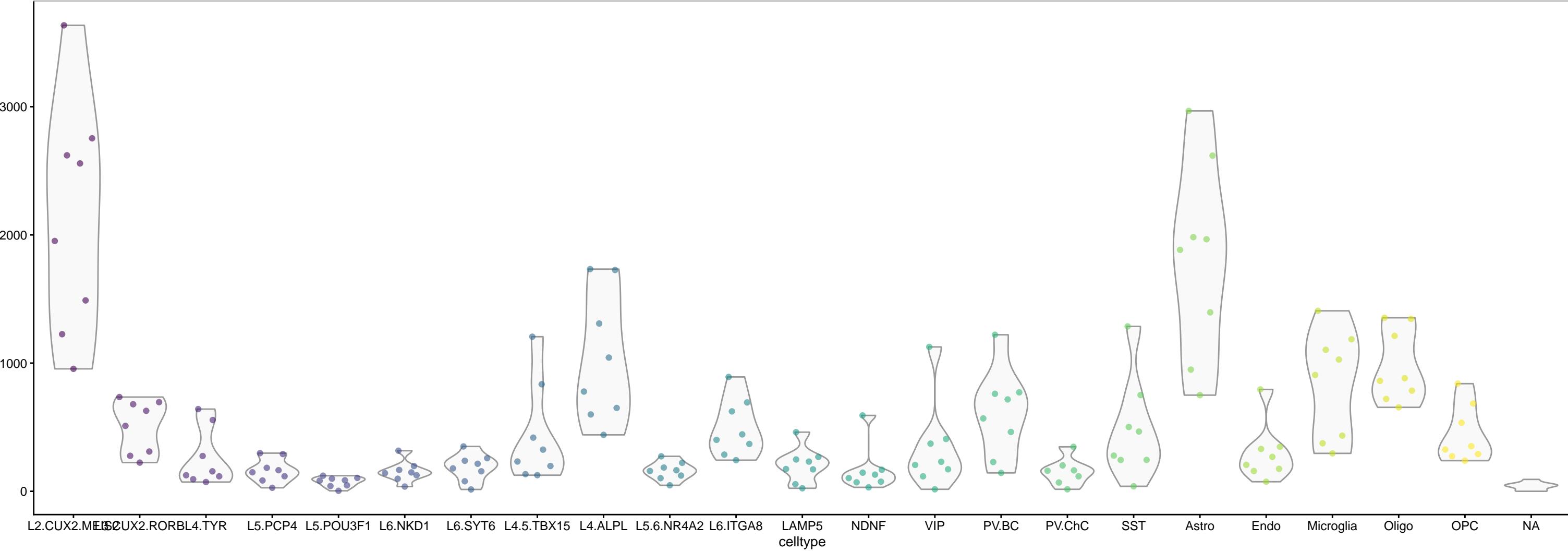
RAE1



celltype: VIP, gene: UBE2D2, peak:VIP\_489\_UBE2D2

UBE2D2

Expression (logcounts; log2-scale)



celltype: VIP, gene: CYP26B1, peak:VIP\_508\_CYP26B1

CYP26B1

Expression (logcounts; log2-scale)

200

100

0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

celltype: VIP, gene: LINC00840, peak:VIP\_513\_LINC00840,LINC026581

LINC00840

Expression (logcounts; log2-scale)

600

400

200

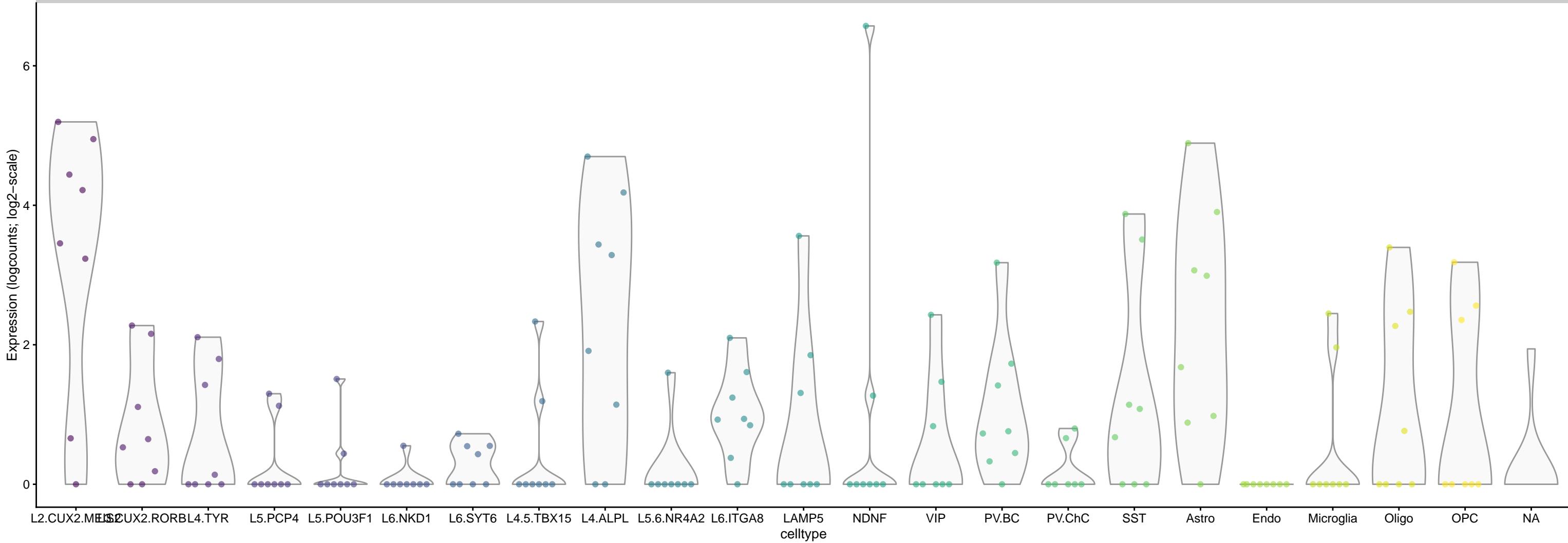
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

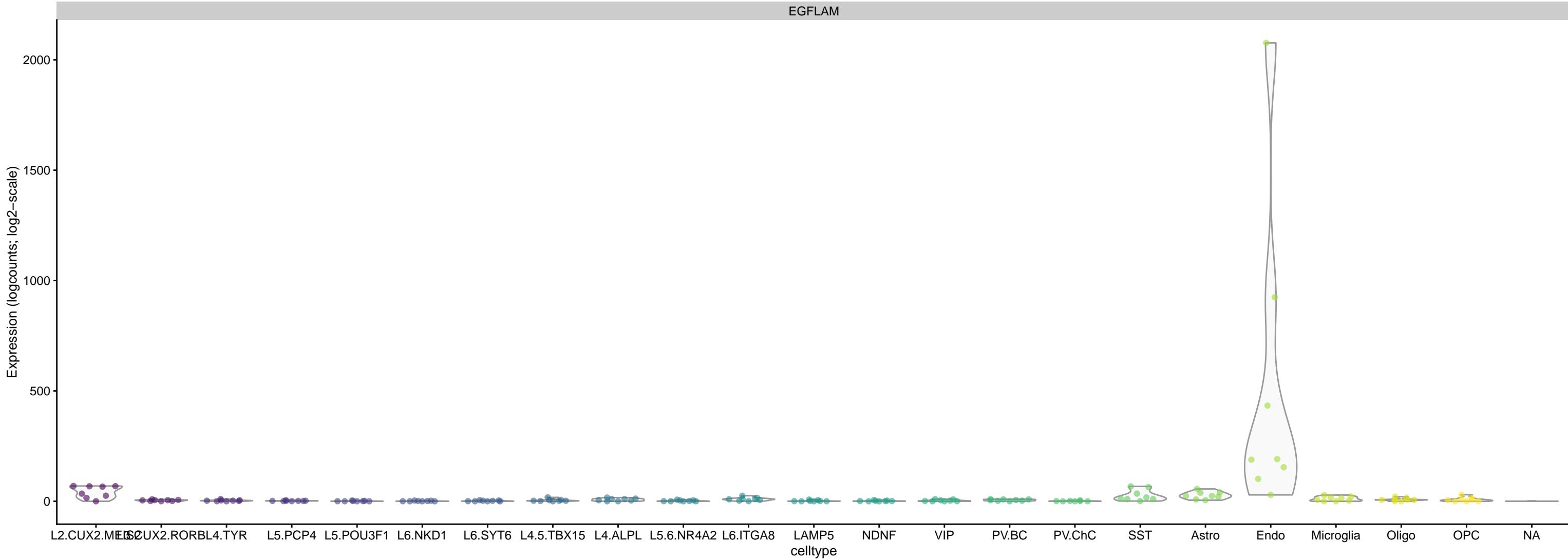
celltype

celltype: VIP, gene: LINC02658, peak:VIP\_513\_LINC00840,LINC026582

LINC02658

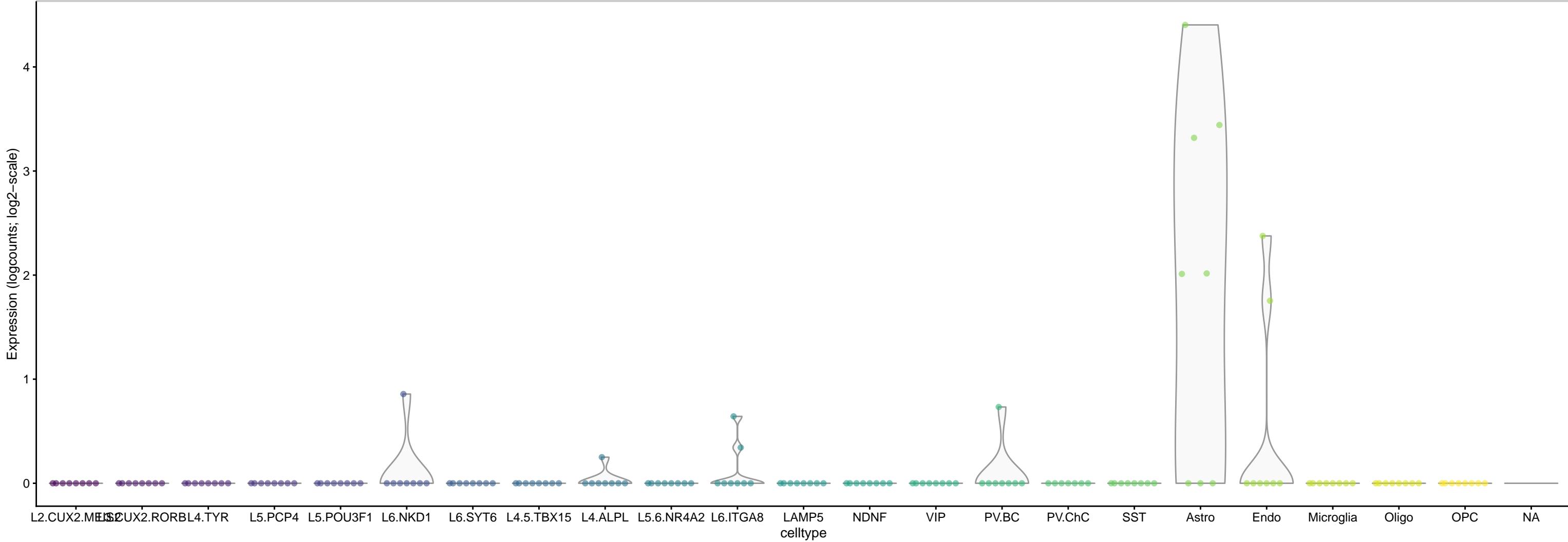


celltype: VIP, gene: EGFLAM, peak:VIP\_521\_EGFLAM

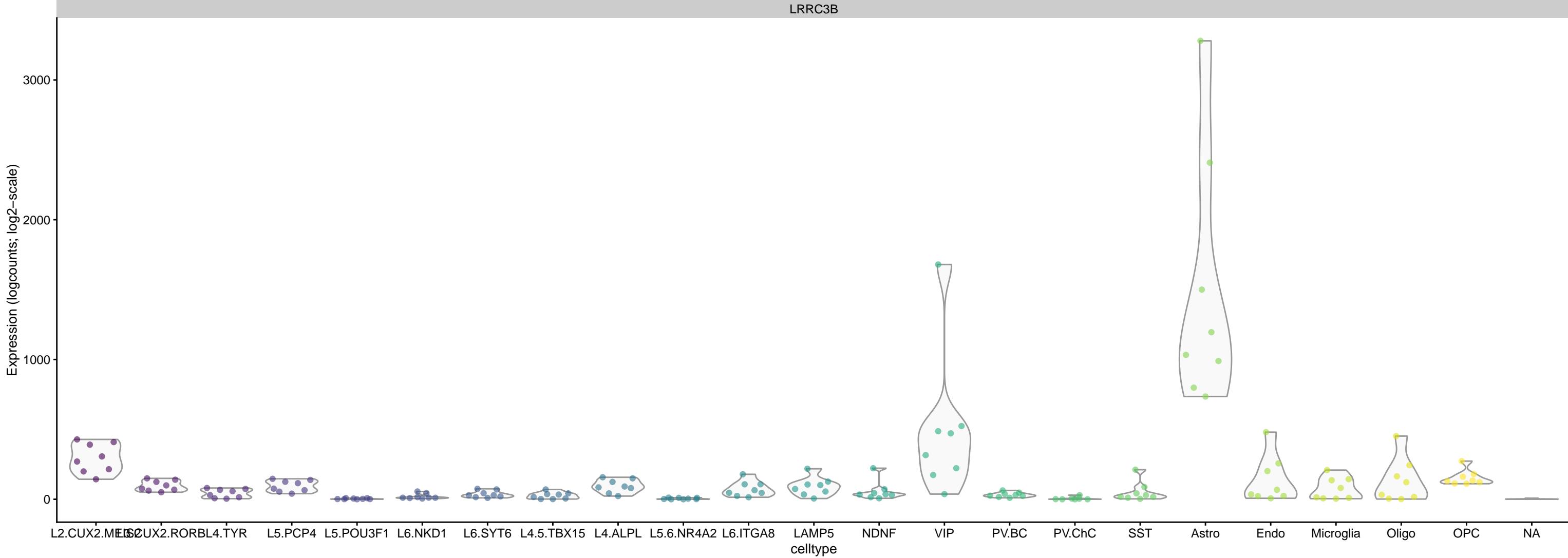


celltype: VIP, gene: C11orf86, peak:VIP\_523\_C11orf86

C11orf86

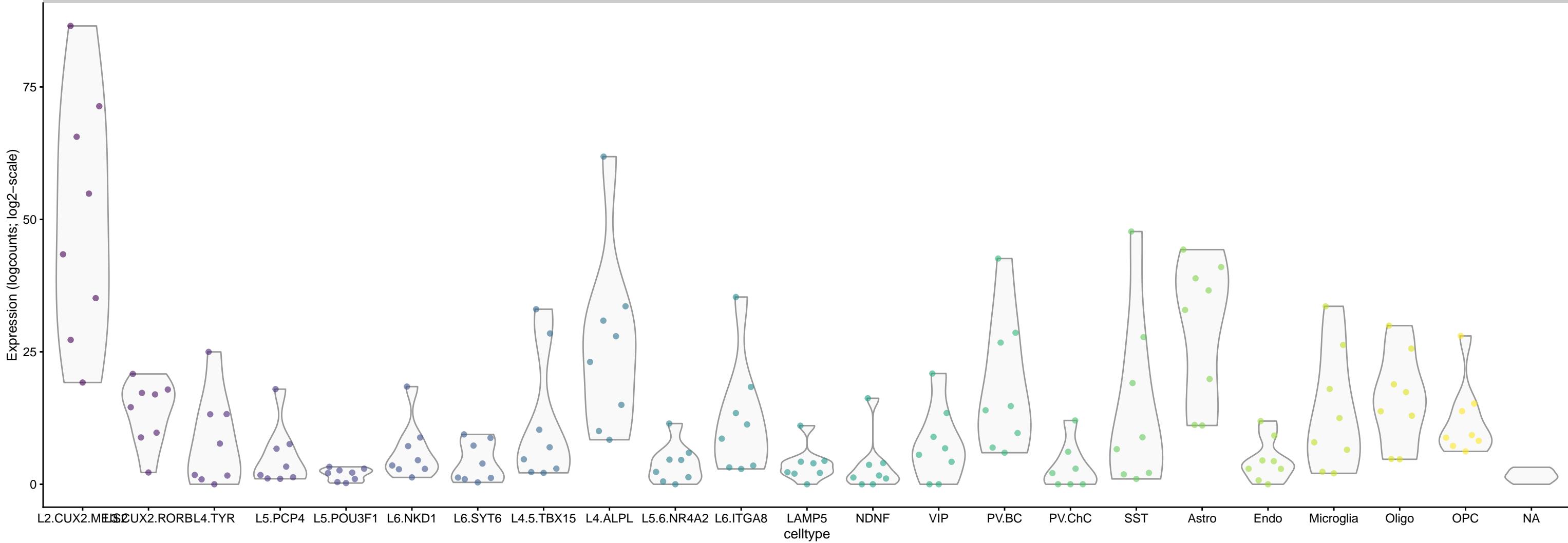


celltype: VIP, gene: LRRC3B, peak:VIP\_527\_LRRC3B



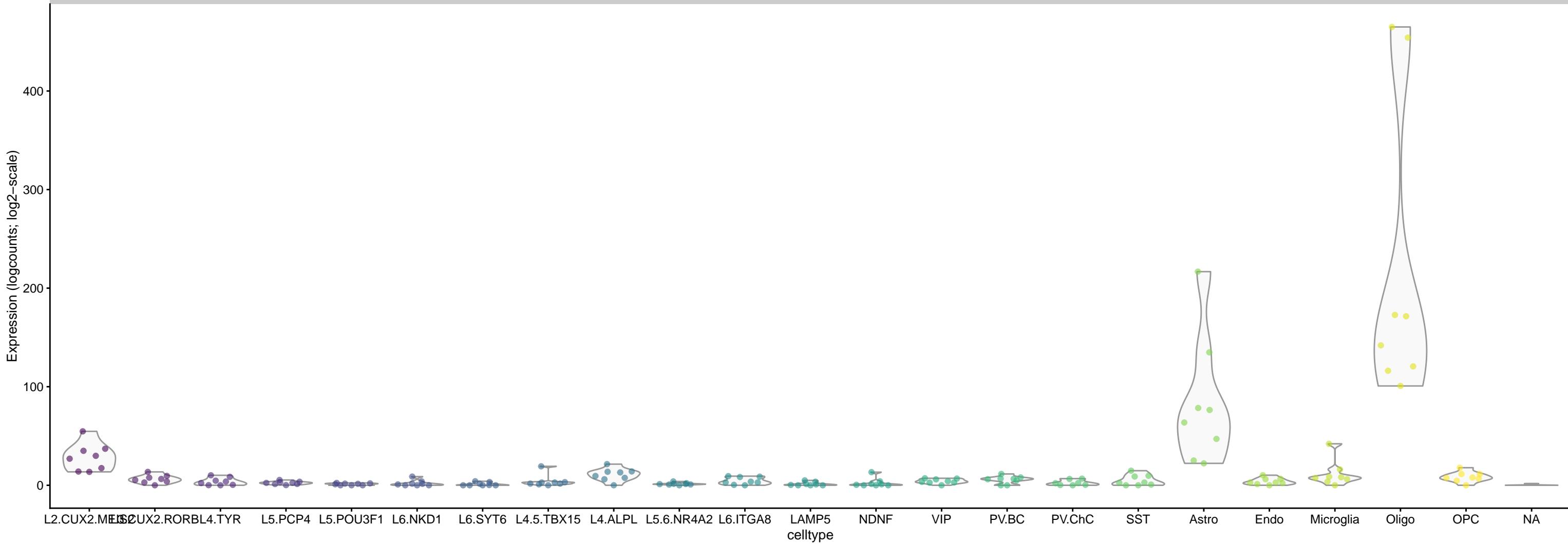
celltype: VIP, gene: GOLGA3, peak:VIP\_528\_GOLGA3

GOLGA3



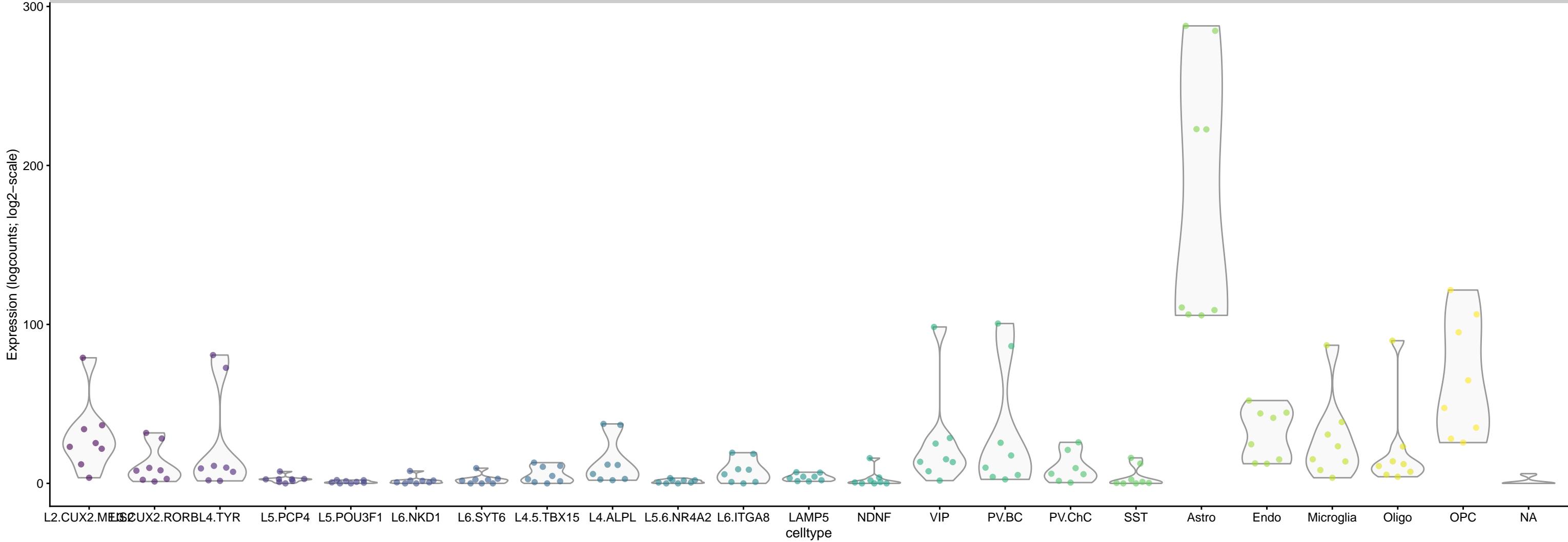
celltype: VIP, gene: LINC01411, peak:VIP\_530\_LINC01411

LINC01411



celltype: VIP, gene: VSIG10, peak:VIP\_542\_VSIG10,WSB21

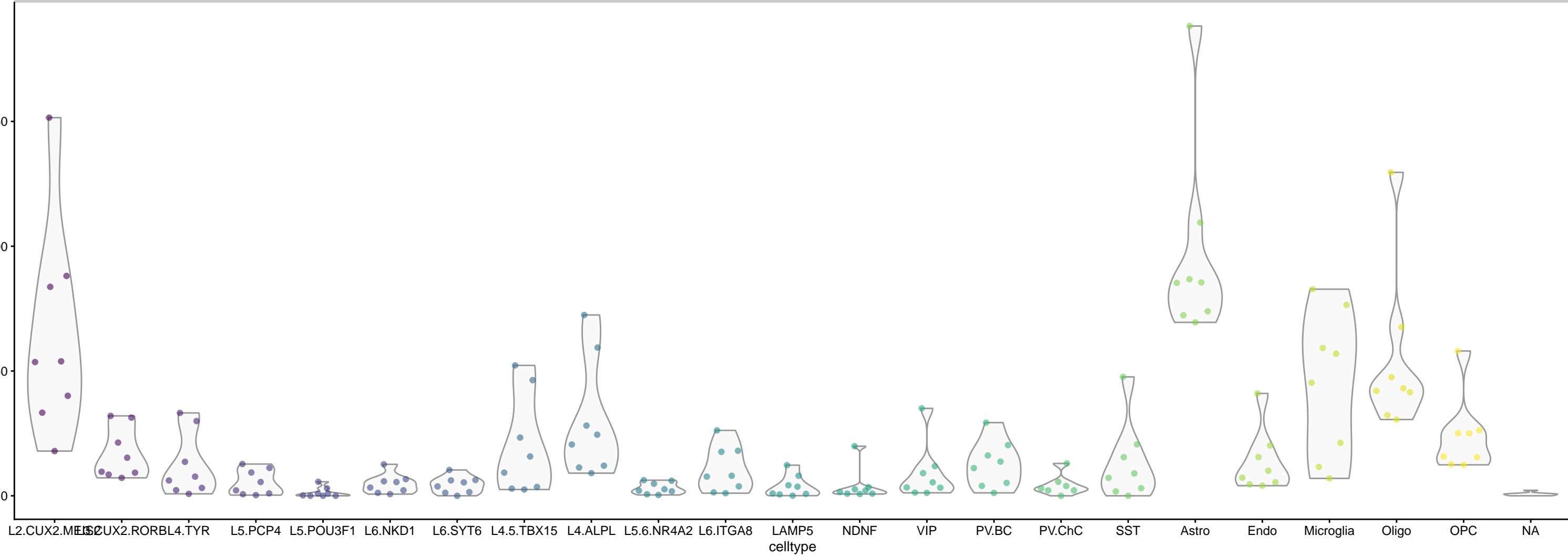
VSIG10



celltype: VIP, gene: WSB2, peak:VIP\_542\_VSIG10,WSB22

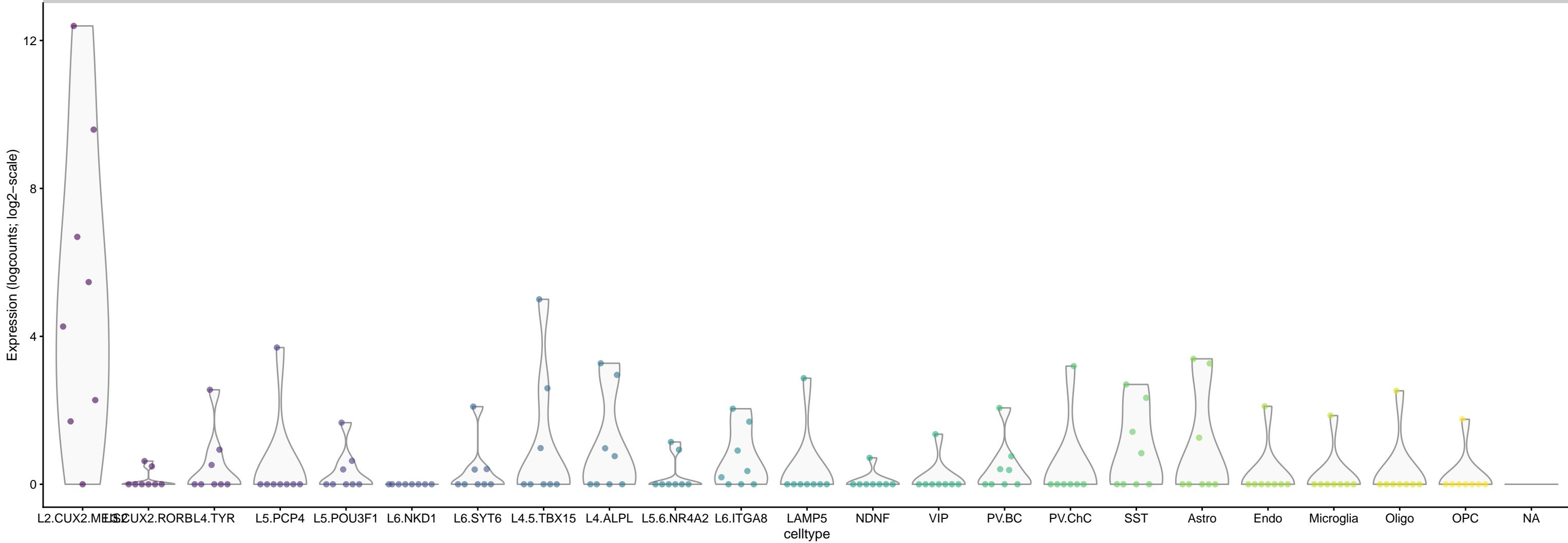
WSB2

Expression (logcounts; log2-scale)



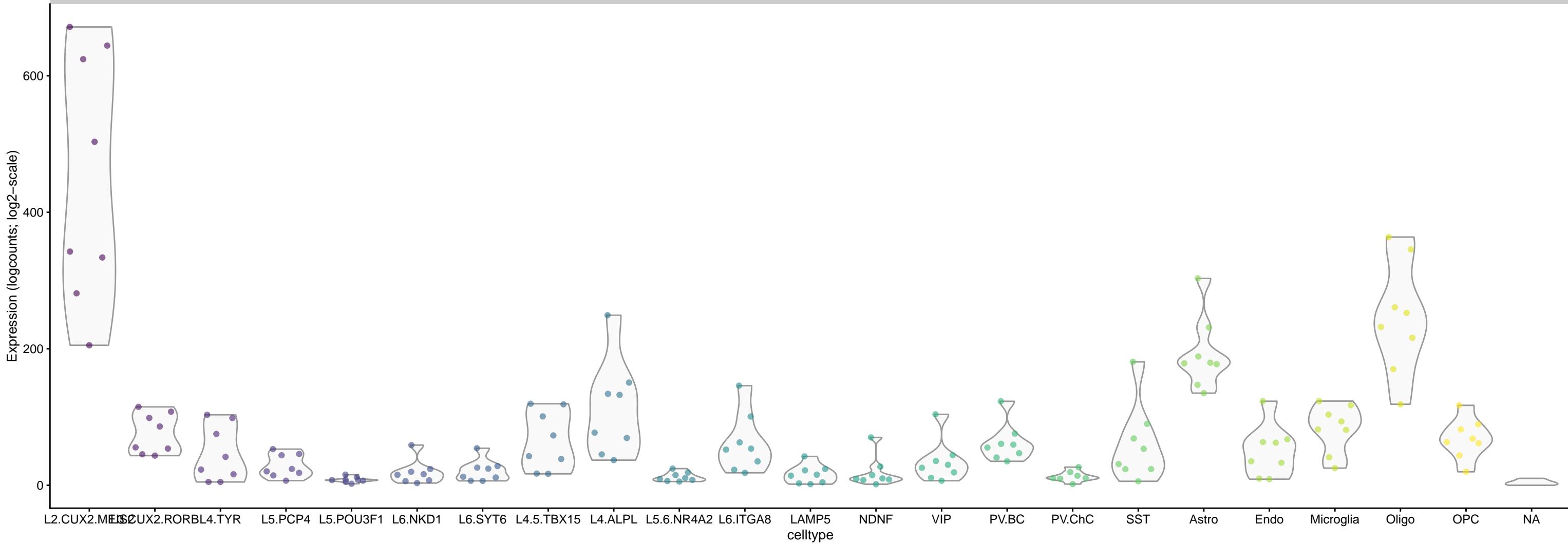
celltype: VIP, gene: NCCRP1, peak:VIP\_543\_NCCRP1,PAK41

NCCRP1



celltype: VIP, gene: PAK4, peak:VIP\_543\_NCCRP1,PAK42

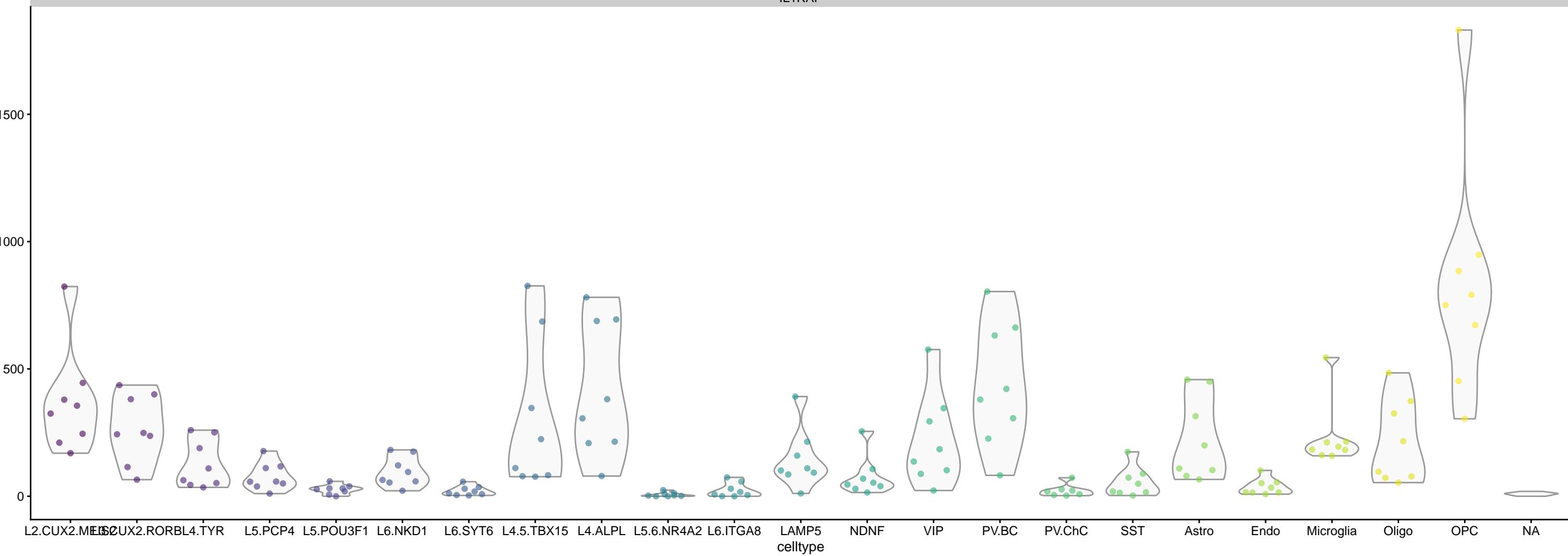
PAK4



celltype: VIP, gene: IL1RAP, peak:VIP\_551\_IL1RAP

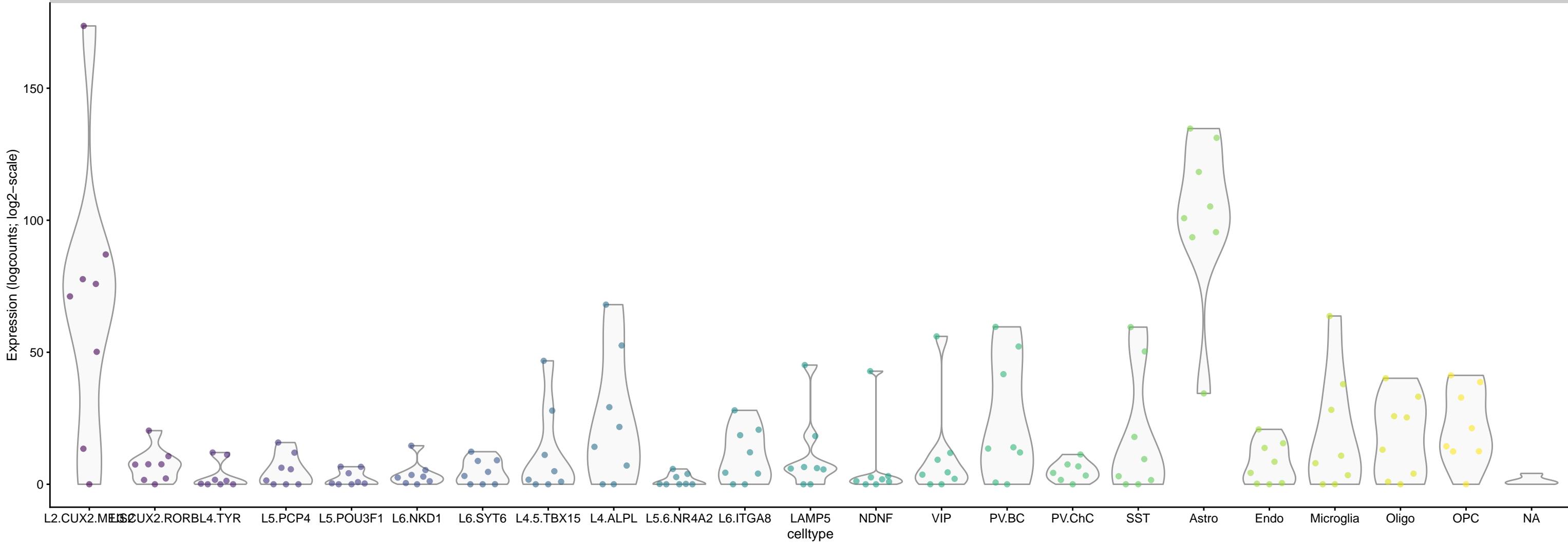
IL1RAP

Expression (logcounts; log2-scale)



celltype: VIP, gene: LINC00634, peak:VIP\_562\_LINC00634,MIR33A1

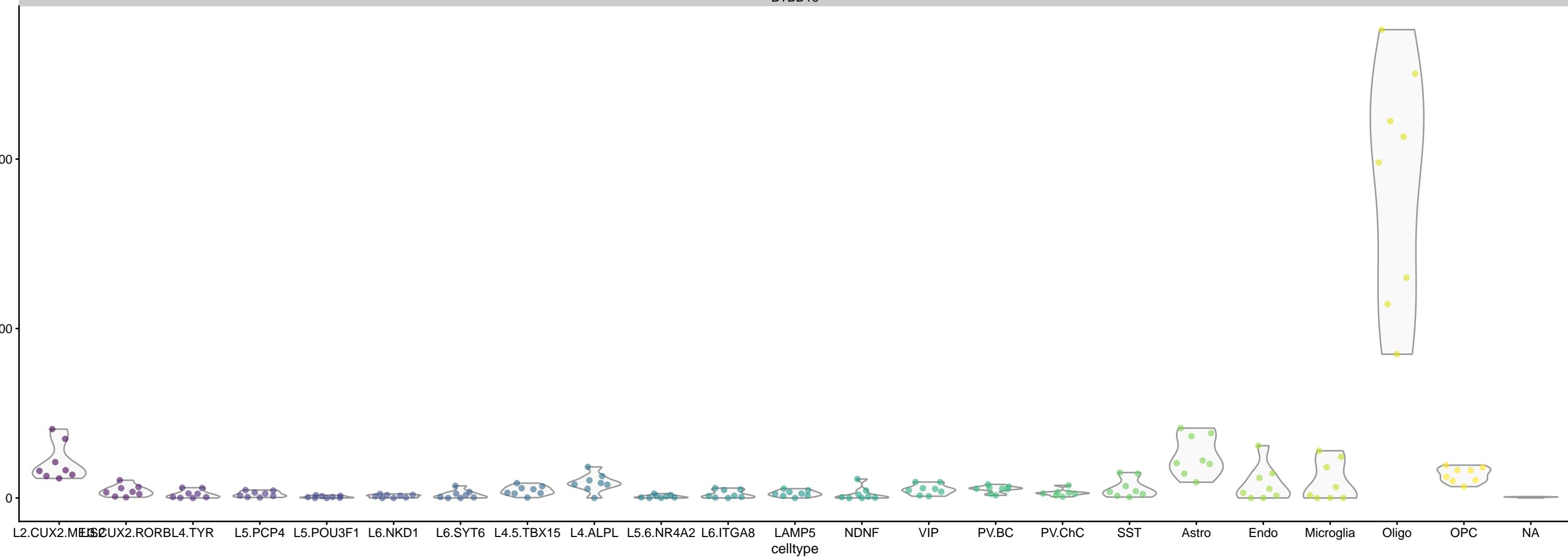
LINC00634



celltype: VIP, gene: BTBD16, peak:VIP\_566\_BTBD16

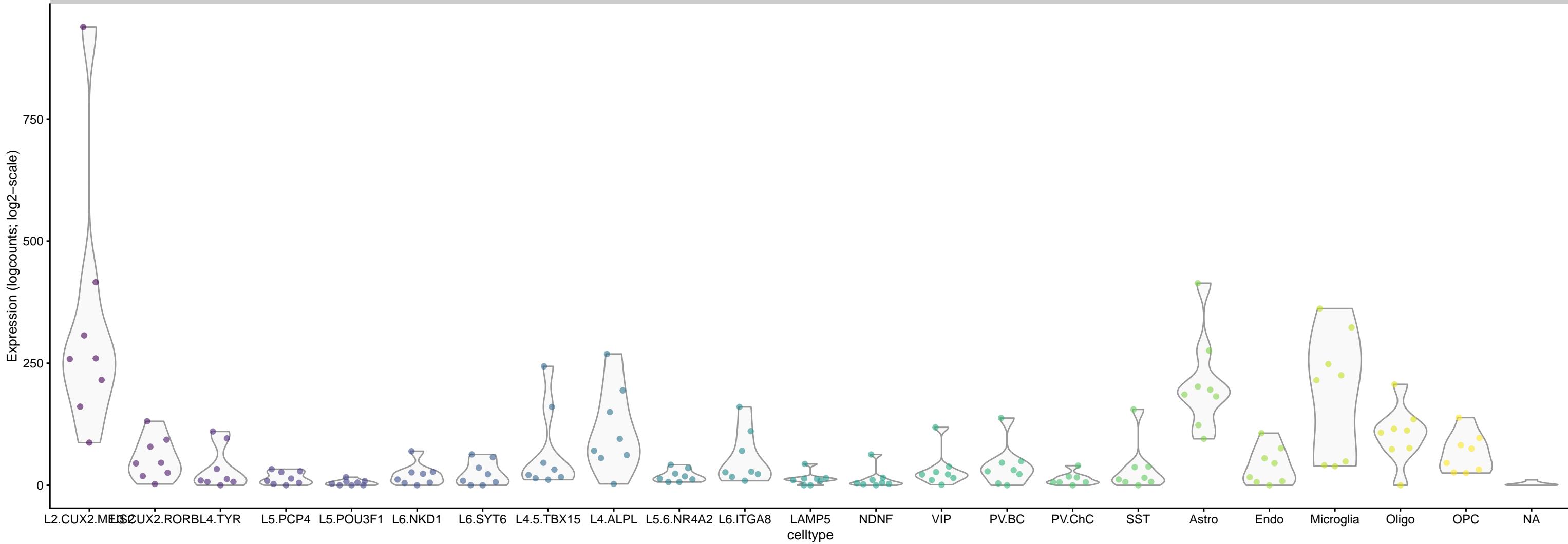
BTBD16

Expression (logcounts; log2-scale)



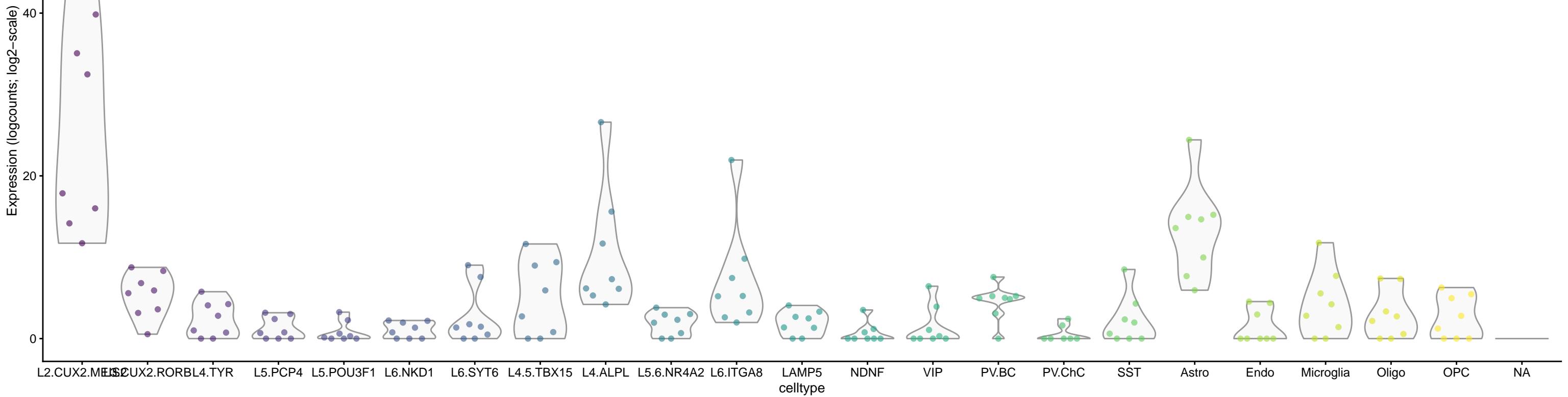
celltype: VIP, gene: BRK1, peak:VIP\_570\_BRK1,GHRLOS1

BRK1



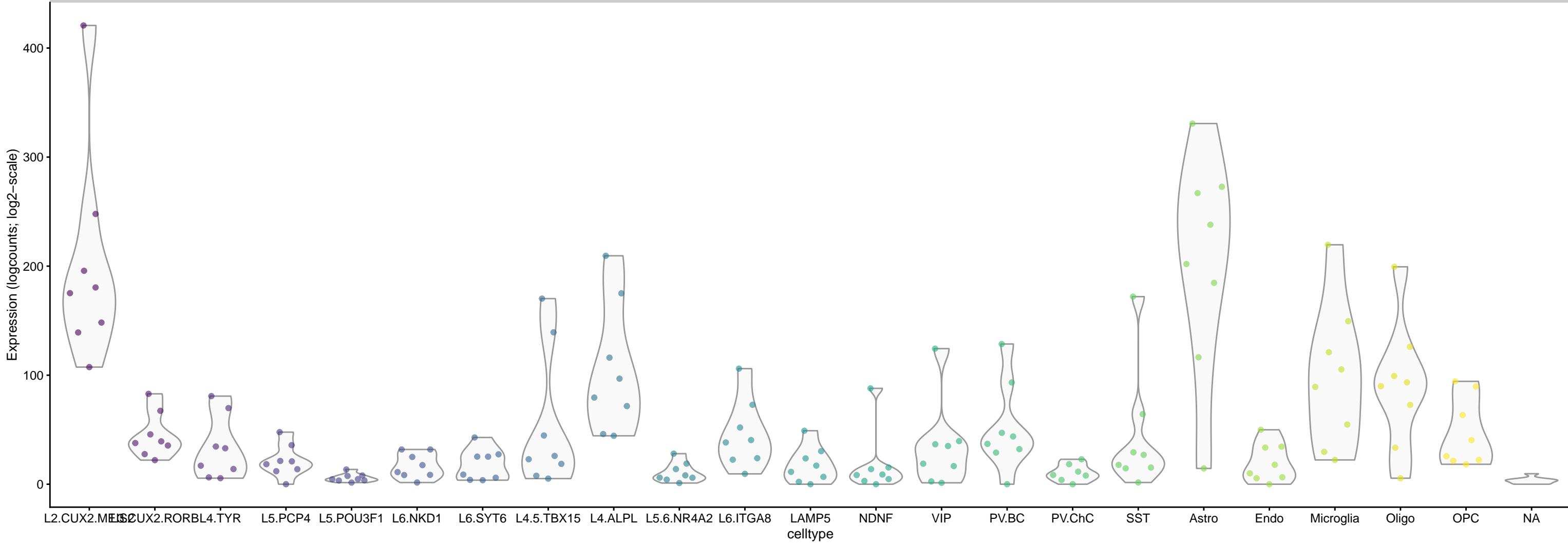
celltype: VIP, gene: GHRLOS, peak:VIP\_570\_BRK1,GHRLOS2

GHRLOS



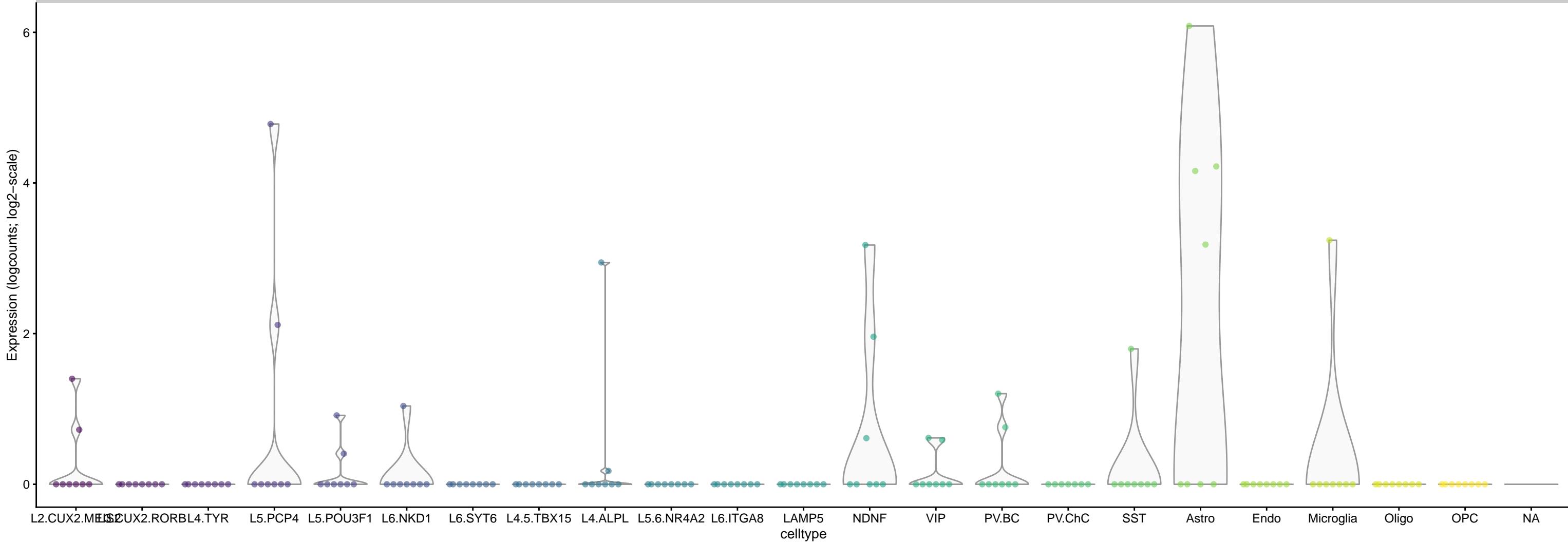
celltype: VIP, gene: RRNAD1, peak:VIP\_582\_RRNAD1

RRNAD1



celltype: VIP, gene: PSAPL1, peak:VIP\_594\_PSAPL1

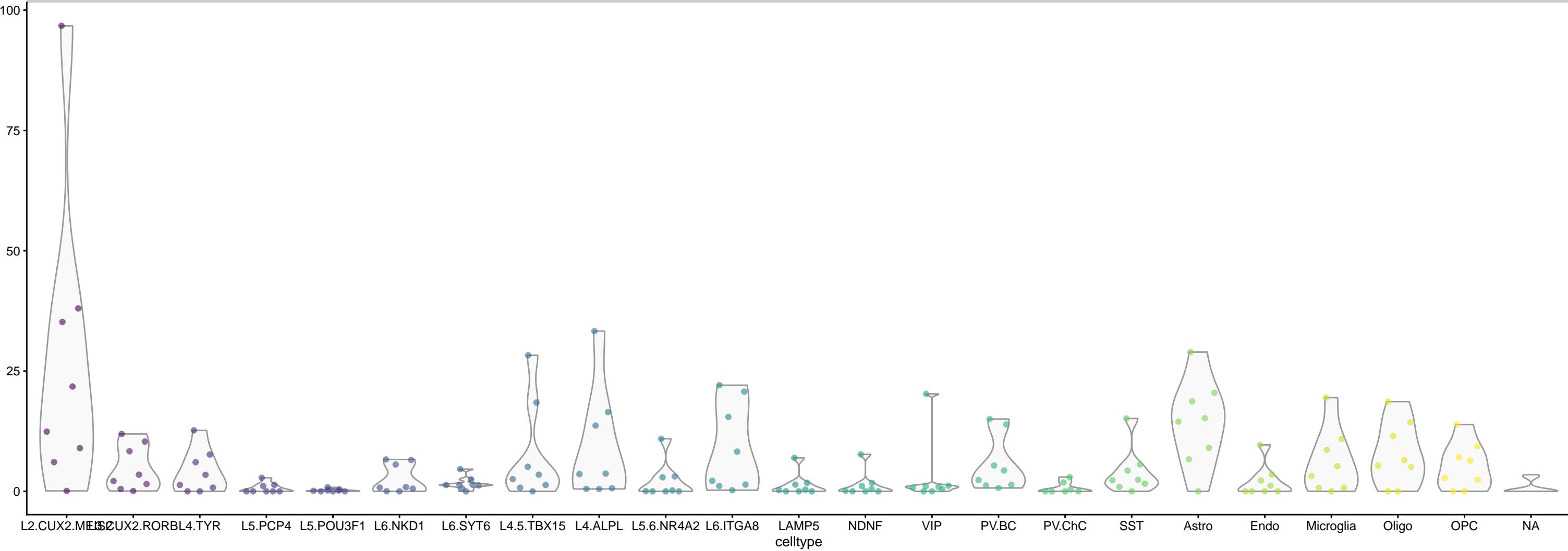
PSAPL1



celltype: VIP, gene: HCRT, peak:VIP\_597\_HCRT

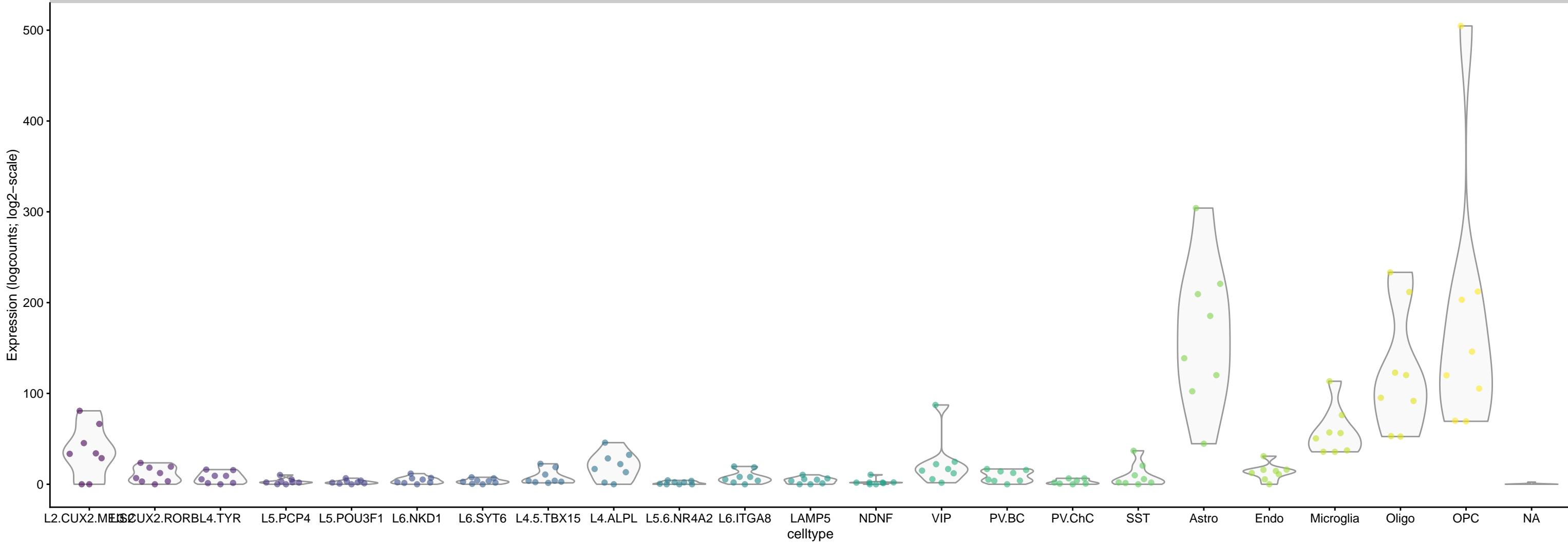
HCRT

Expression (logcounts; log2-scale)



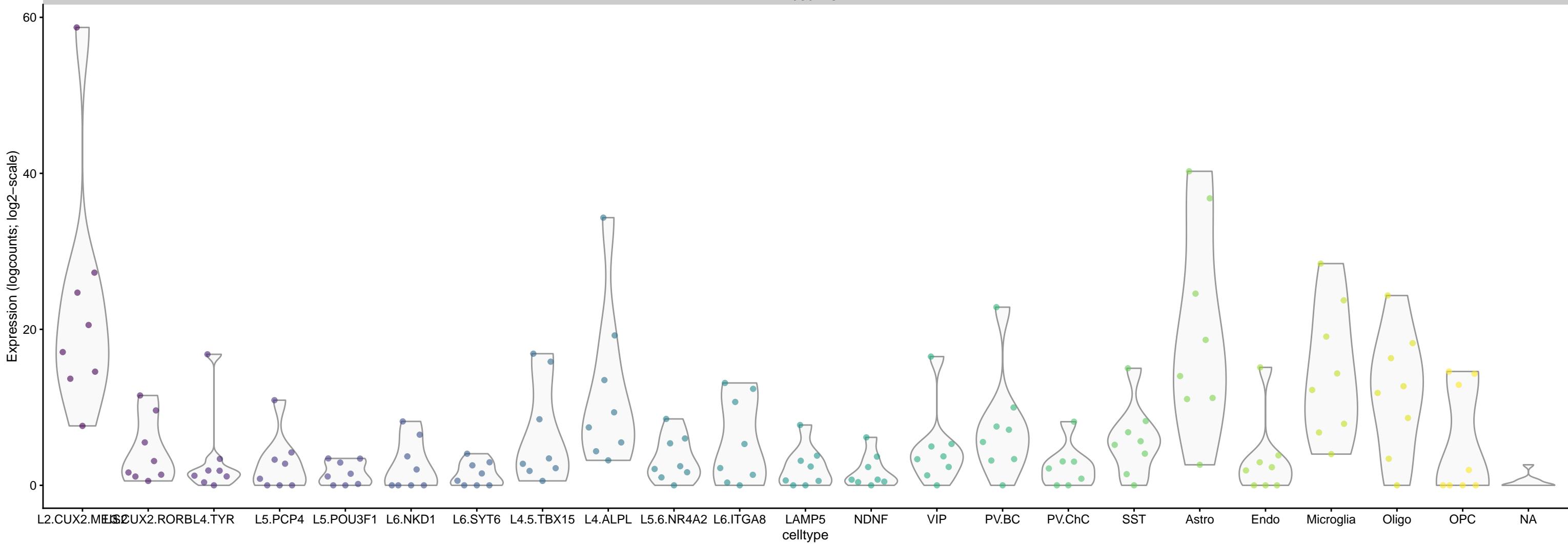
celltype: VIP, gene: PLIN3, peak:VIP\_598\_PLIN3

PLIN3



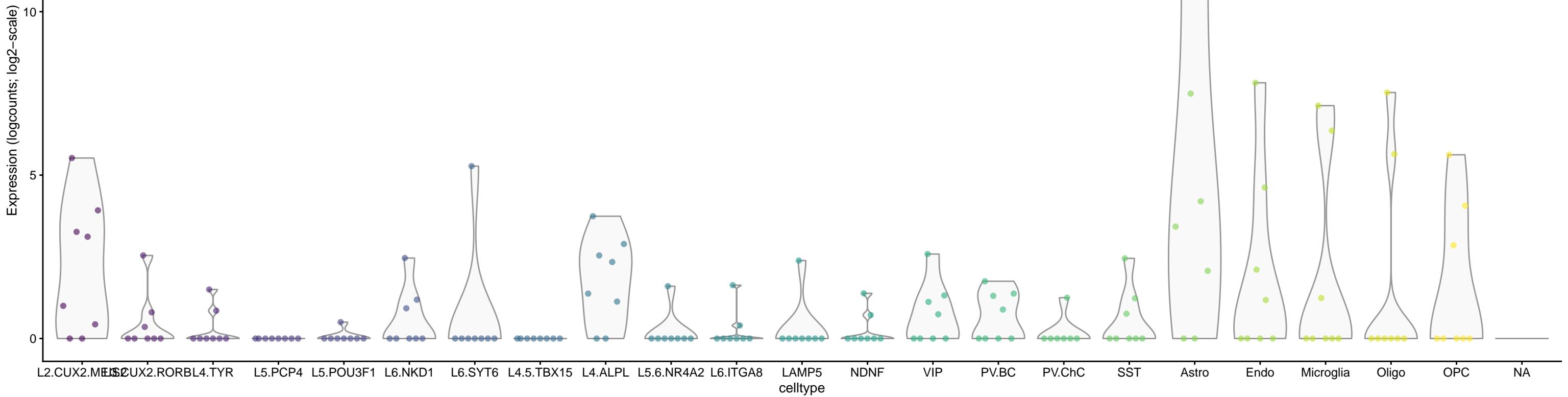
celltype: VIP, gene: DNAJC9-AS1, peak:VIP\_605\_DNAJC9-AS1

DNAJC9-AS1



celltype: VIP, gene: SSUH2, peak:VIP\_614\_SSUH2

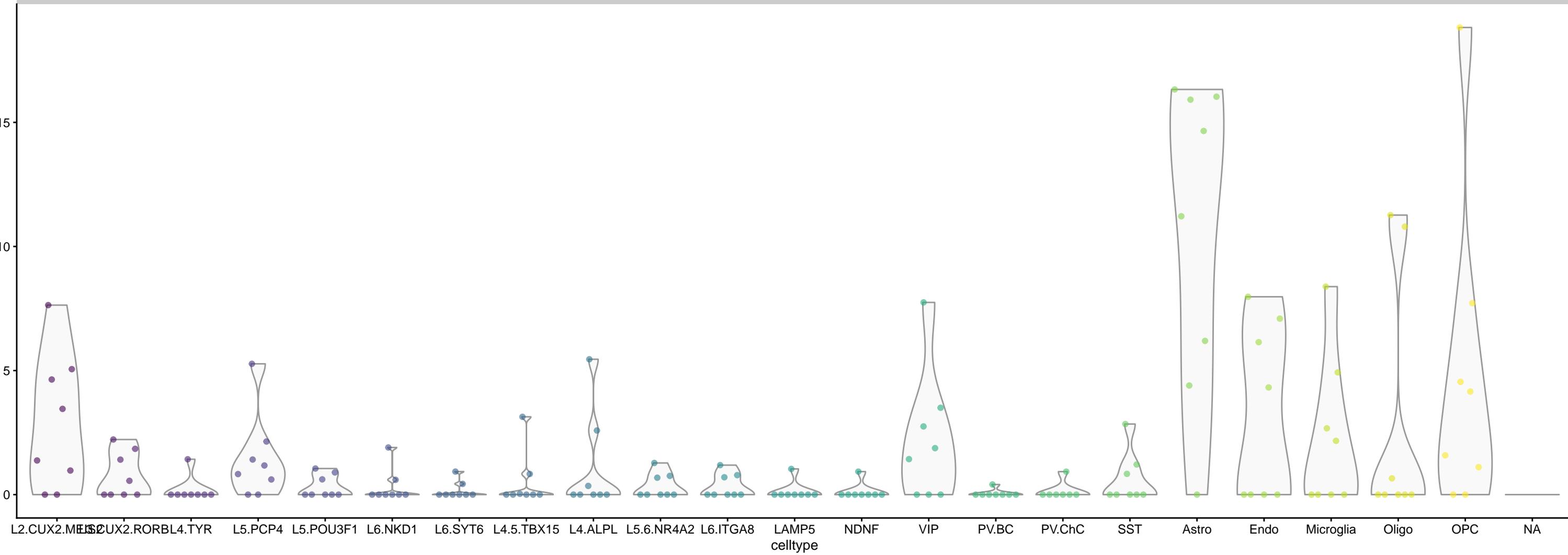
SSUH2



celltype: VIP, gene: C1orf195, peak:VIP\_616\_C1orf195

C1orf195

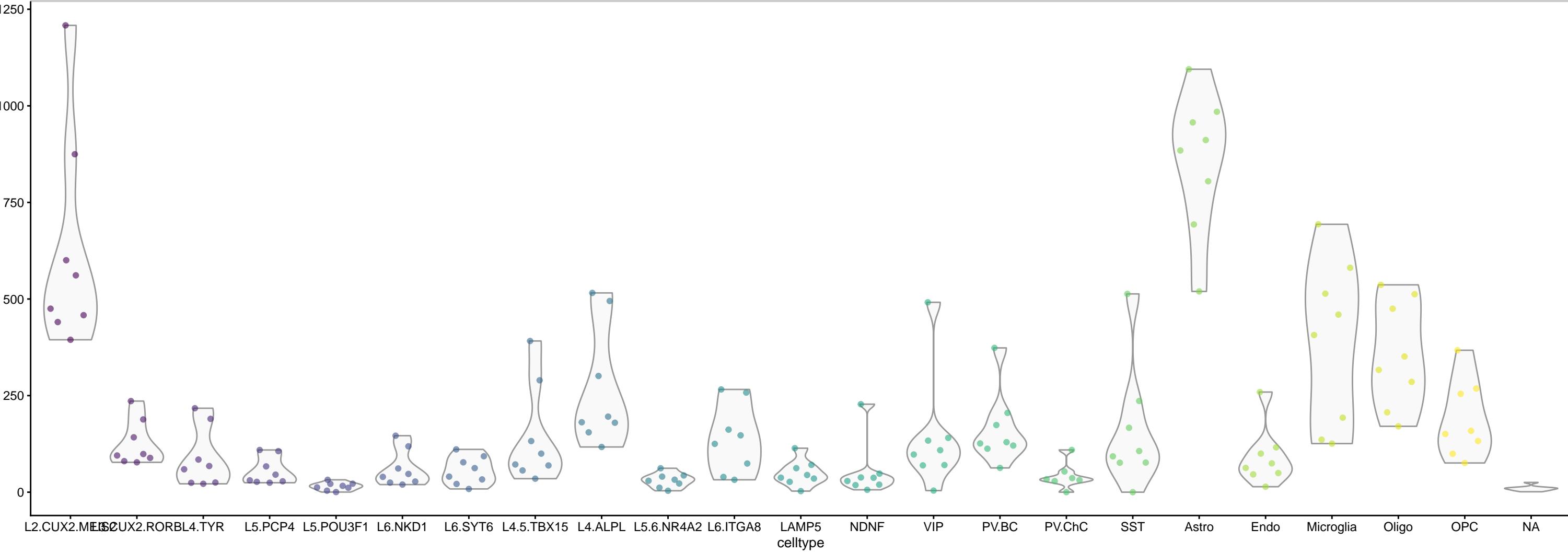
Expression (logcounts; log2-scale)



celltype: VIP, gene: CACUL1, peak:VIP\_623\_CACUL1

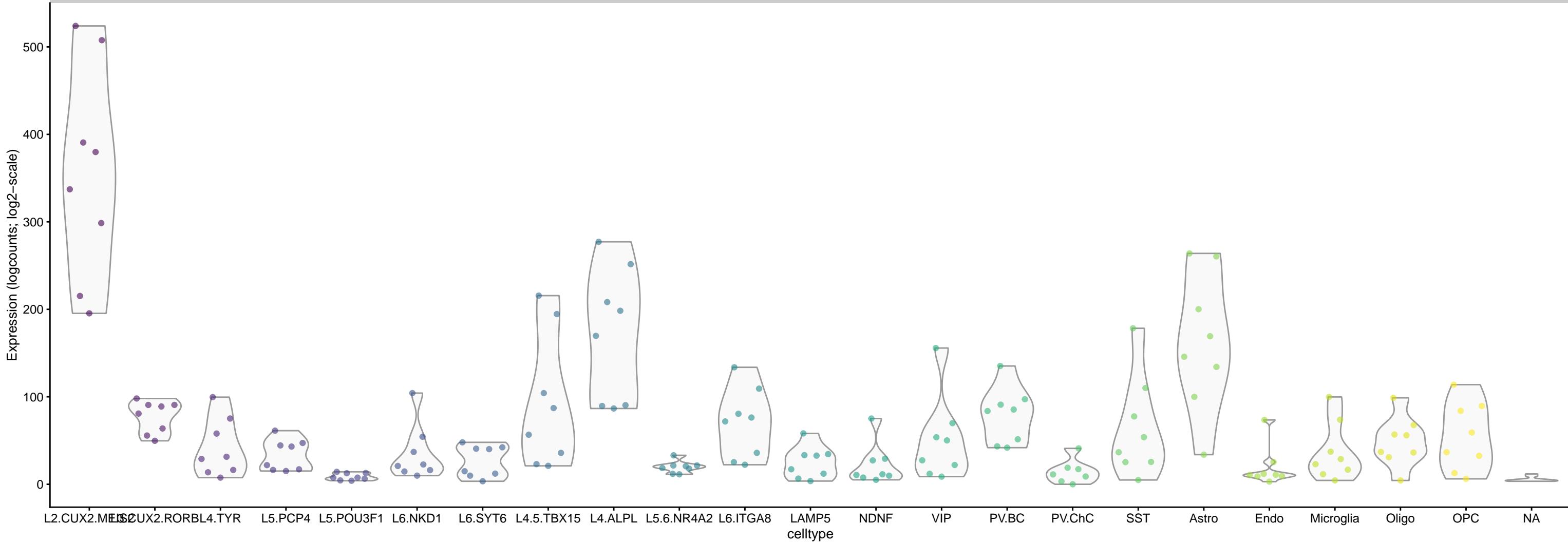
CACUL1

Expression (logcounts; log2-scale)



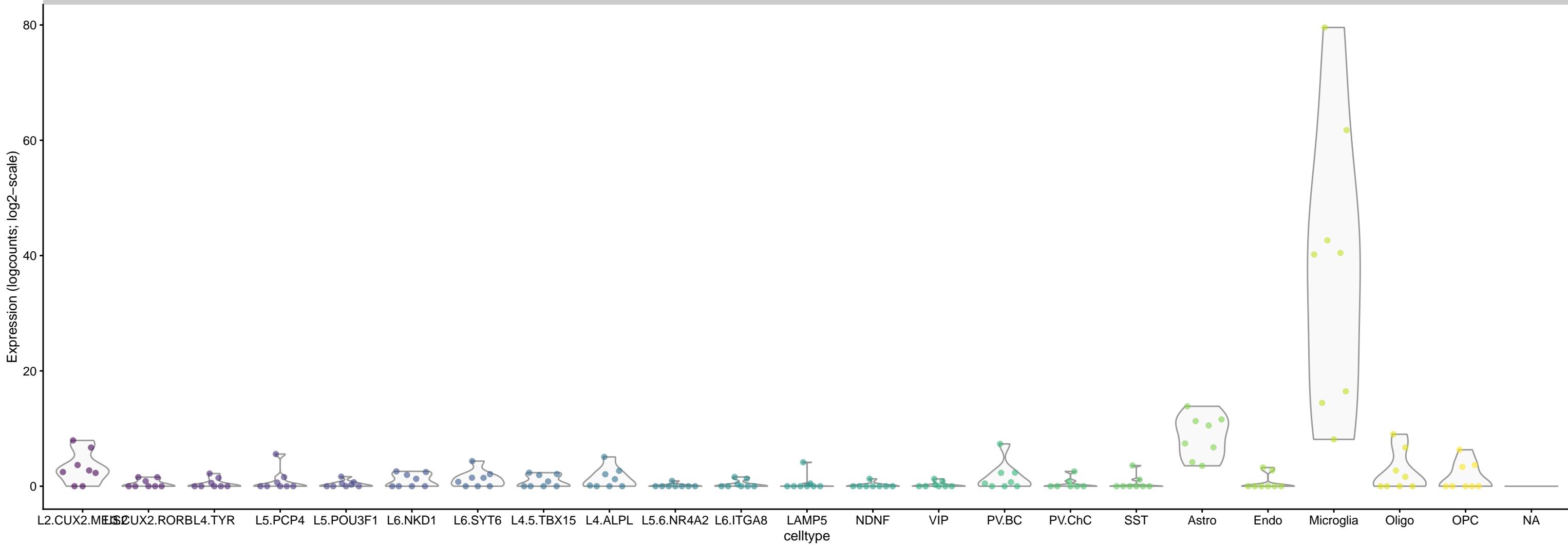
celltype: VIP, gene: ARFGAP1, peak:VIP\_639\_ARFGAP1

ARFGAP1



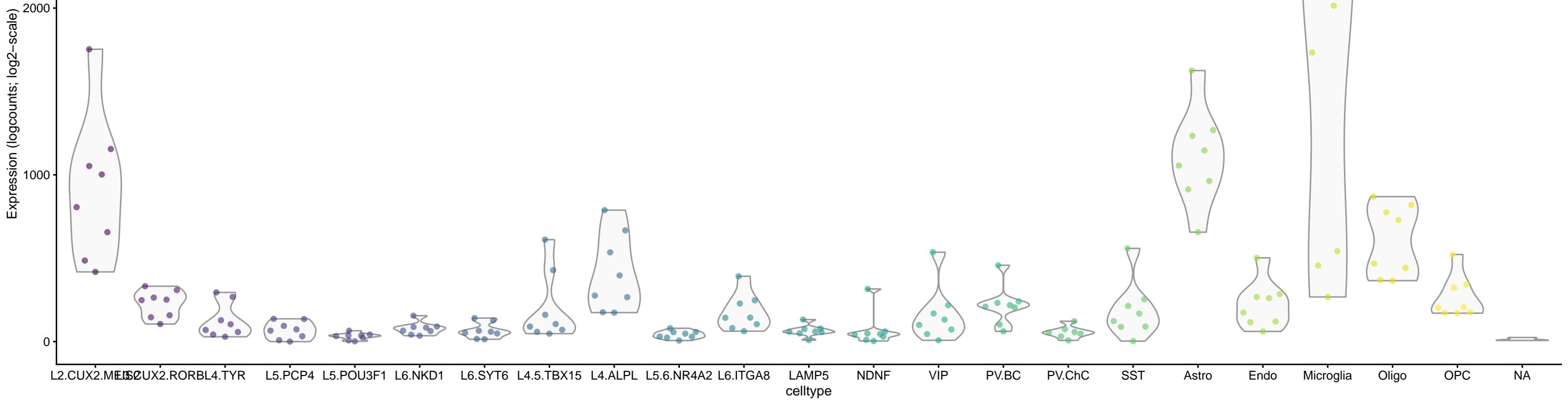
celltype: VIP, gene: MAP4K1, peak:VIP\_641\_MAP4K1

MAP4K1



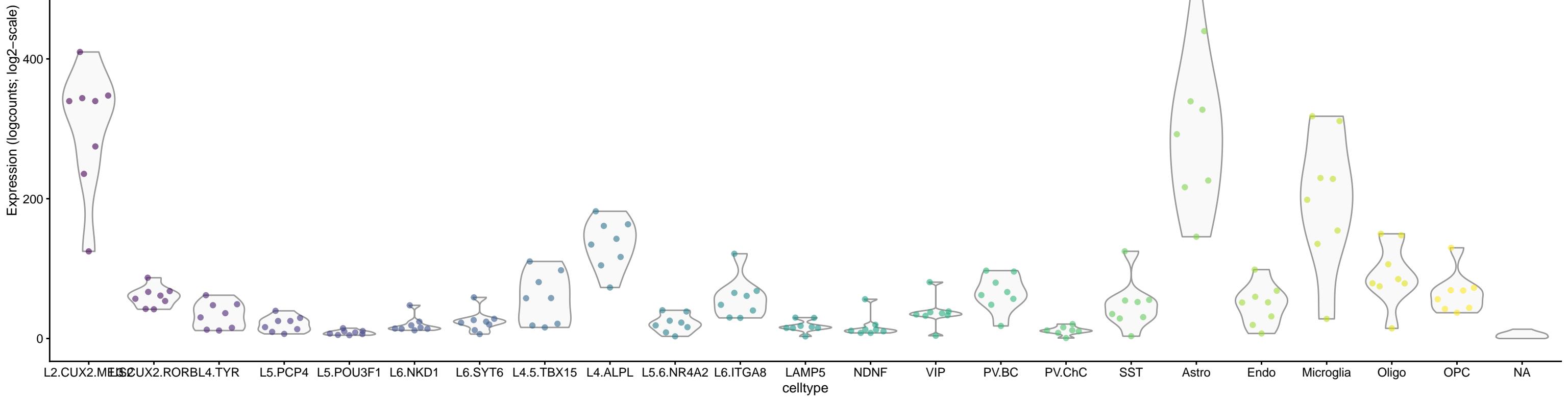
celltype: VIP, gene: RAB1A, peak:VIP\_646\_RAB1A

RAB1A



celltype: VIP, gene: PABPC4, peak:VIP\_657\_PABPC4

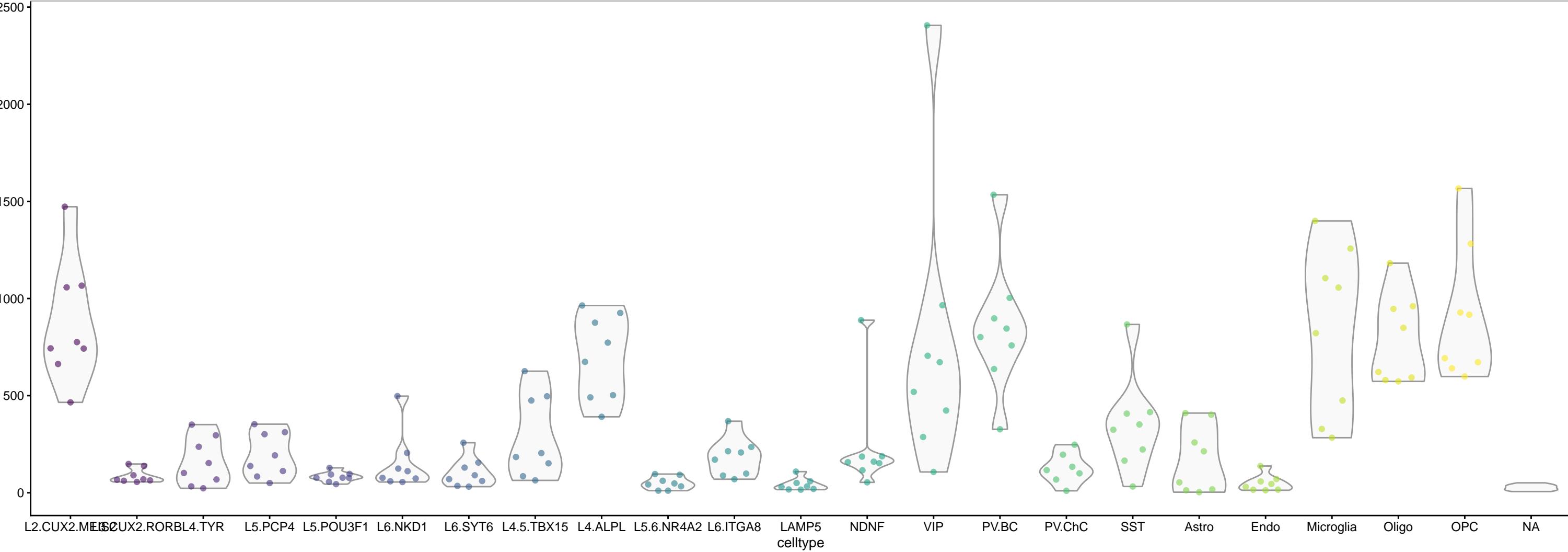
PABPC4



celltype: VIP, gene: PTPRE, peak:VIP\_663\_PTPRE

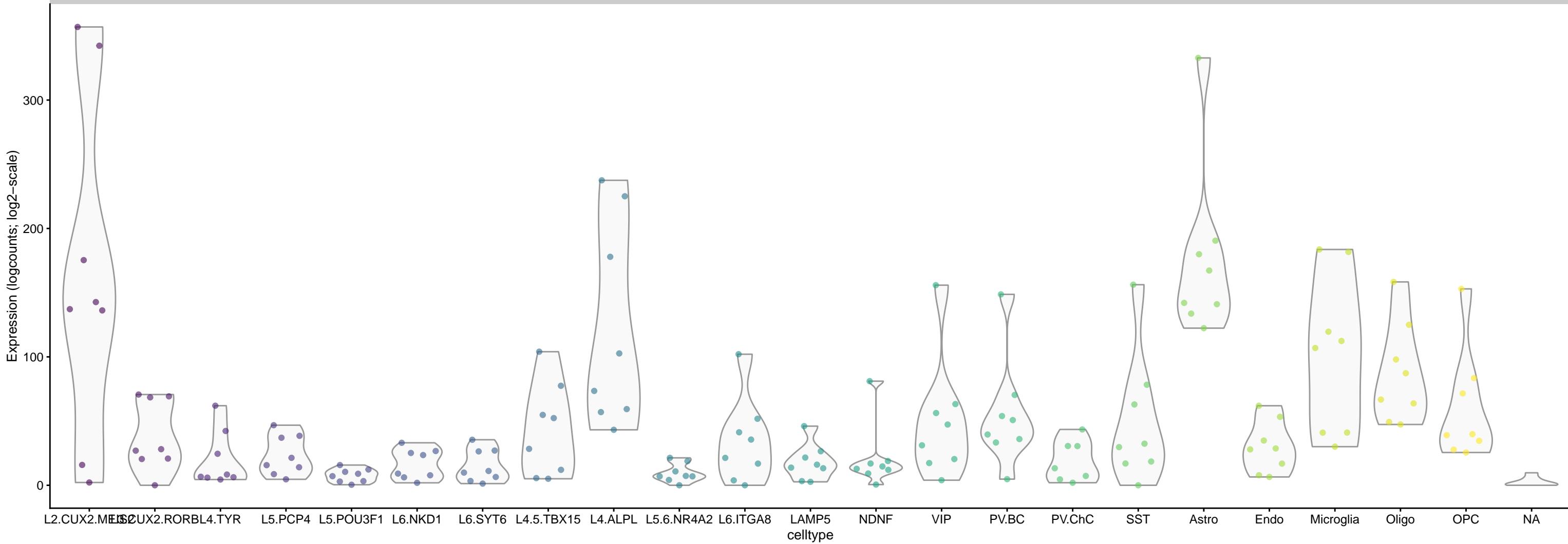
PTPRE

Expression (logcounts; log2-scale)

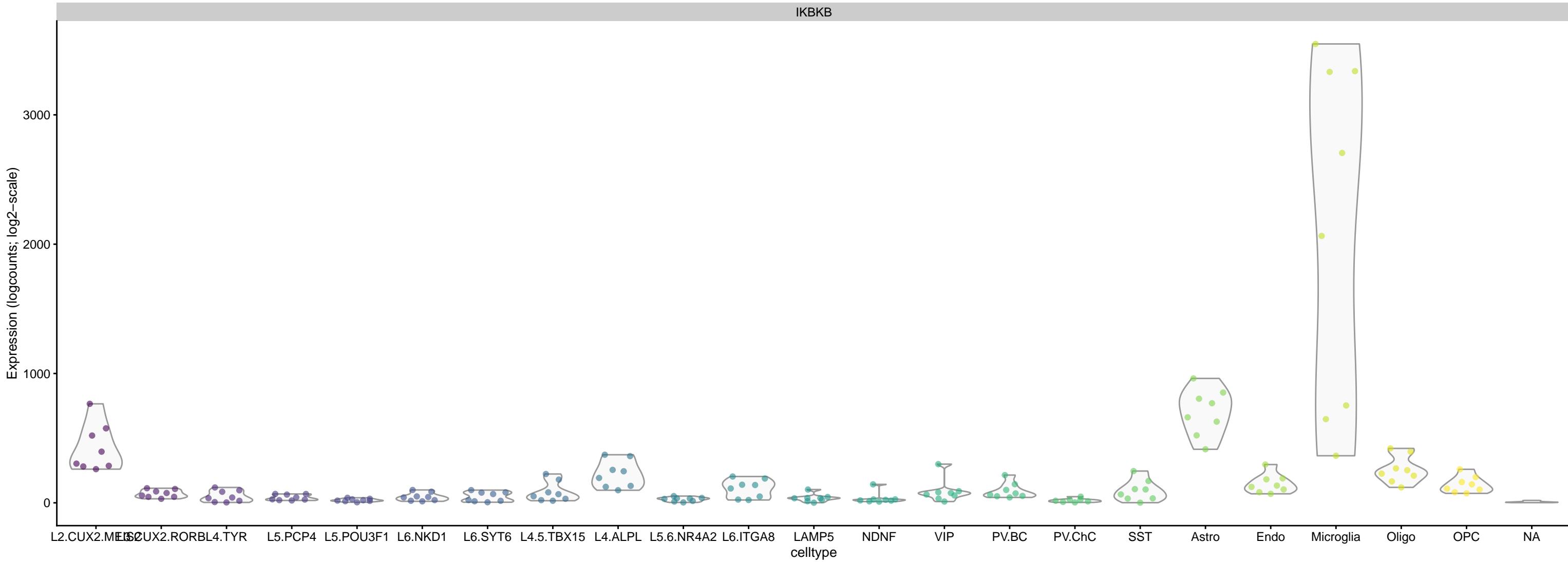


celltype: VIP, gene: AP3M2, peak:VIP\_666\_AP3M2,IKBKB,PLAT1

AP3M2



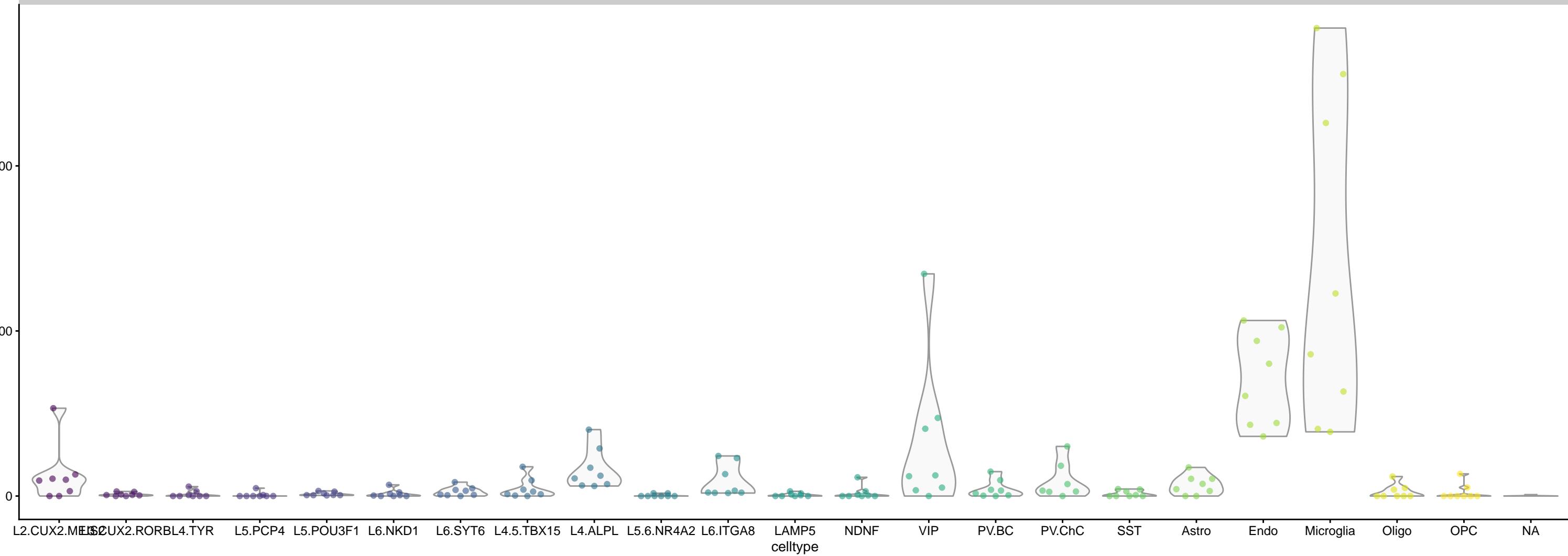
celltype: VIP, gene: IKBKB, peak:VIP\_666\_AP3M2,IKBKB,PLAT2



celltype: VIP, gene: PLAT, peak:VIP\_666\_AP3M2,IKBKB,PLAT3

PLAT

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: OXSR1, peak:VIP\_672\_OXSR1,PLCD11

OXSR1

Expression (logcounts; log2-scale)

2000

1500

1000

500

0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

celltype: VIP, gene: PLCD1, peak:VIP\_672\_OXSR1,PLCD12

PLCD1

Expression (logcounts; log2-scale)

600

400

200

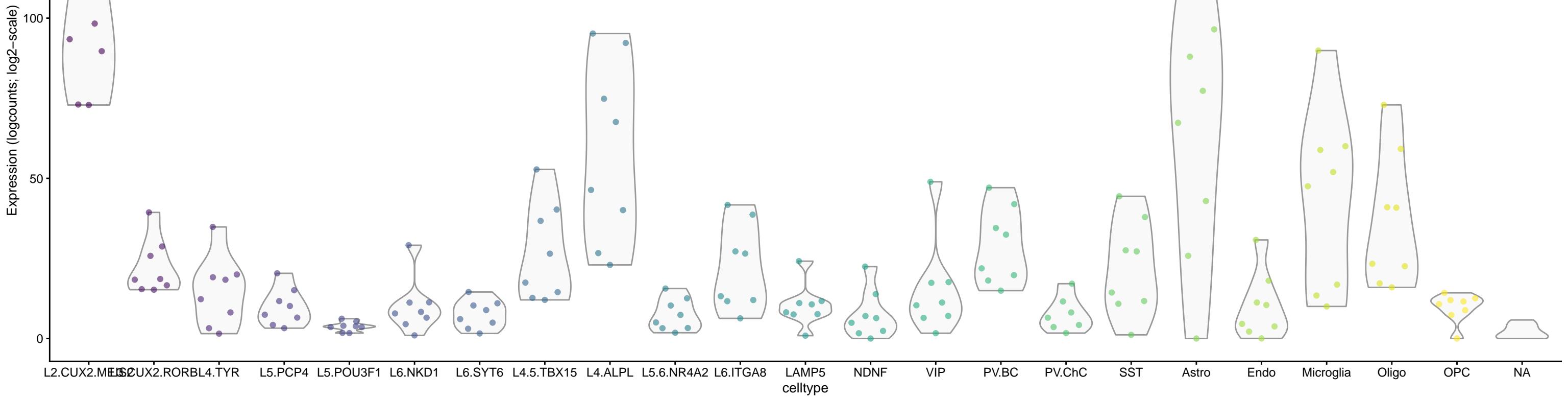
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

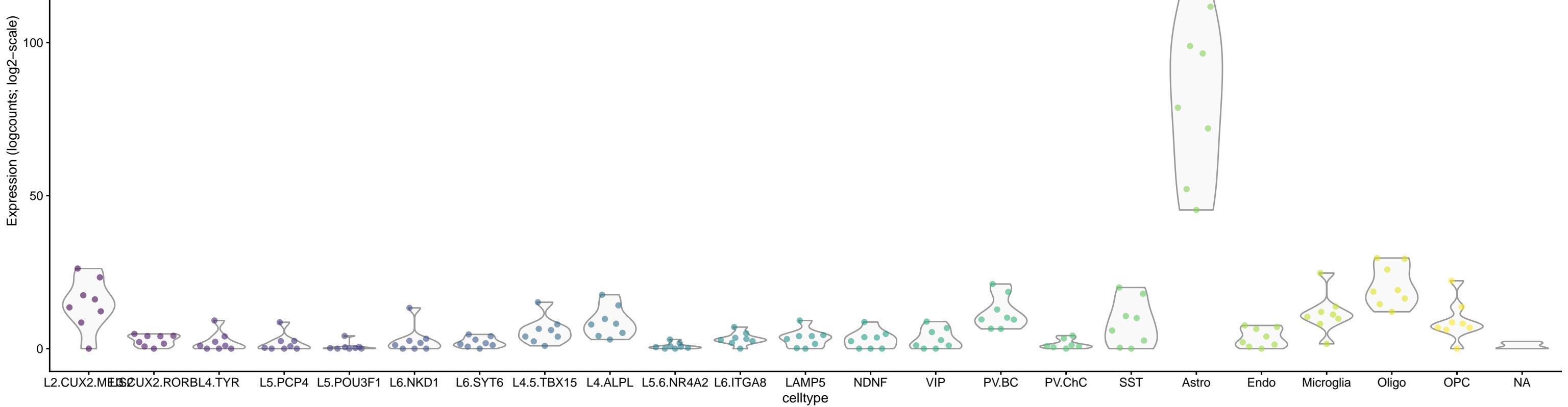
celltype: VIP, gene: DHX16, peak:VIP\_674\_DHX16,HCG20,LINC00243,MDC1-AS1,NRM1

DHX16



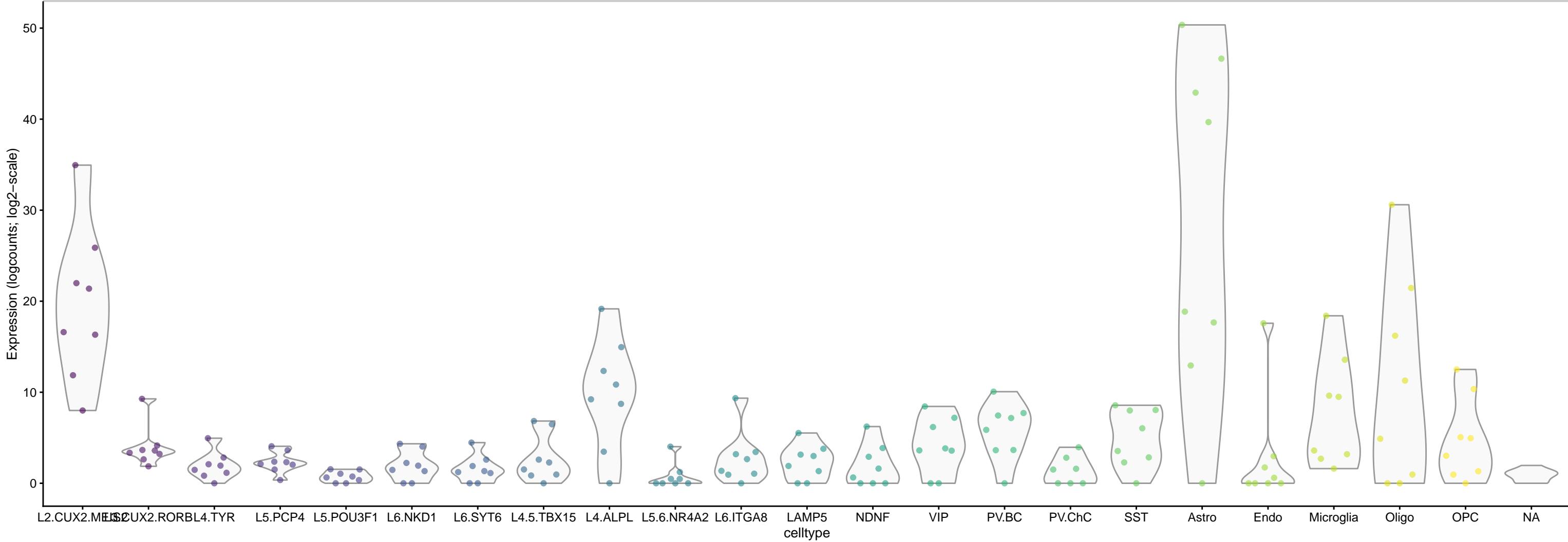
celltype: VIP, gene: HCG20, peak:VIP\_674\_DHX16,HCG20,LINC00243,MDC1-AS1,NRM2

HCG20



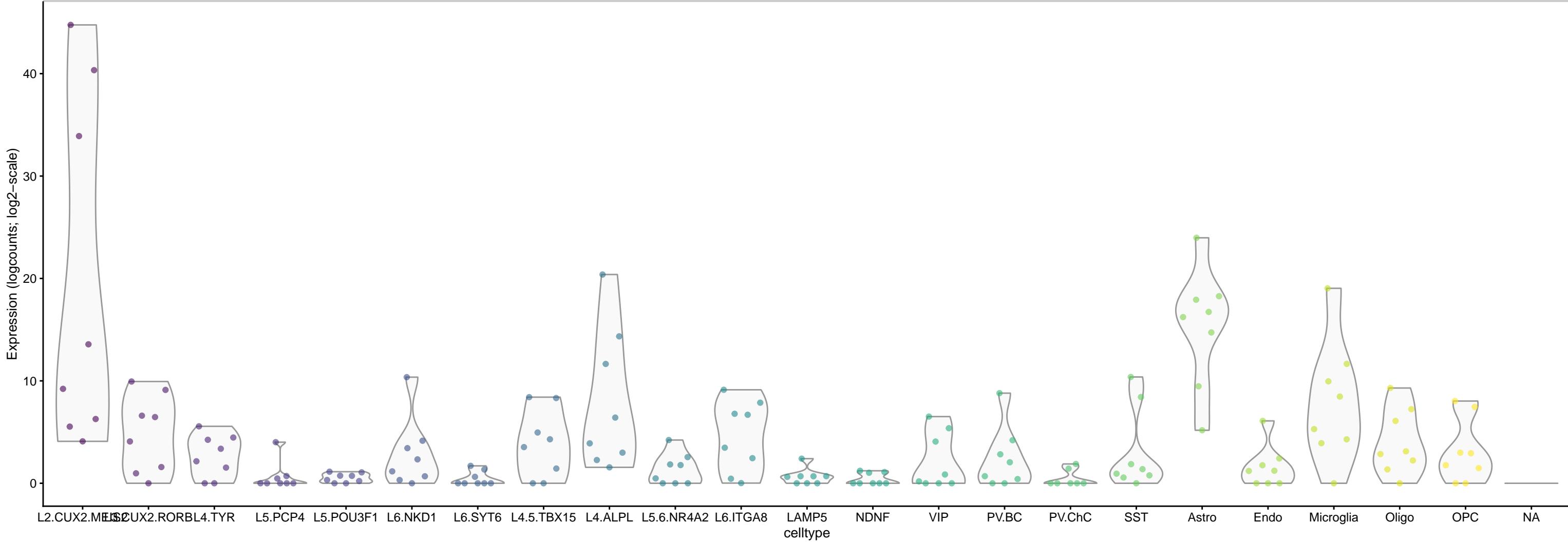
celltype: VIP, gene: LINC00243, peak:VIP\_674\_DHX16,HCG20,LINC00243,MDC1-AS1,NRM3

LINC00243

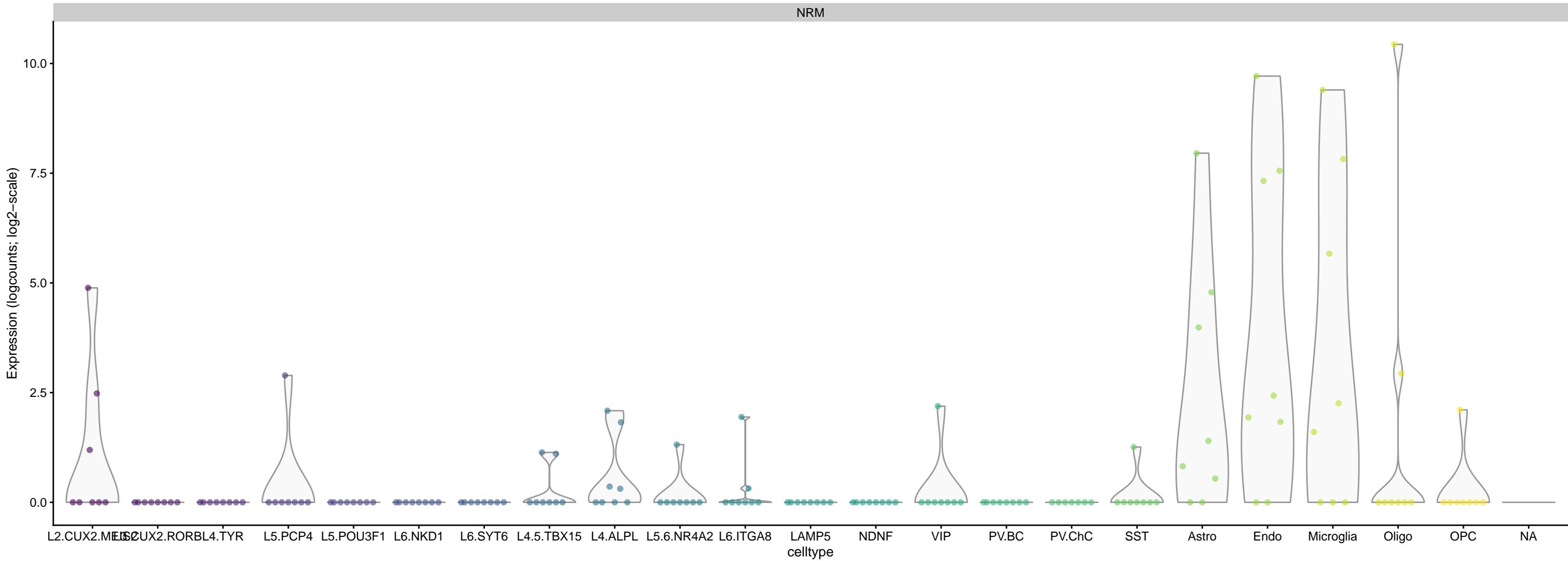


celltype: VIP, gene: MDC1-AS1, peak:VIP\_674\_DHX16,HCG20,LINC00243,MDC1-AS1,NRM4

MDC1-AS1



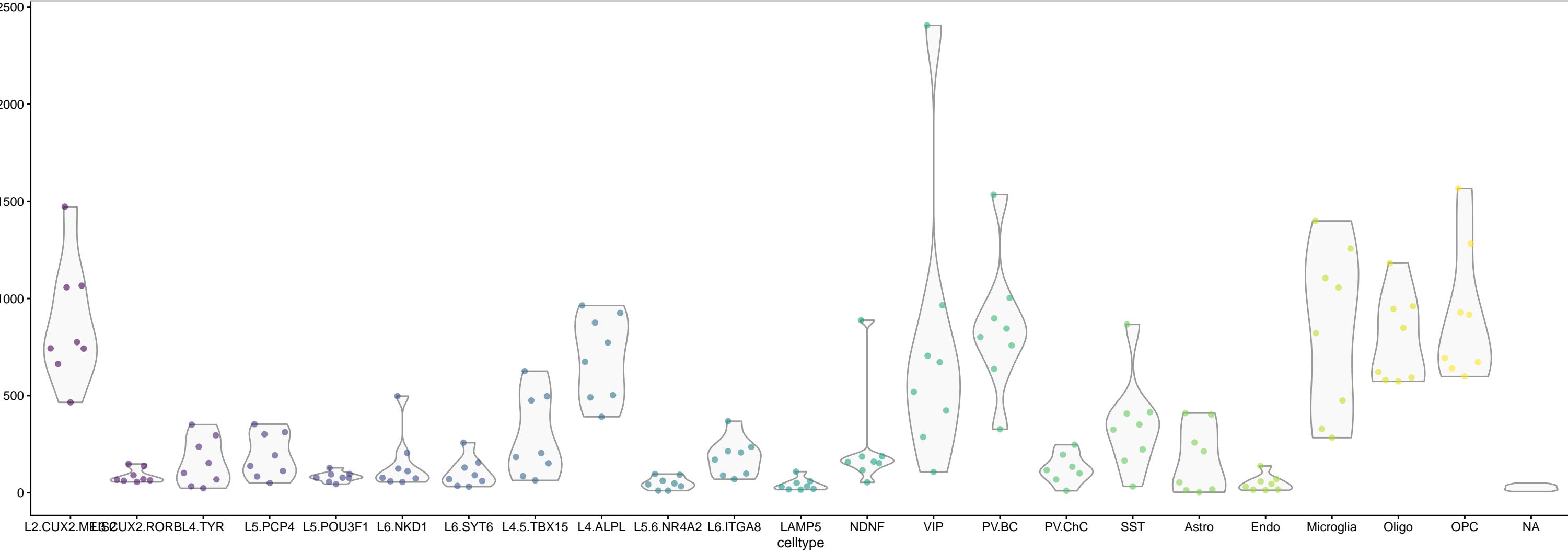
celltype: VIP, gene: NRM, peak:VIP\_674\_DHX16,HCG20,LINC00243,MDC1-AS1,NRM5



celltype: VIP, gene: PTPRE, peak:VIP\_680\_PTPRE

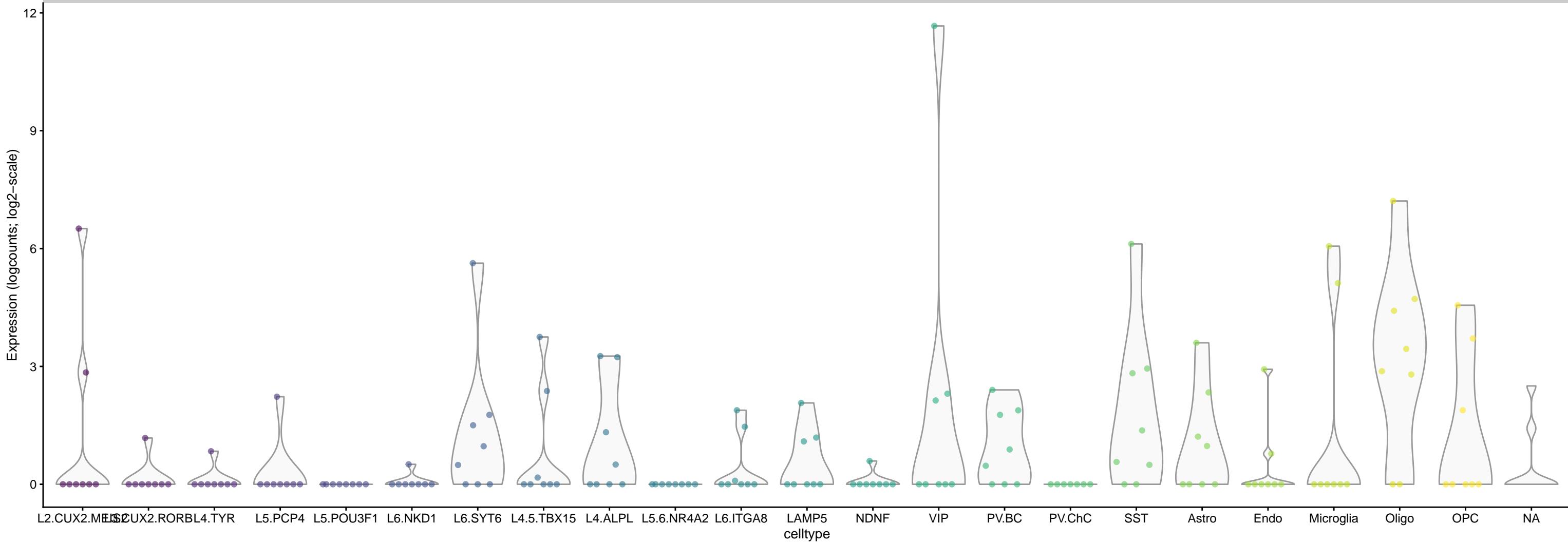
PTPRE

Expression (logcounts; log2-scale)



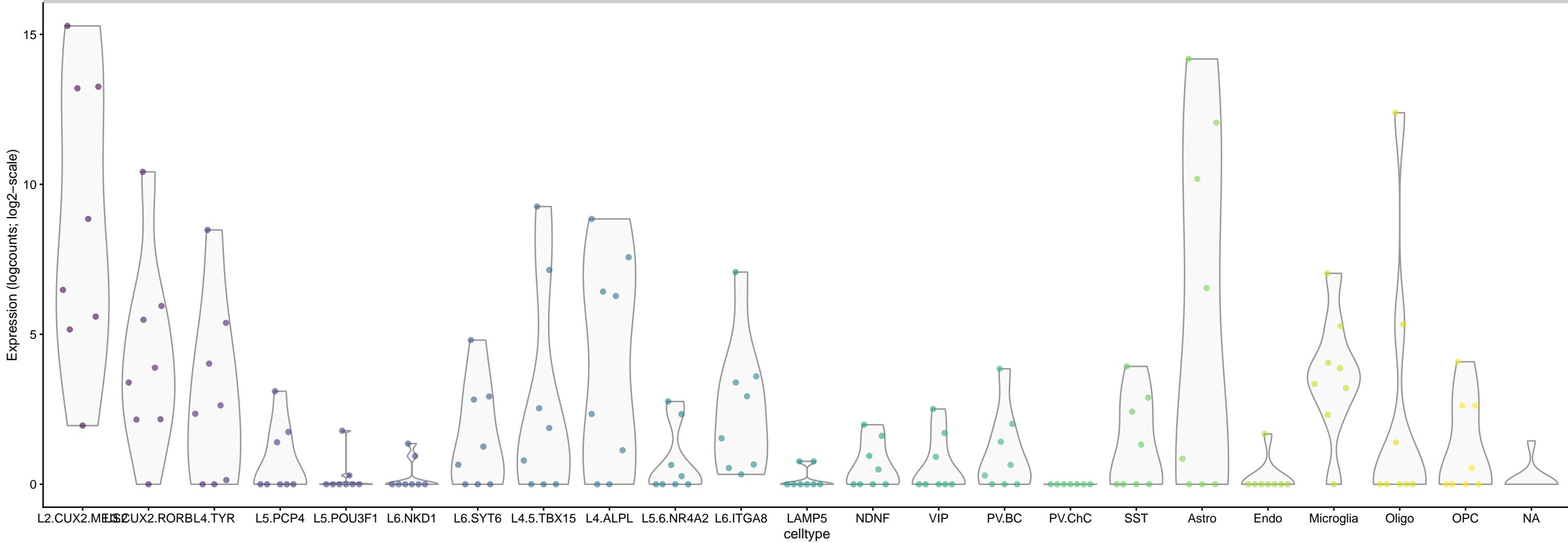
celltype: VIP, gene: INSM1, peak:VIP\_684\_INSM1

INSM1



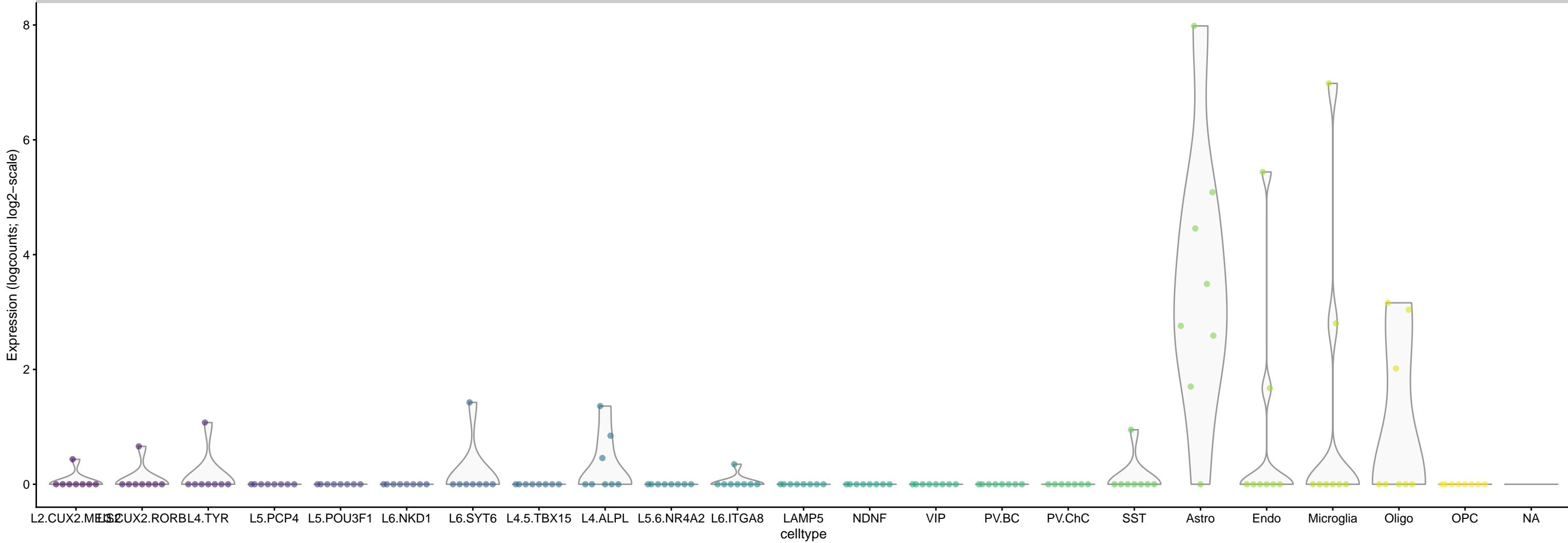
celltype: VIP, gene: FAM228A, peak:VIP\_694\_FAM228A

FAM228A



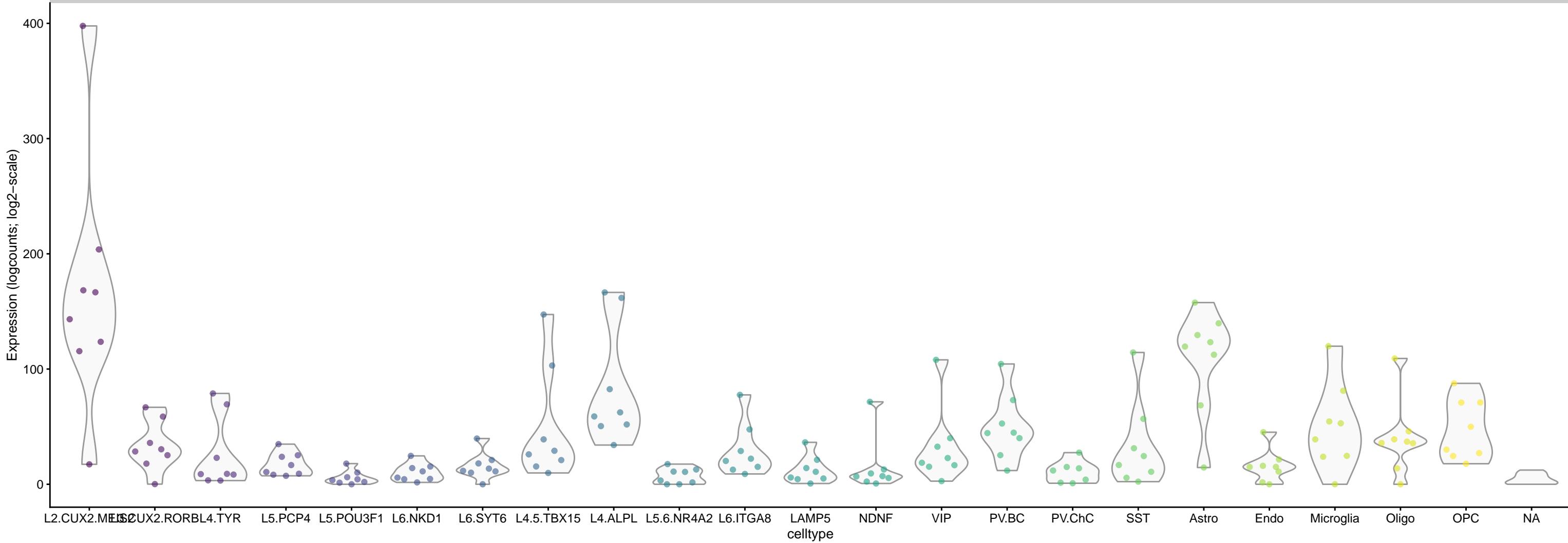
celltype: VIP, gene: SERINC4, peak:VIP\_695\_SERINC4

SERINC4



celltype: VIP, gene: MRPL37, peak:VIP\_700\_MRPL37

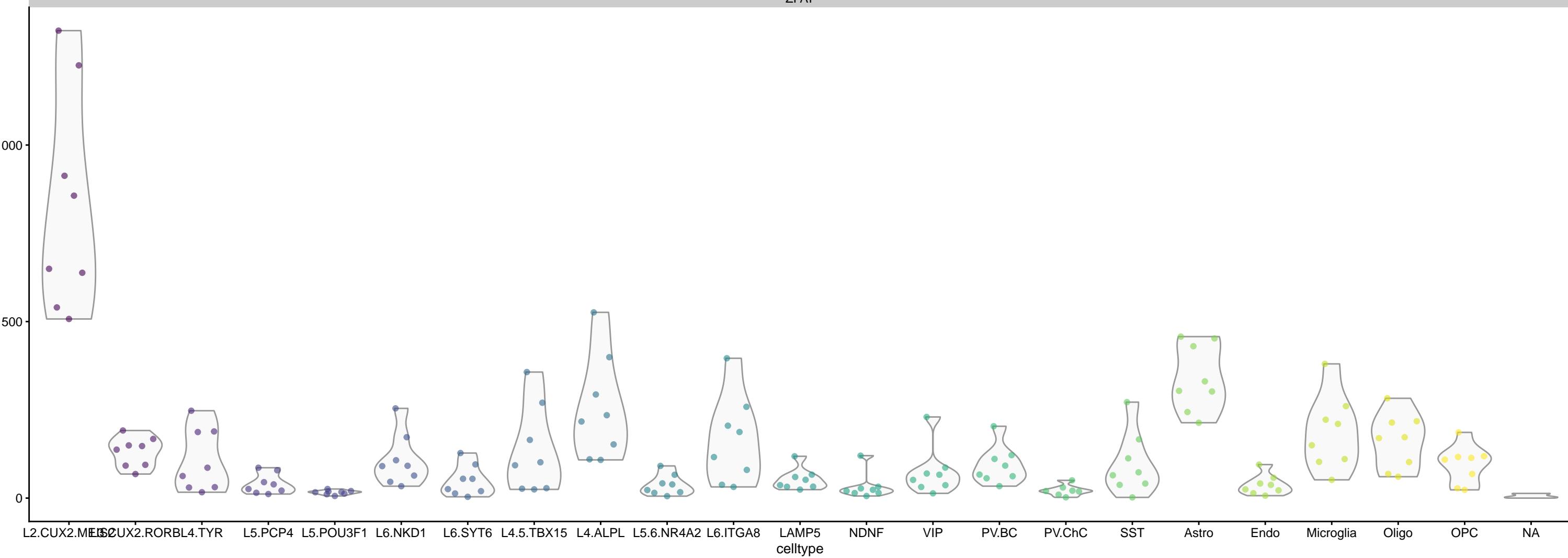
MRPL37



celltype: VIP, gene: ZFAT, peak:VIP\_715\_ZFAT

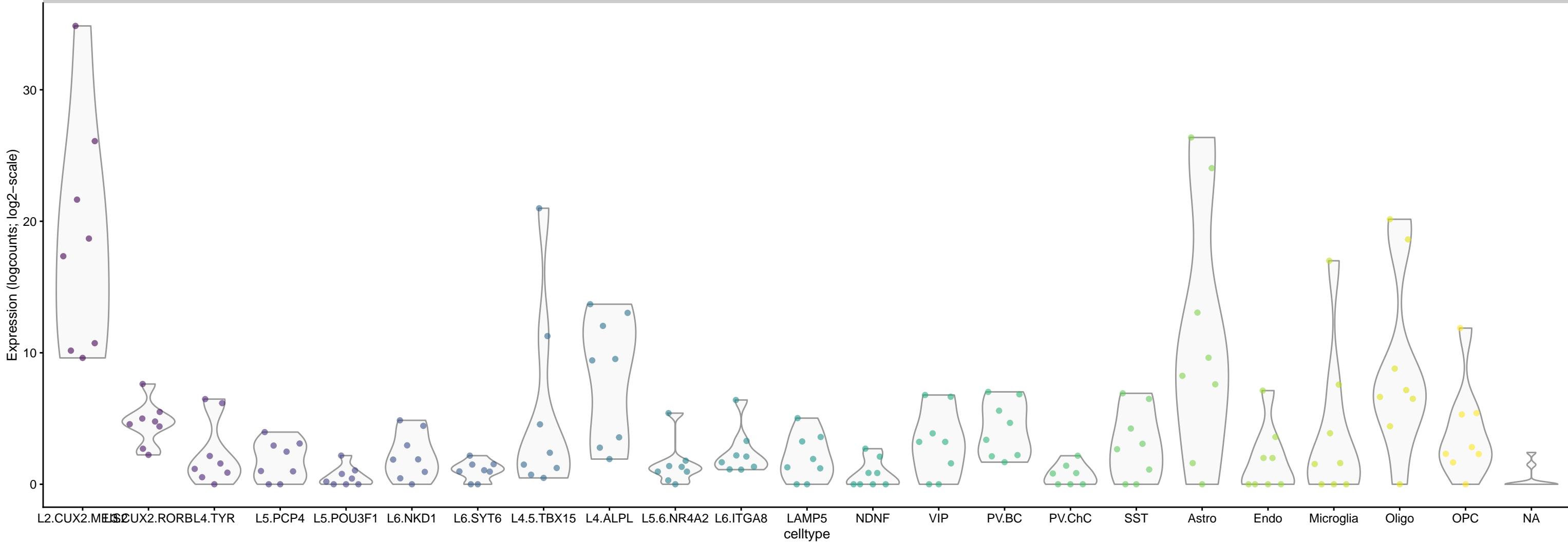
ZFAT

Expression (logcounts; log2-scale)



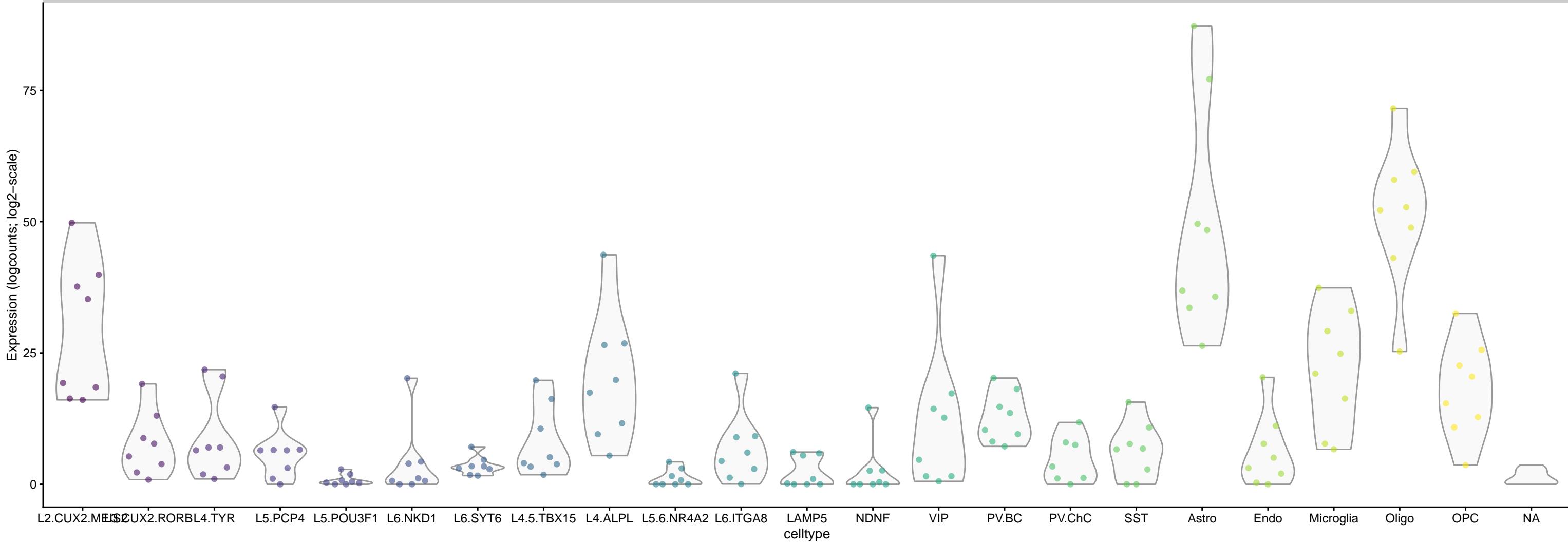
celltype: VIP, gene: KTN1-AS1, peak:VIP\_717\_KTN1-AS1

KTN1-AS1



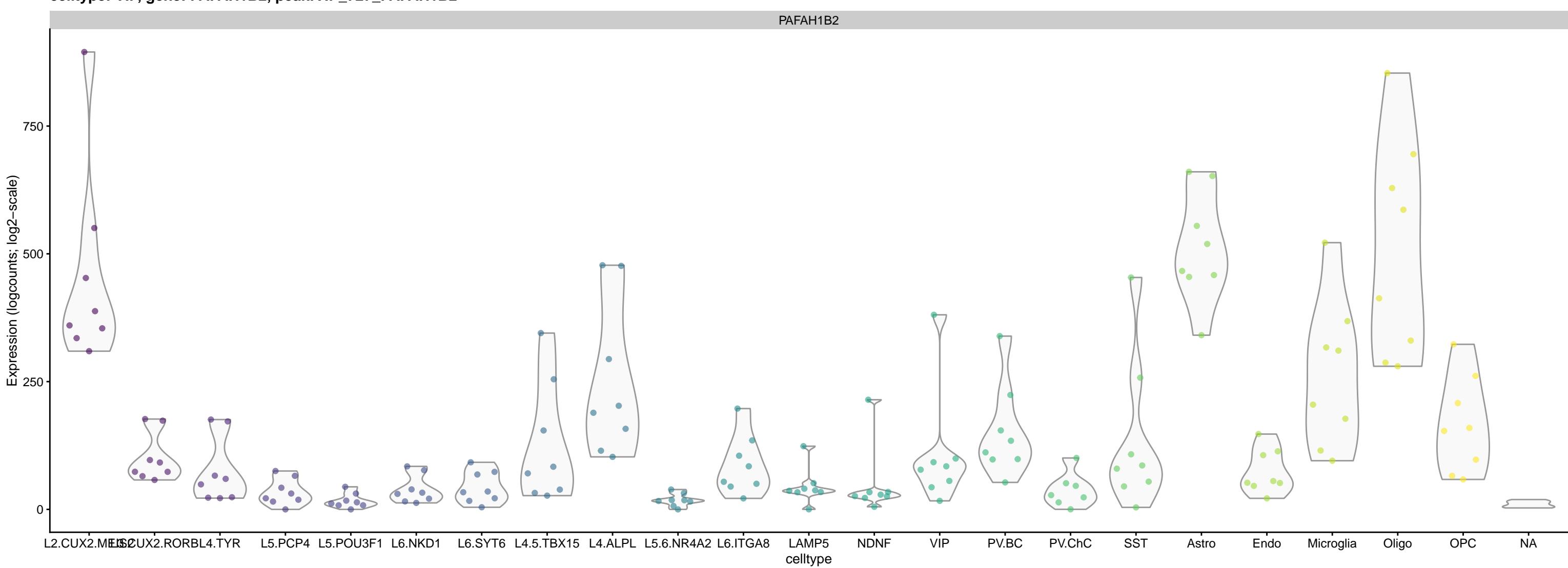
celltype: VIP, gene: C9orf43, peak:VIP\_718\_C9orf43

C9orf43



celltype: VIP, gene: PAFAH1B2, peak:VIP\_727\_PAFAH1B2

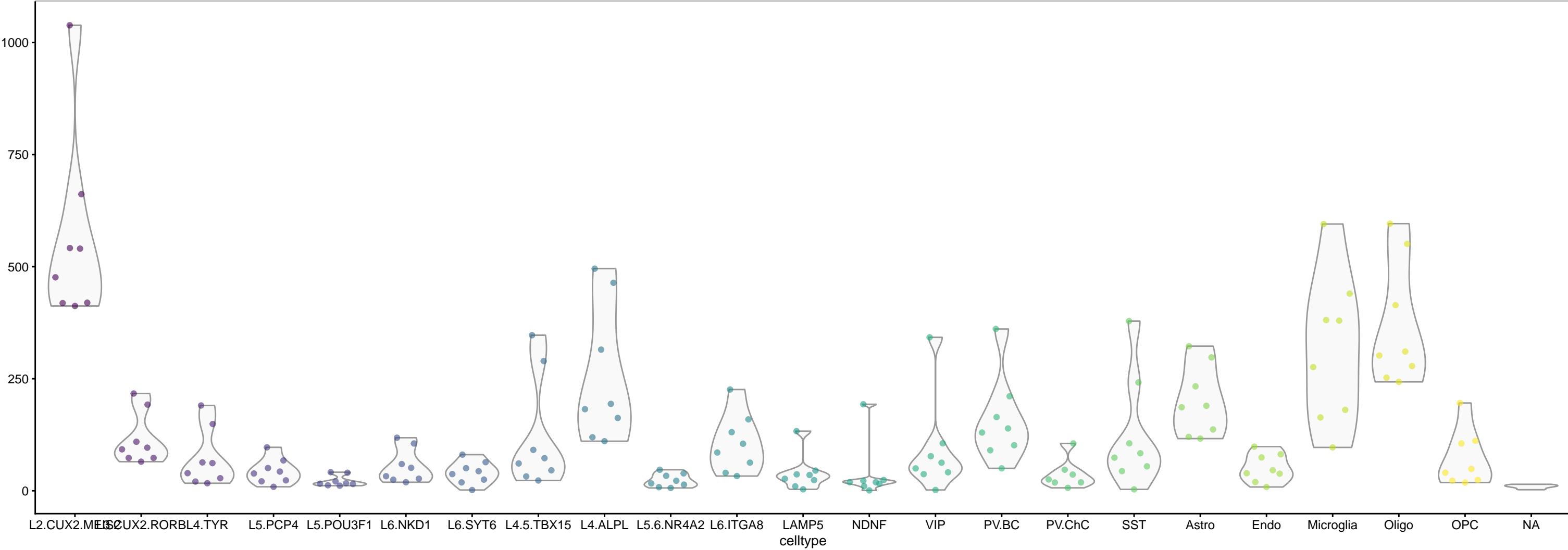
PAFAH1B2



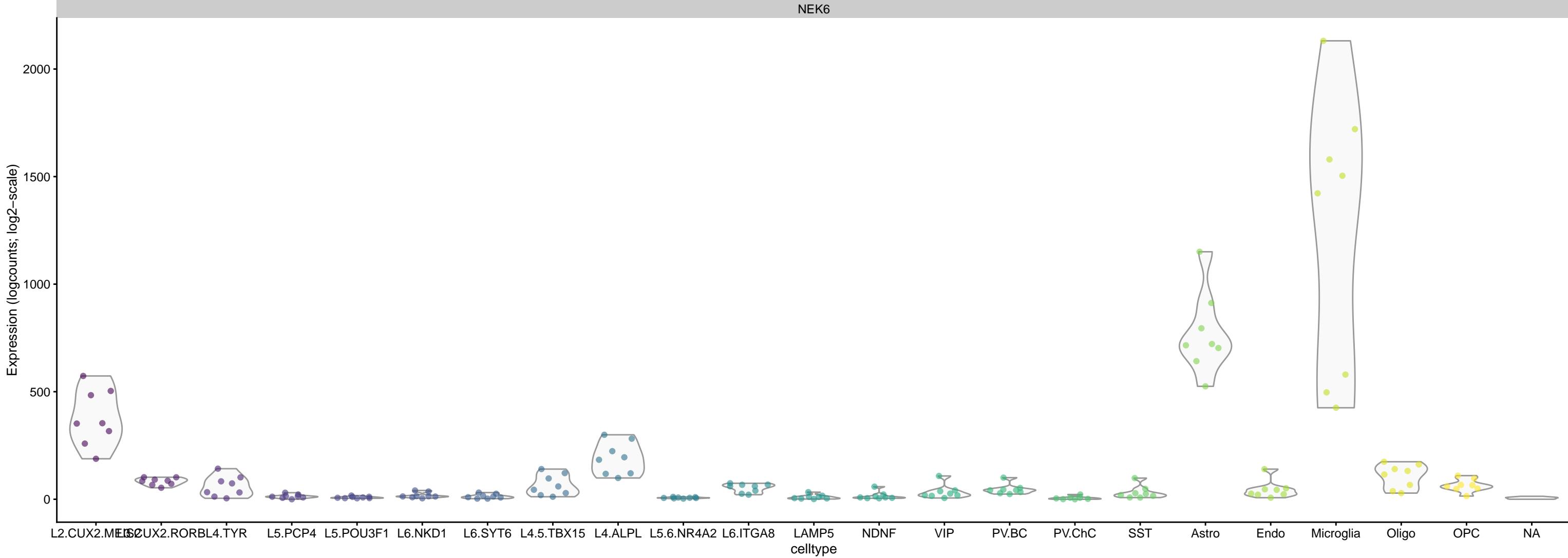
celltype: VIP, gene: HMOX2, peak:VIP\_728\_HMOX2

HMOX2

Expression (logcounts; log2-scale)

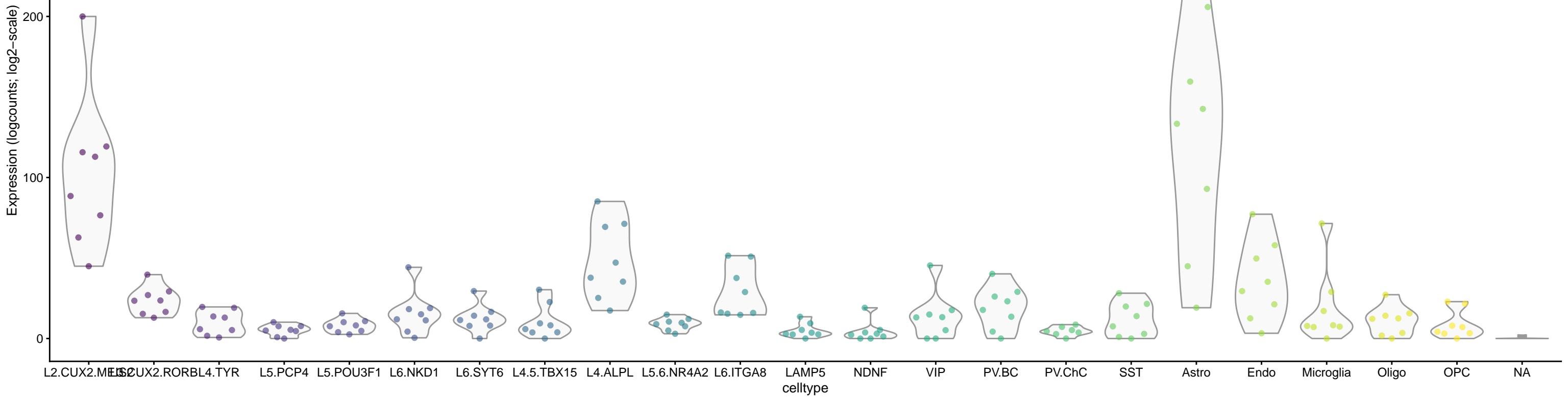


celltype: VIP, gene: NEK6, peak:VIP\_736\_NEK6



celltype: VIP, gene: MIR22HG, peak:VIP\_742\_MIR22,MIR22HG,RPA1,SMYD4,TLCD22

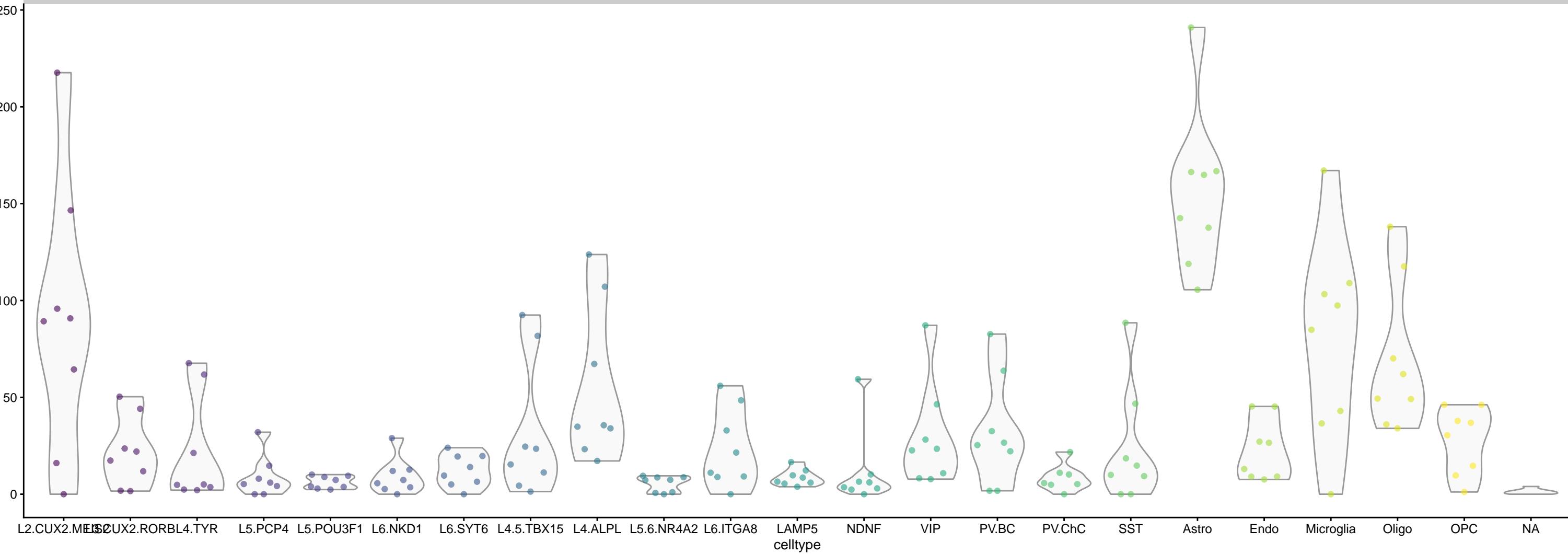
MIR22HG



celltype: VIP, gene: RPA1, peak:VIP\_742\_MIR22,MIR22HG,RPA1,SMYD4,TLCD23

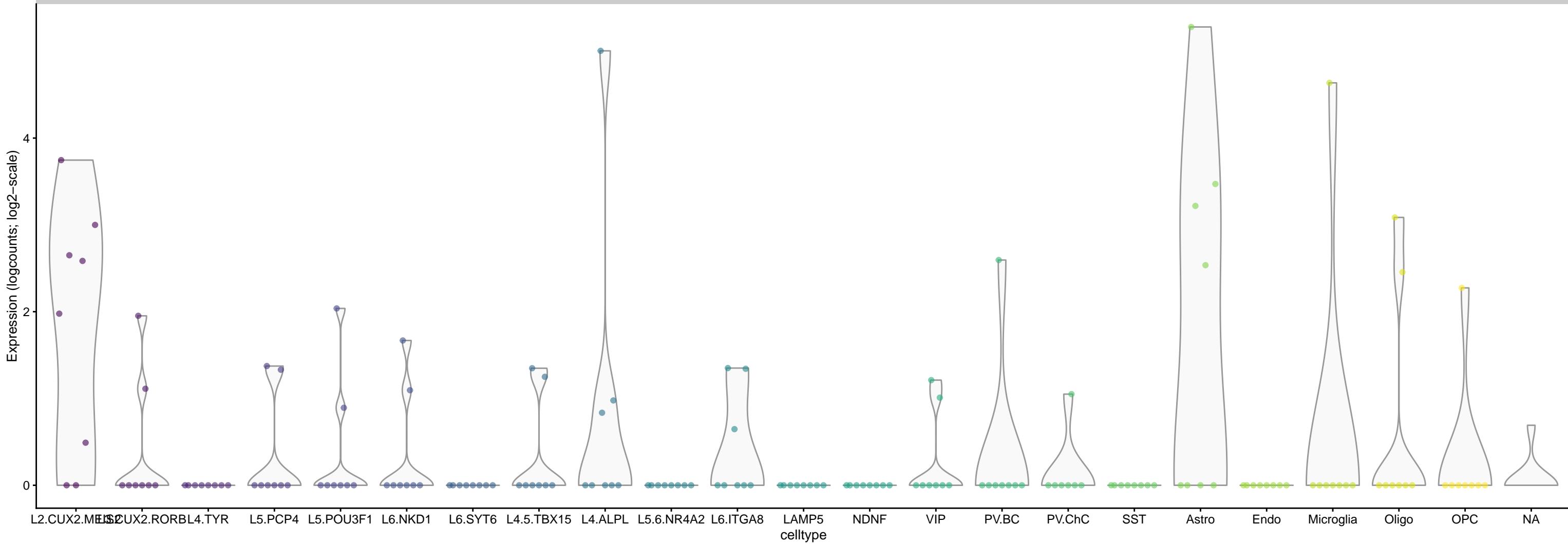
RPA1

Expression (logcounts; log2-scale)



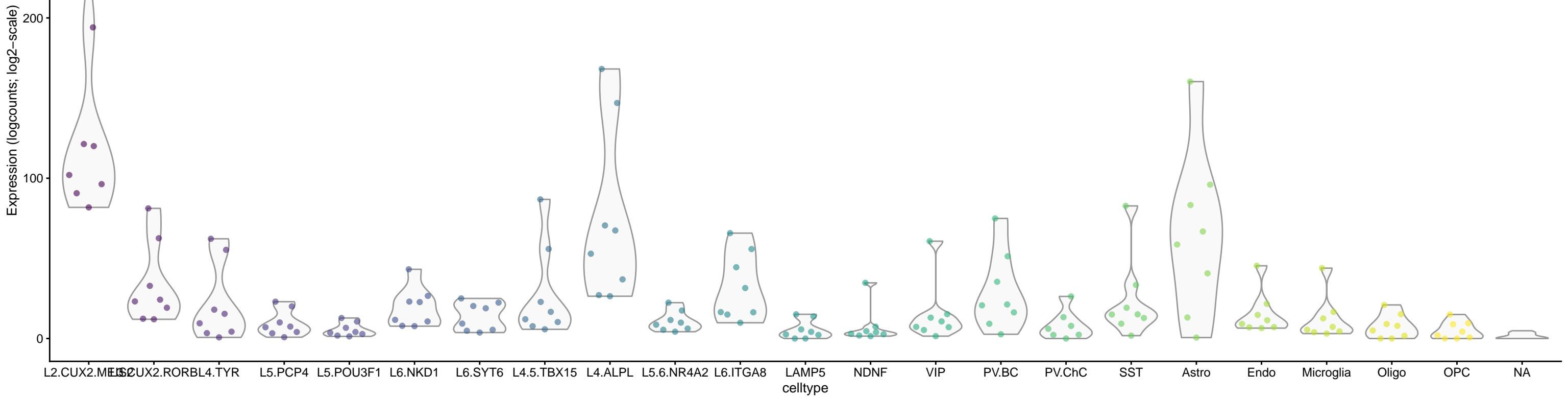
celltype: VIP, gene: SMYD4, peak:VIP\_742\_MIR22,MIR22HG,RPA1,SMYD4,TLCD24

SMYD4



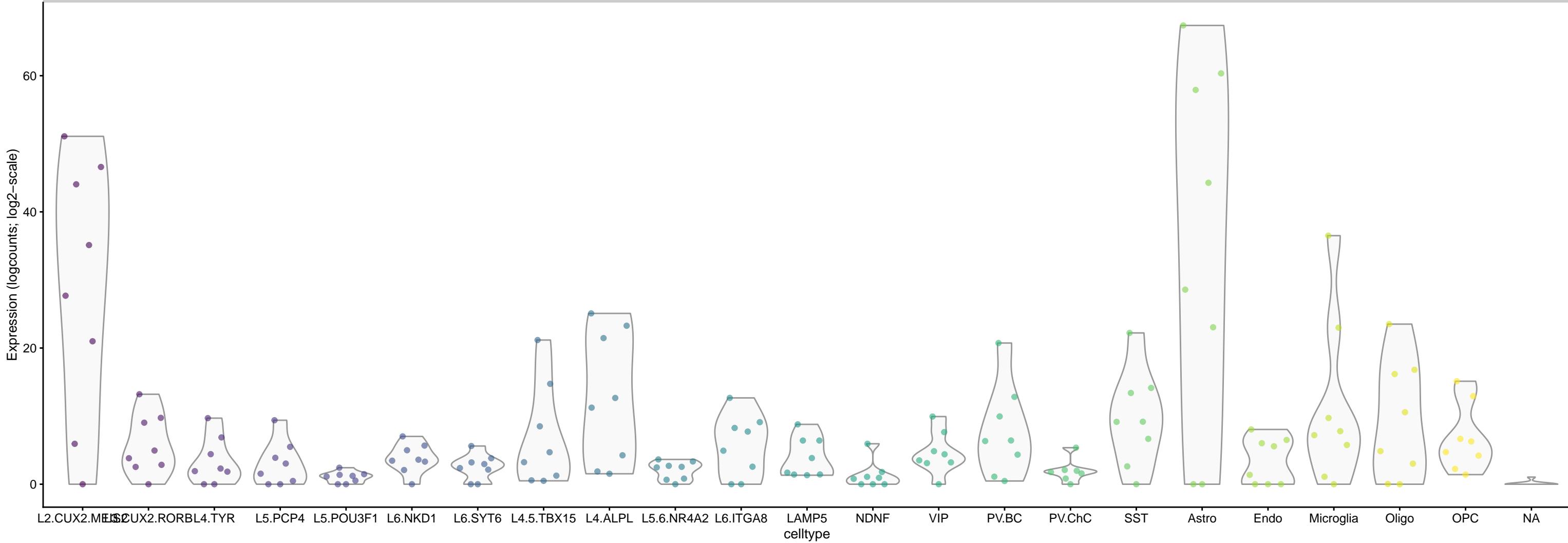
celltype: VIP, gene: TLCD2, peak:VIP\_742\_MIR22,MIR22HG,RPA1,SMYD4,TLCD25

TLCD2



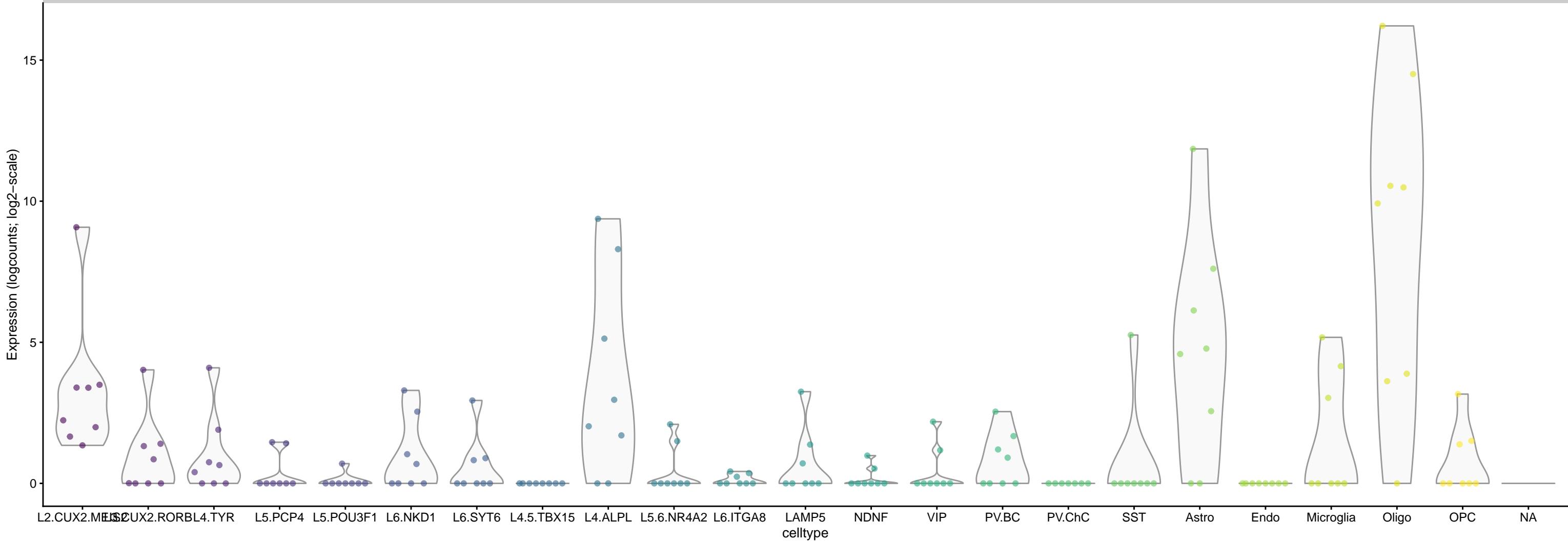
celltype: VIP, gene: ADD3-AS1, peak:VIP\_746\_ADD3-AS1

ADD3-AS1



celltype: VIP, gene: LINC00870, peak:VIP\_748\_LINC00870

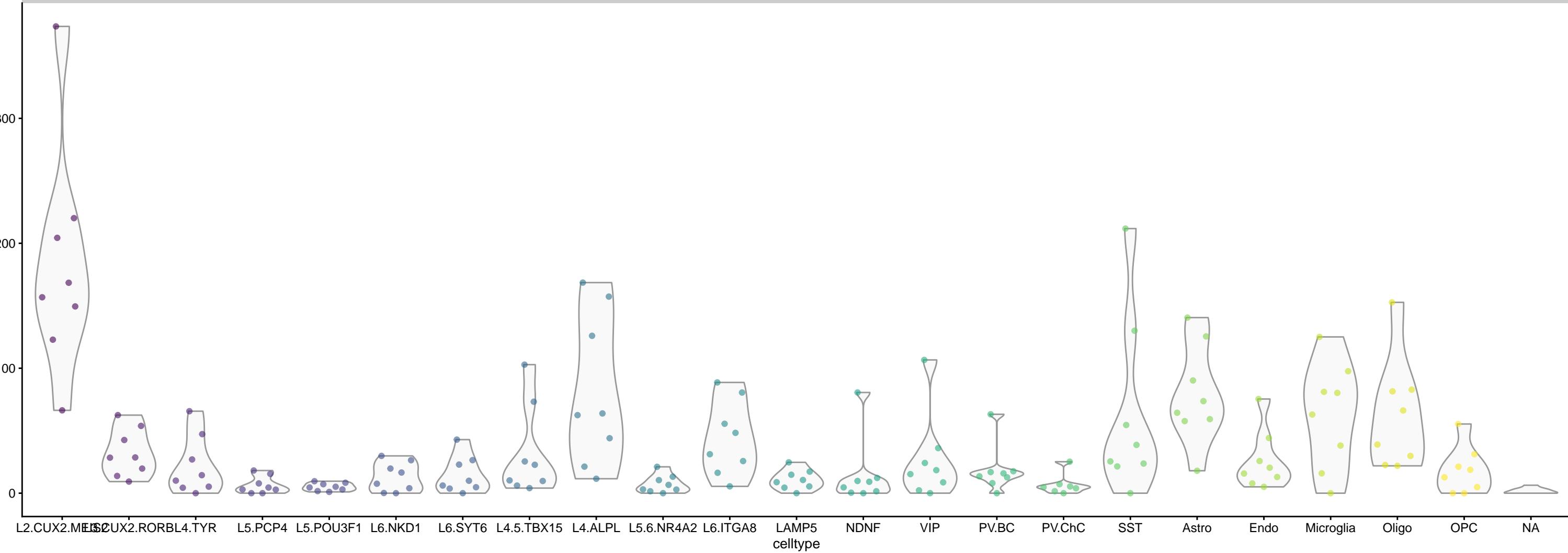
LINC00870



celltype: VIP, gene: CASP6, peak:VIP\_757\_CASP6

CASP6

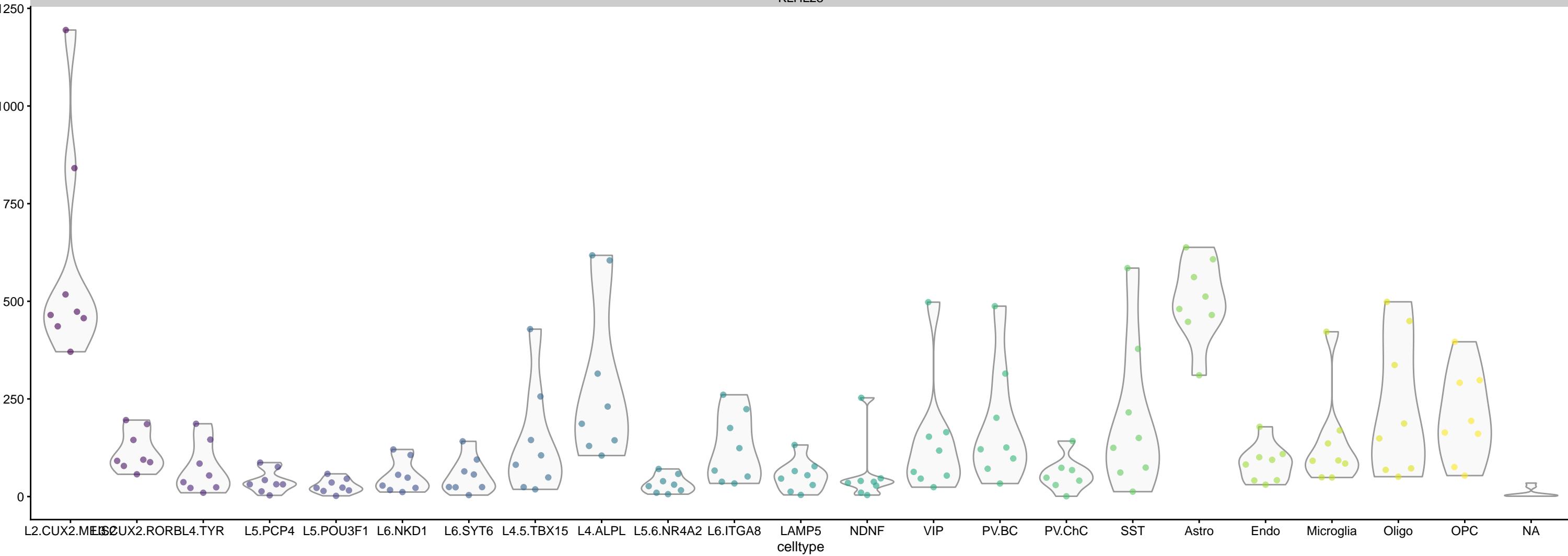
Expression (logcounts; log2-scale)



celltype: VIP, gene: KLHL23, peak:VIP\_761\_KLHL23

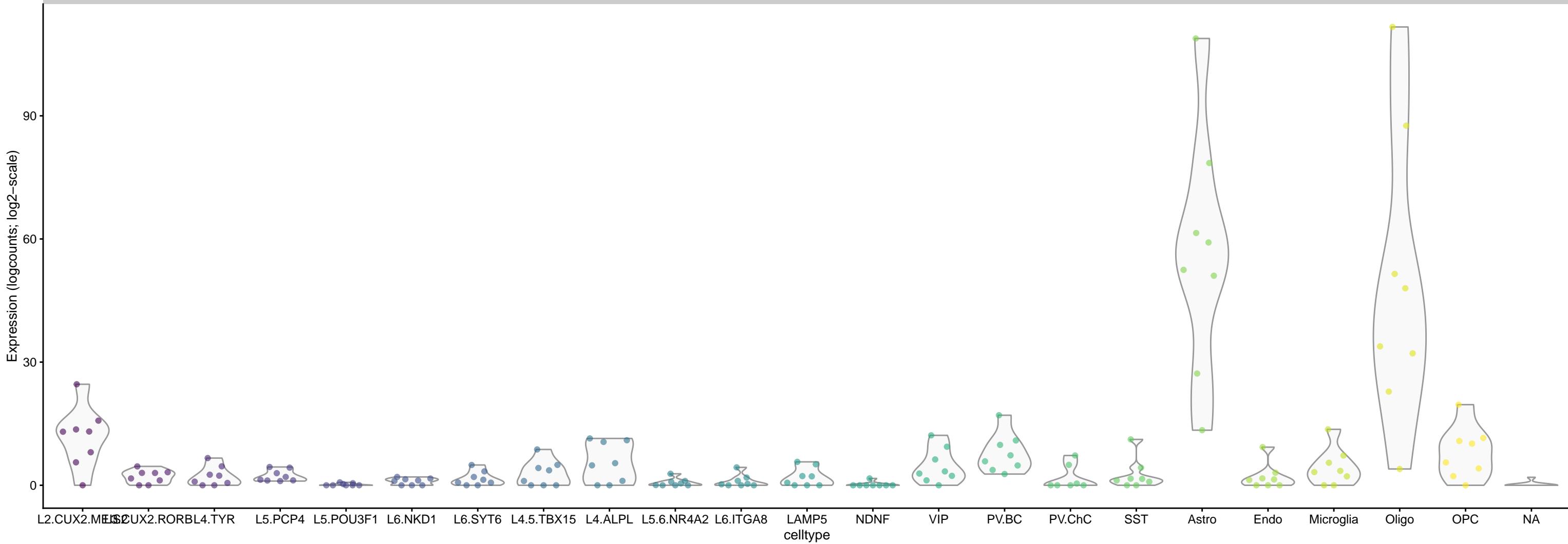
KLHL23

Expression (logcounts; log2-scale)



celltype: VIP, gene: PTPRD-AS1, peak:VIP\_768\_PTPRD-AS1

PTPRD-AS1



celltype: VIP, gene: EMX2, peak:VIP\_773\_EMX2,EMX2OS1

EMX2

Expression (logcounts; log<sub>2</sub>-scale)

750

500

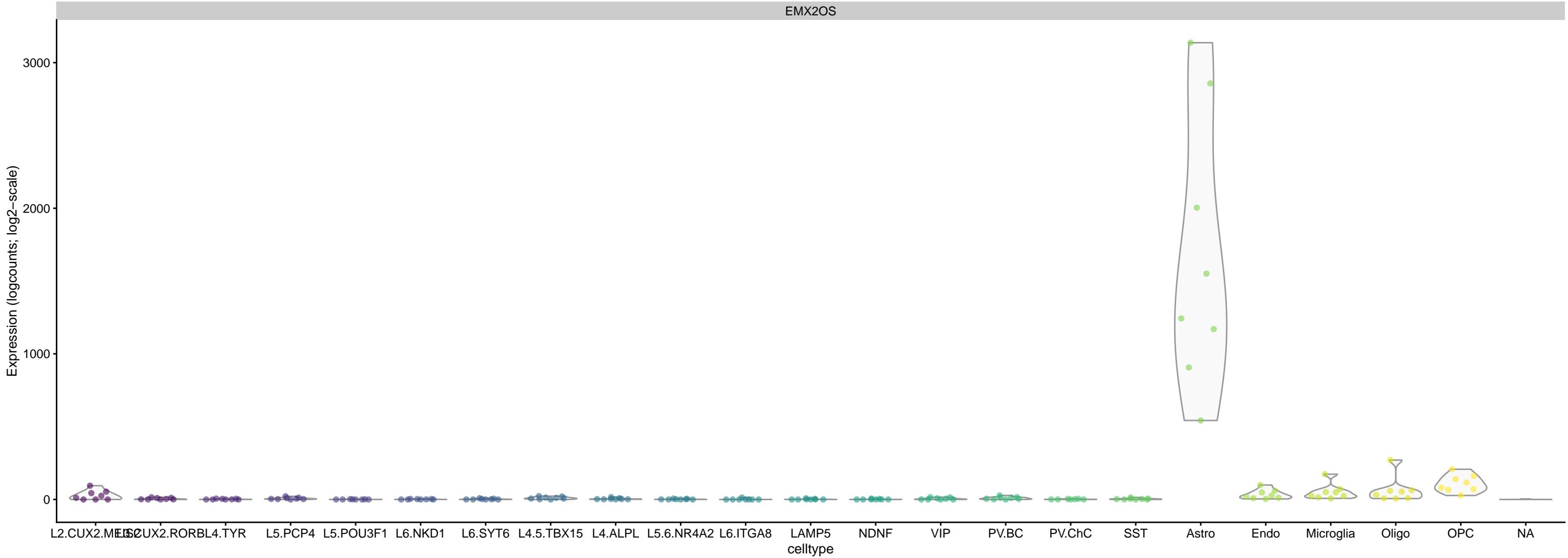
250

0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

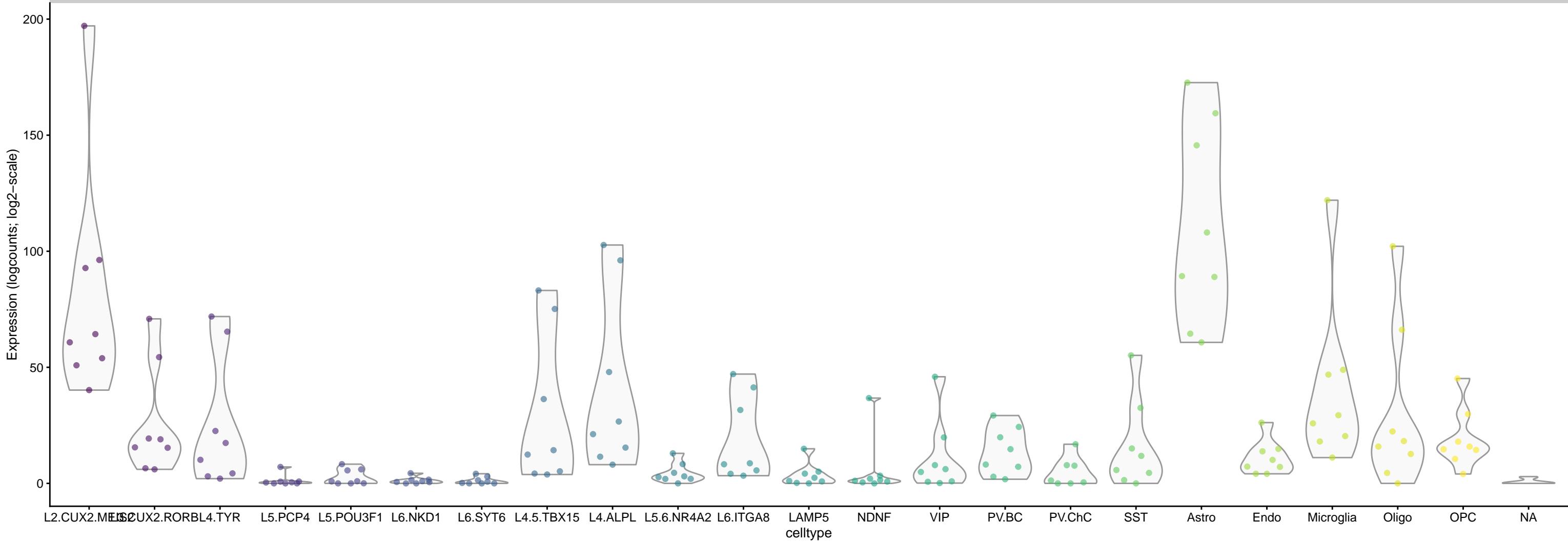
celltype

celltype: VIP, gene: EMX2OS, peak:VIP\_773\_EMX2,EMX2OS2



celltype: VIP, gene: TRIM65, peak:VIP\_789\_TRIM65,UNK1

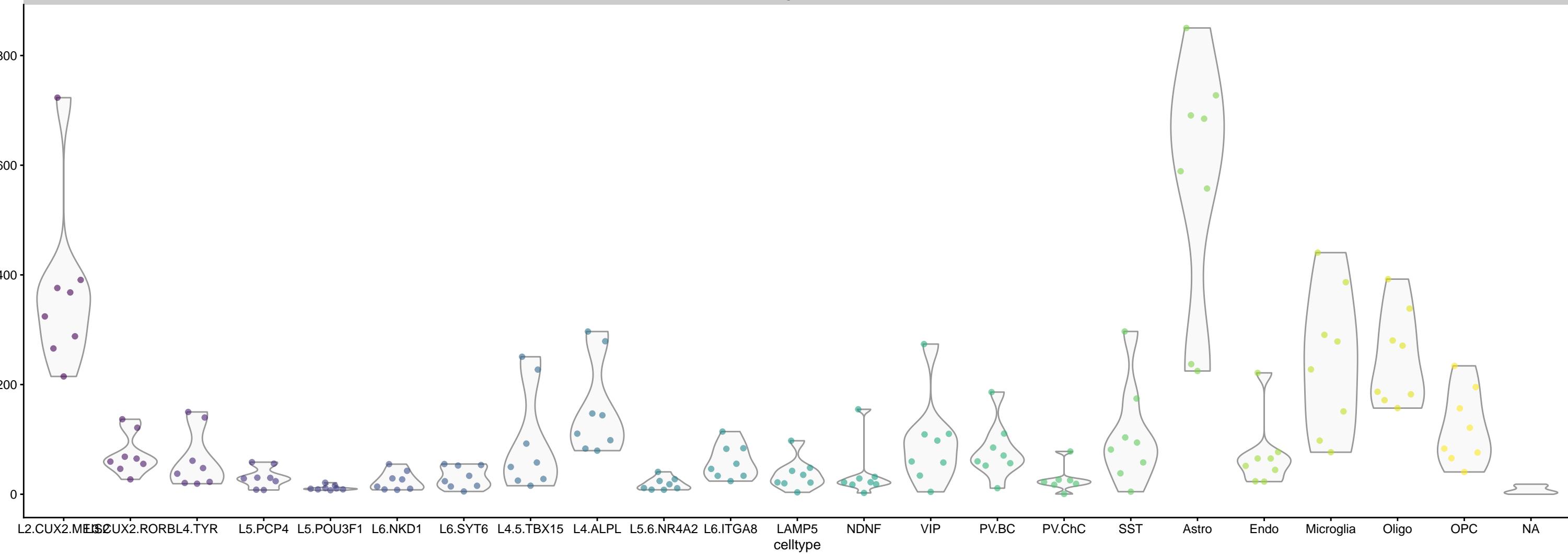
TRIM65



celltype: VIP, gene: UNK, peak:VIP\_789\_TRIM65,UNK2

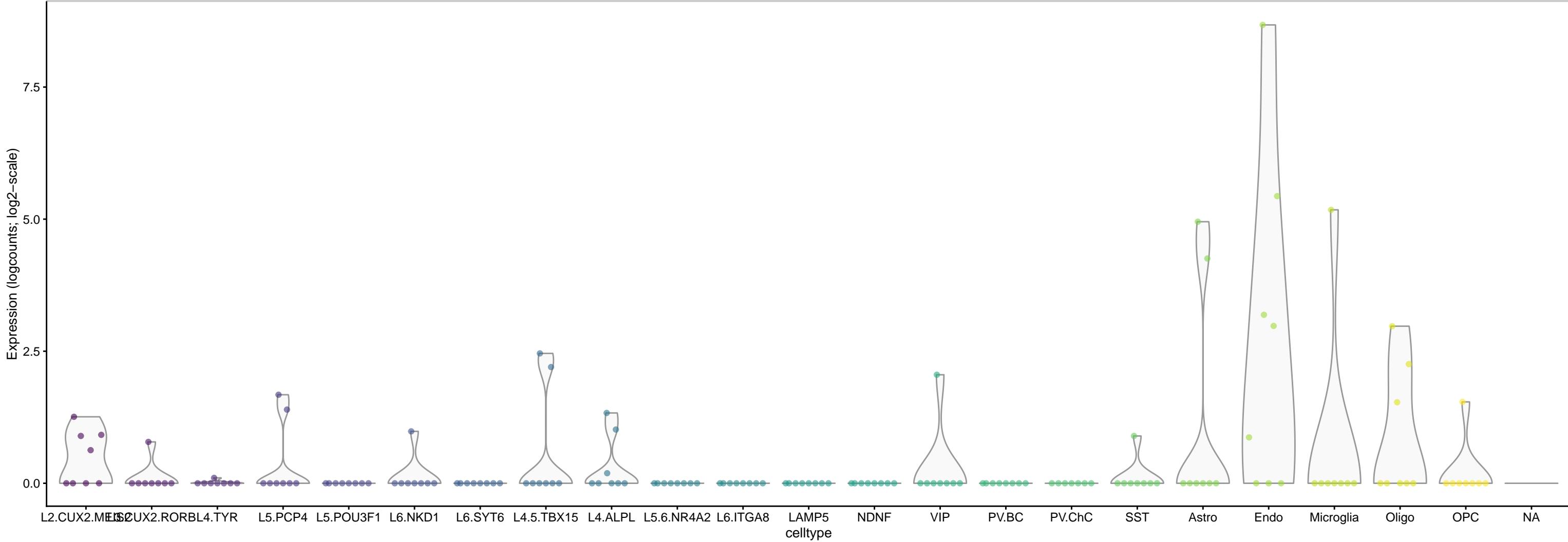
UNK

Expression (logcounts; log2-scale)



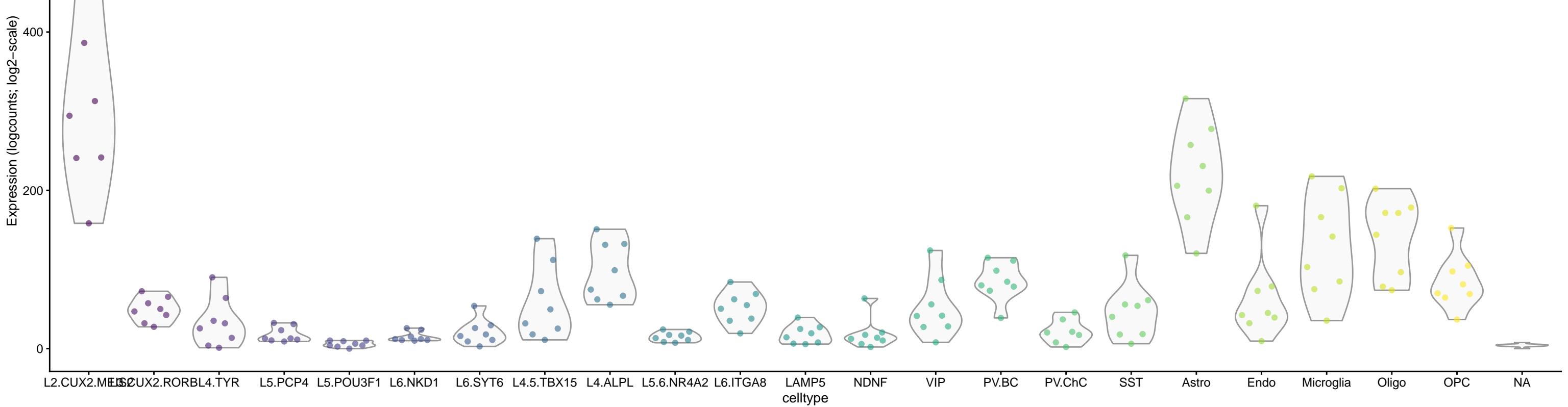
celltype: VIP, gene: LINC01600, peak:VIP\_795\_LINC01600,WRNIP11

LINC01600



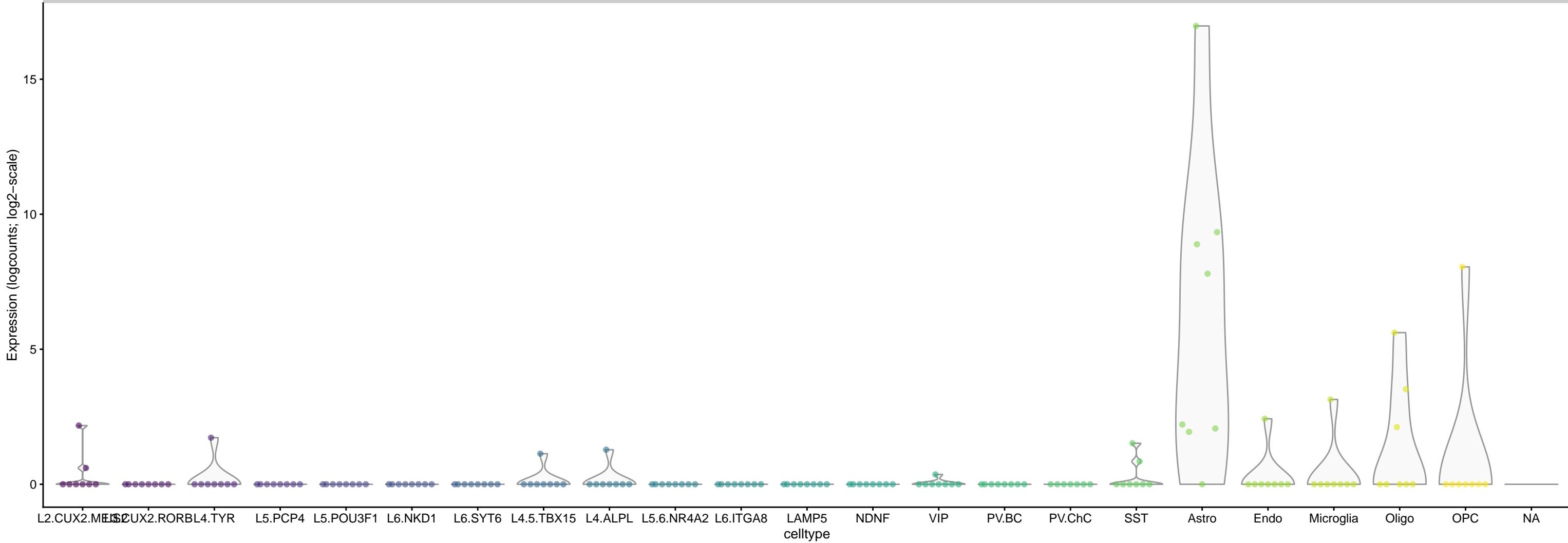
celltype: VIP, gene: WRNIP1, peak:VIP\_795\_LINC01600,WRNIP12

WRNIP1



celltype: VIP, gene: ZBTB20-AS3, peak:VIP\_812\_ZBTB20-AS3

ZBTB20-AS3



celltype: VIP, gene: TAS1R2, peak:VIP\_822\_TAS1R2

TAS1R2

Expression (logcounts; log<sub>2</sub>-scale)

3

2

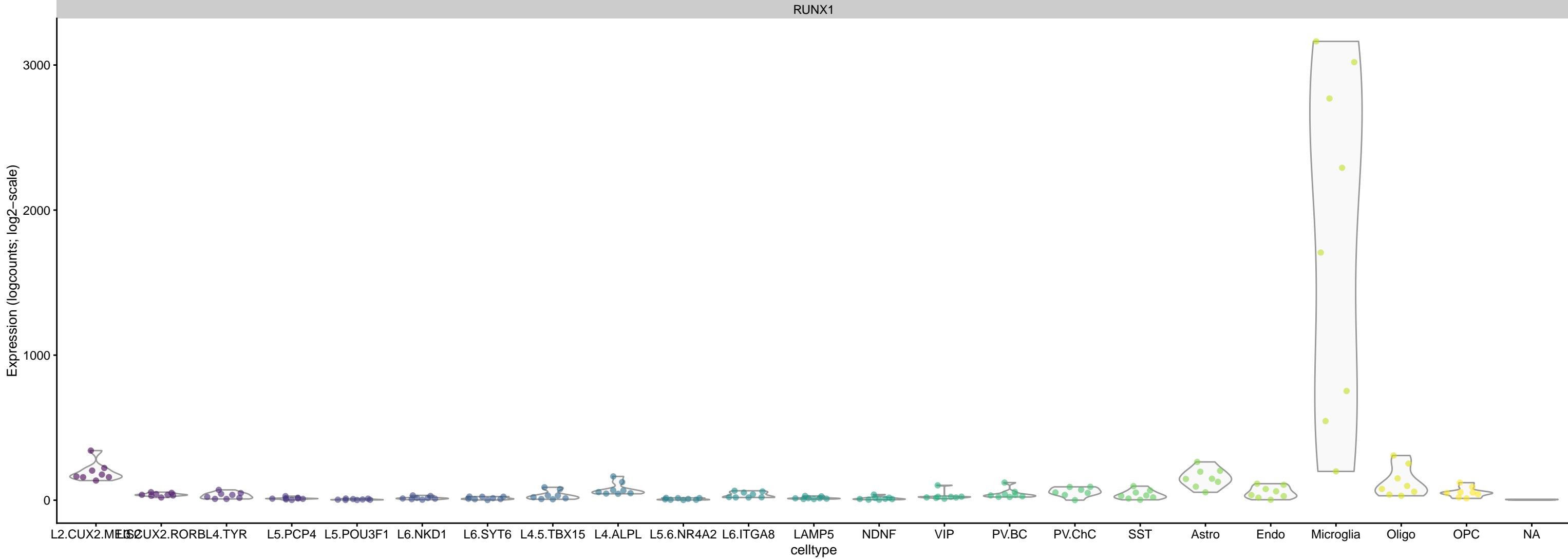
1

0

L2.CUX2.ME L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

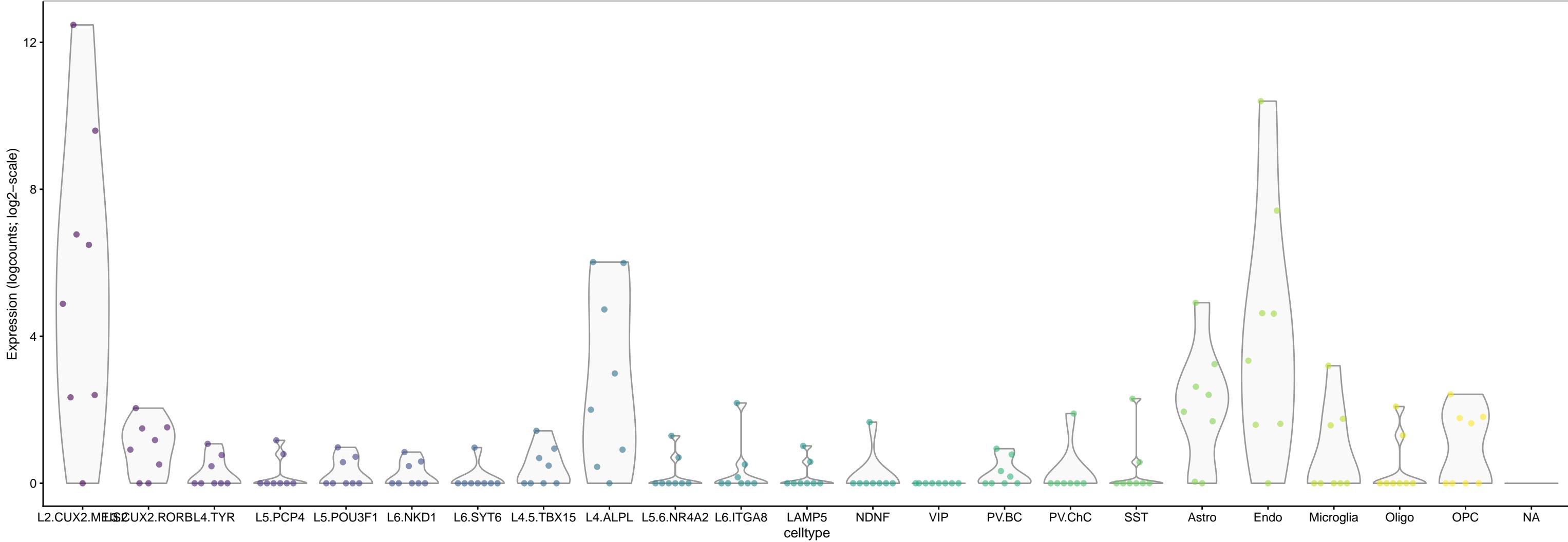
celltype

celltype: VIP, gene: RUNX1, peak:VIP\_836\_RUNX1



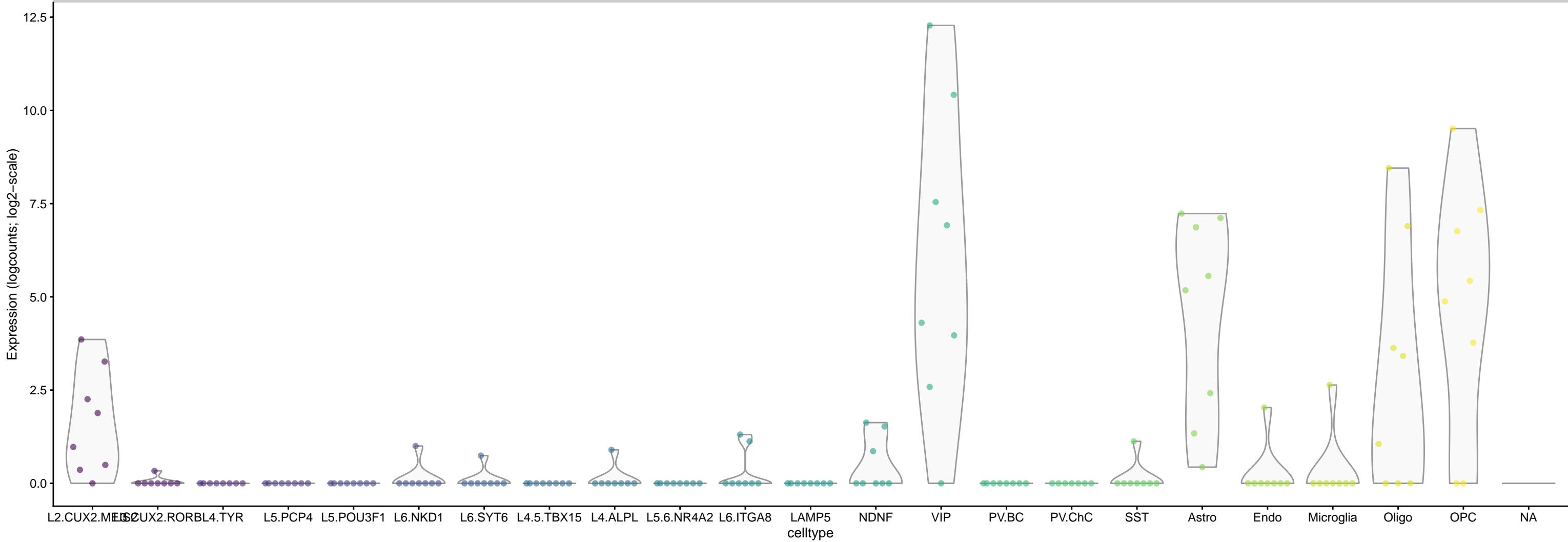
celltype: VIP, gene: AP1S3, peak:VIP\_848\_AP1S3

AP1S3



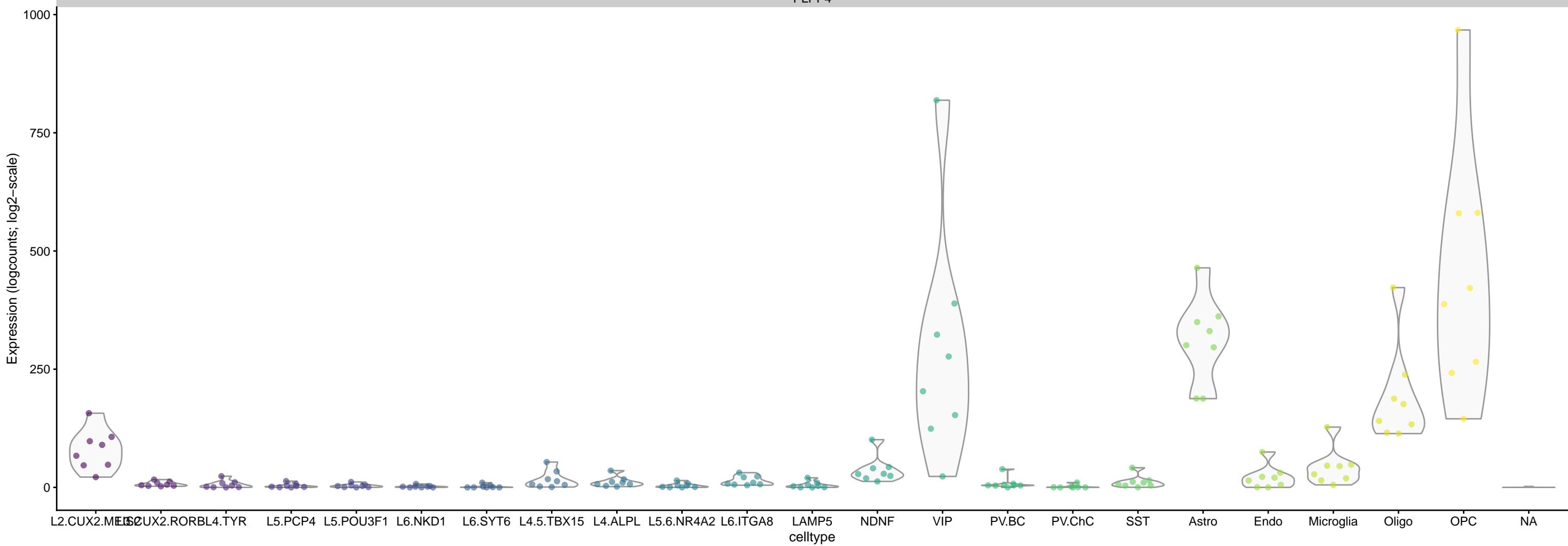
celltype: VIP, gene: LINC01561, peak:VIP\_859\_LINC01561,PLPP41

LINC01561



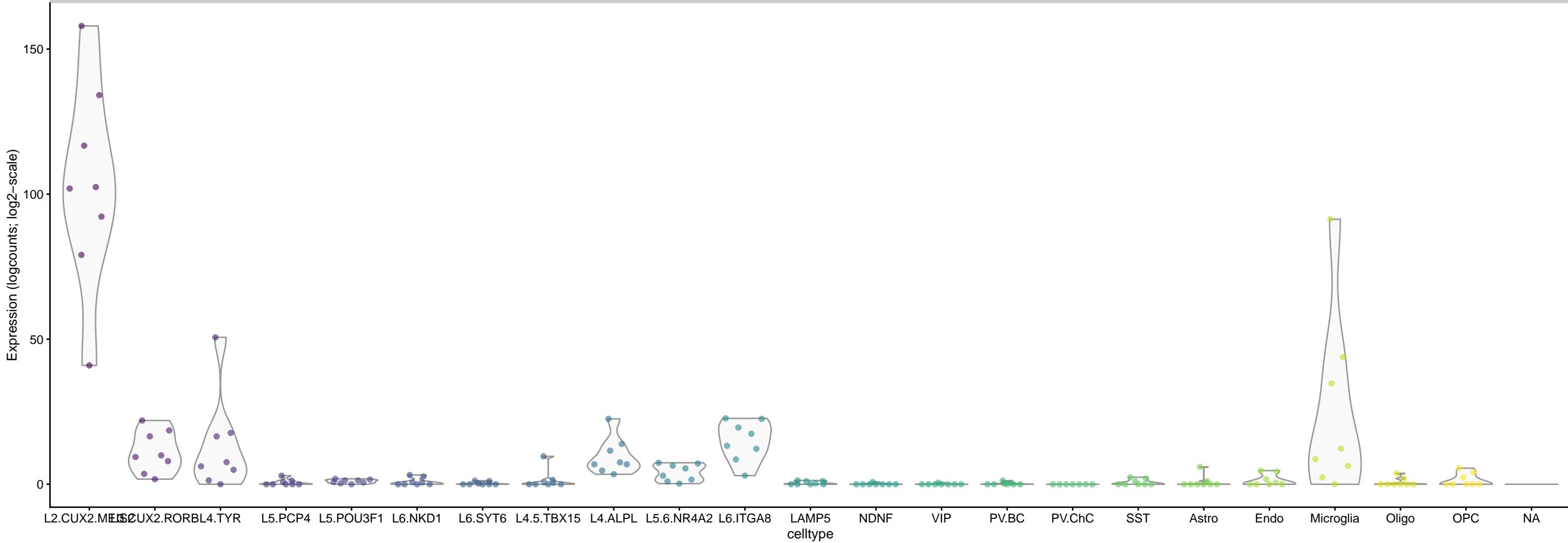
celltype: VIP, gene: PLPP4, peak:VIP\_859\_LINC01561,PLPP42

PLPP4



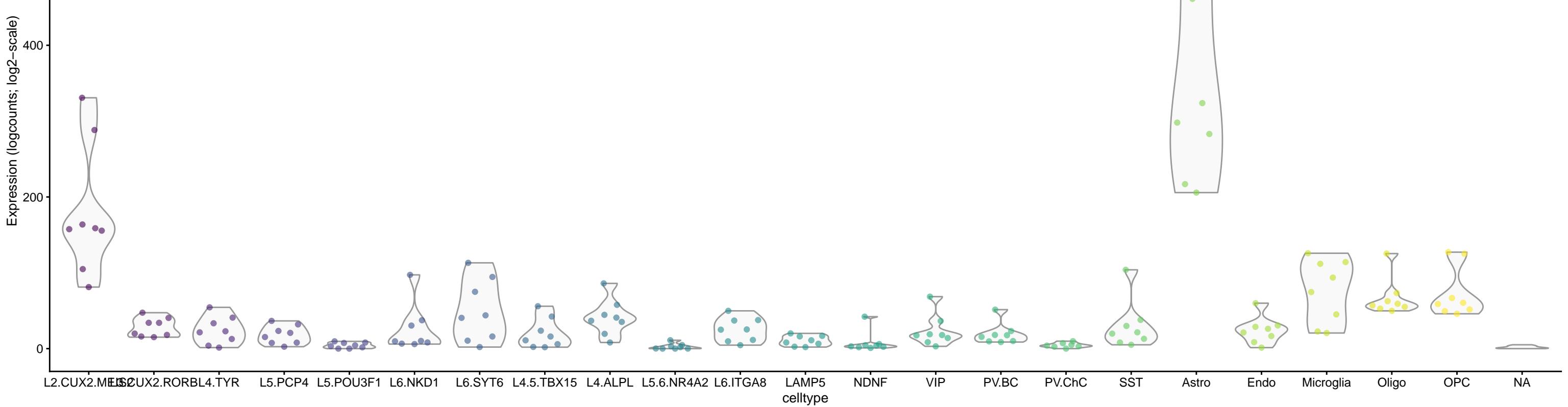
celltype: VIP, gene: LINC02688, peak:VIP\_868\_LINC02688

LINC02688



celltype: VIP, gene: SMIM20, peak:VIP\_873\_SMIM20

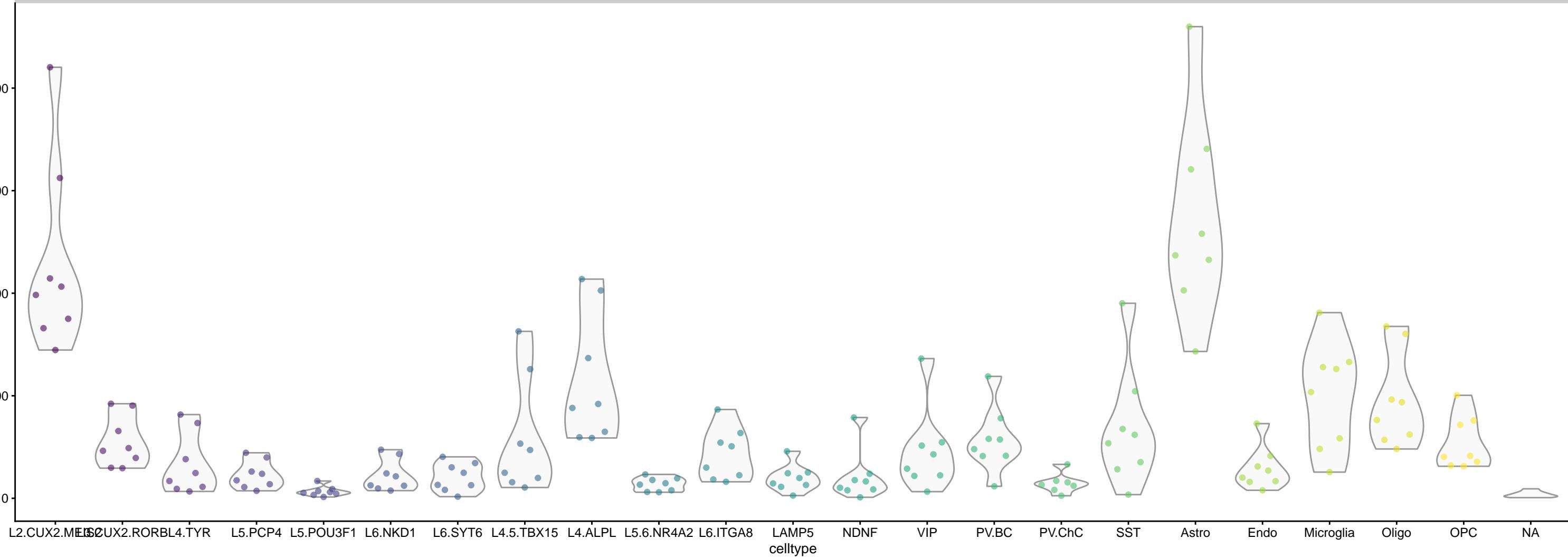
SMIM20



celltype: VIP, gene: GLG1, peak:VIP\_890\_GLG1

GLG1

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: PCP4, peak:VIP\_902\_PCP4

PCP4

Expression (logcounts; log<sub>2</sub>-scale)

300

200

100

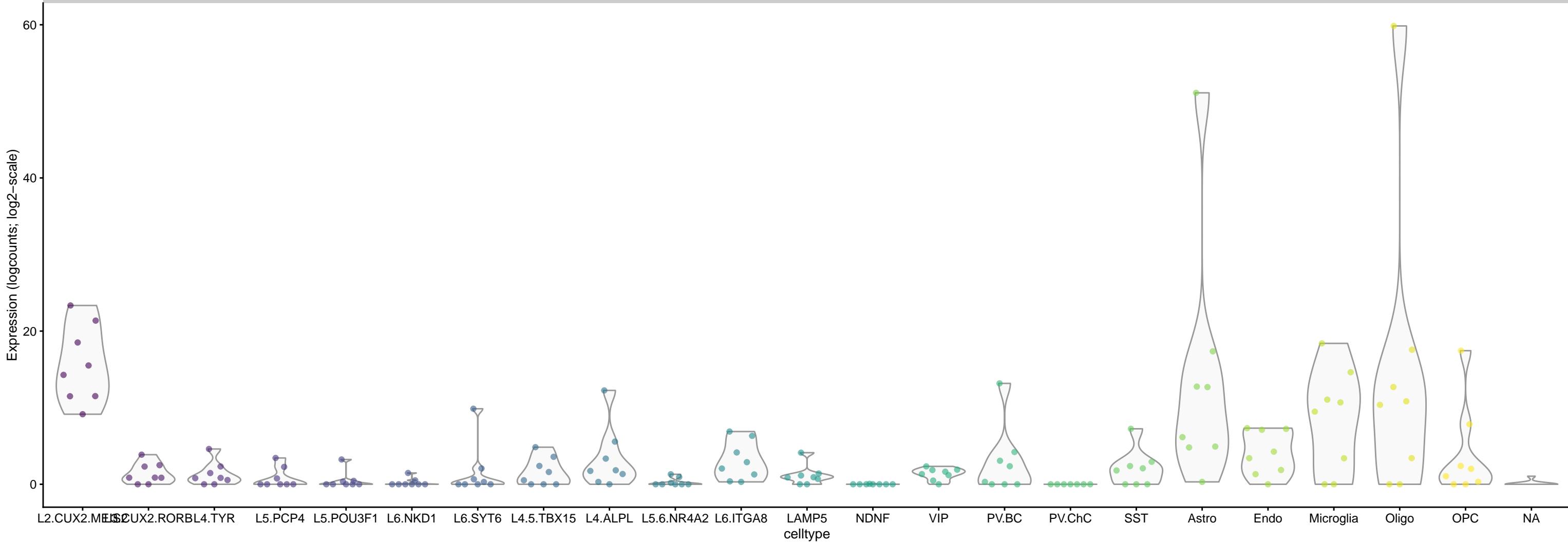
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

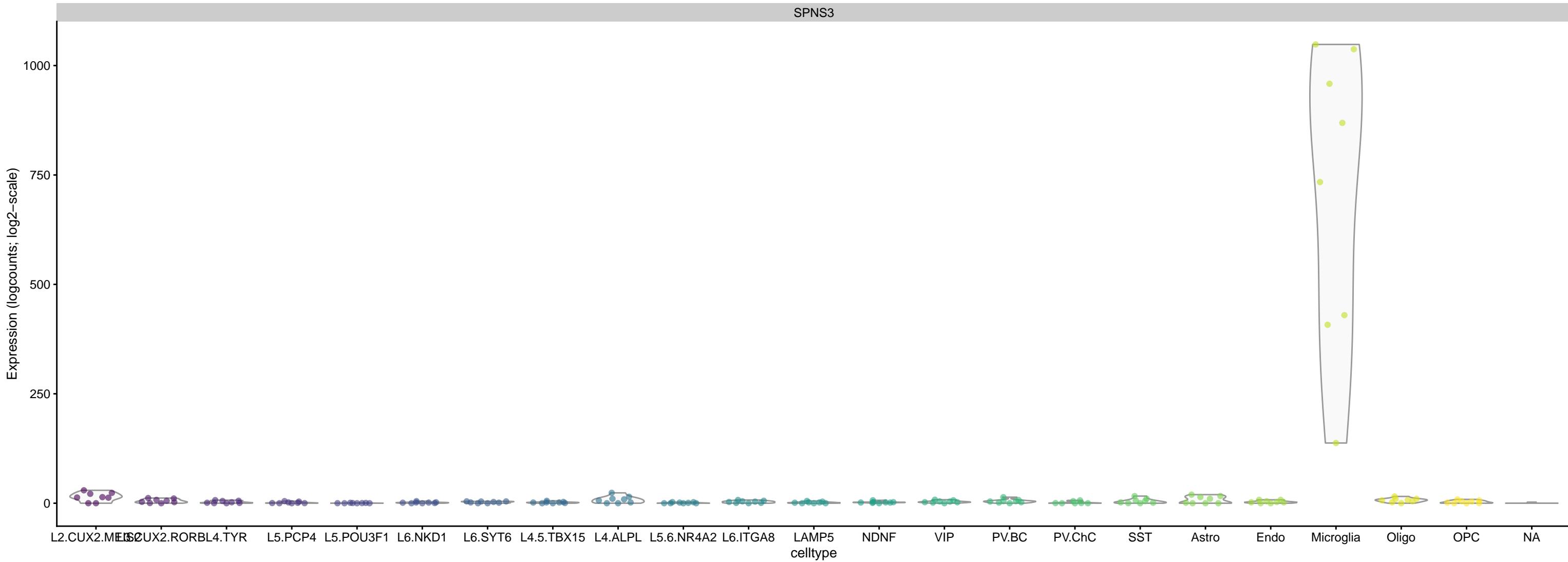
celltype

celltype: VIP, gene: P2RX3, peak:VIP\_903\_P2RX3,PRG2,PRG31

P2RX3



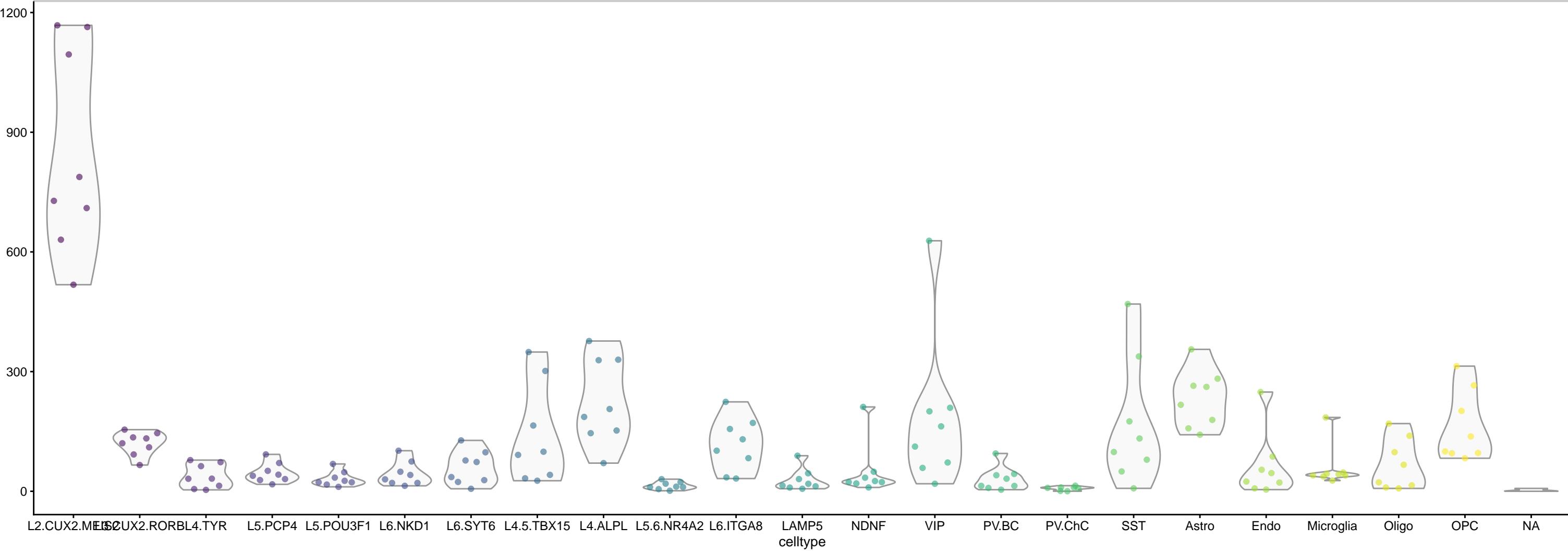
celltype: VIP, gene: SPNS3, peak:VIP\_908\_SPNS3



celltype: VIP, gene: ADAM19, peak:VIP\_918\_ADAM19

ADAM19

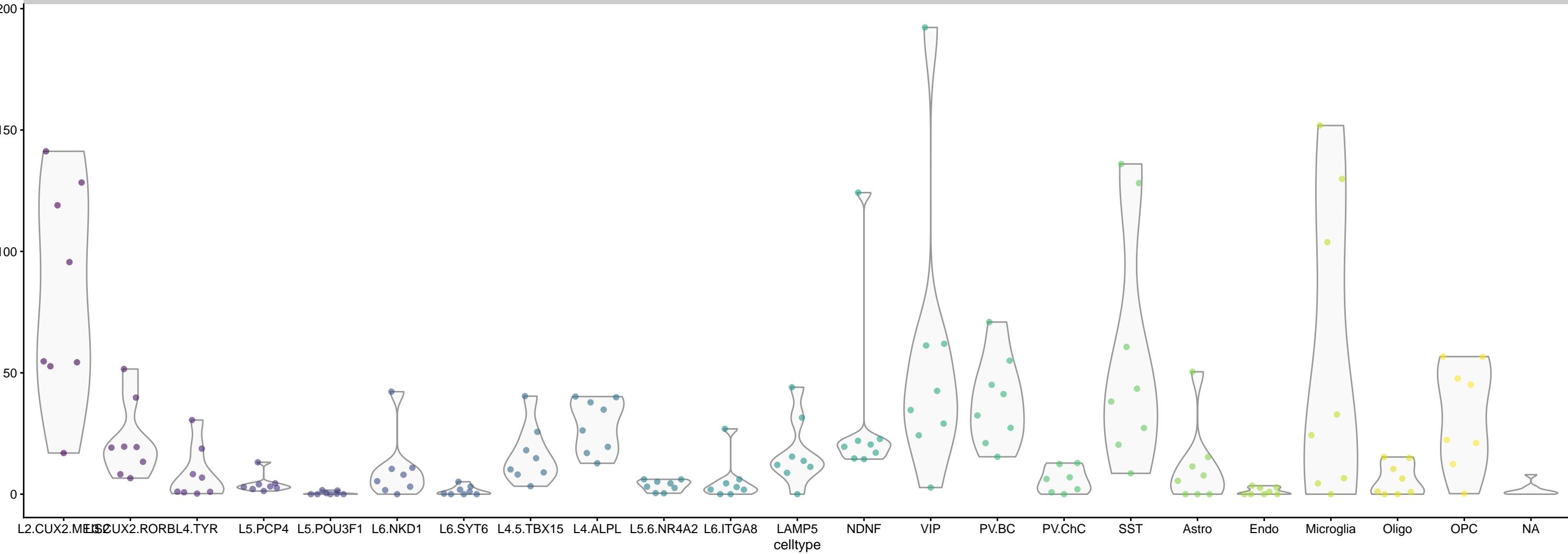
Expression (logcounts; log2-scale)



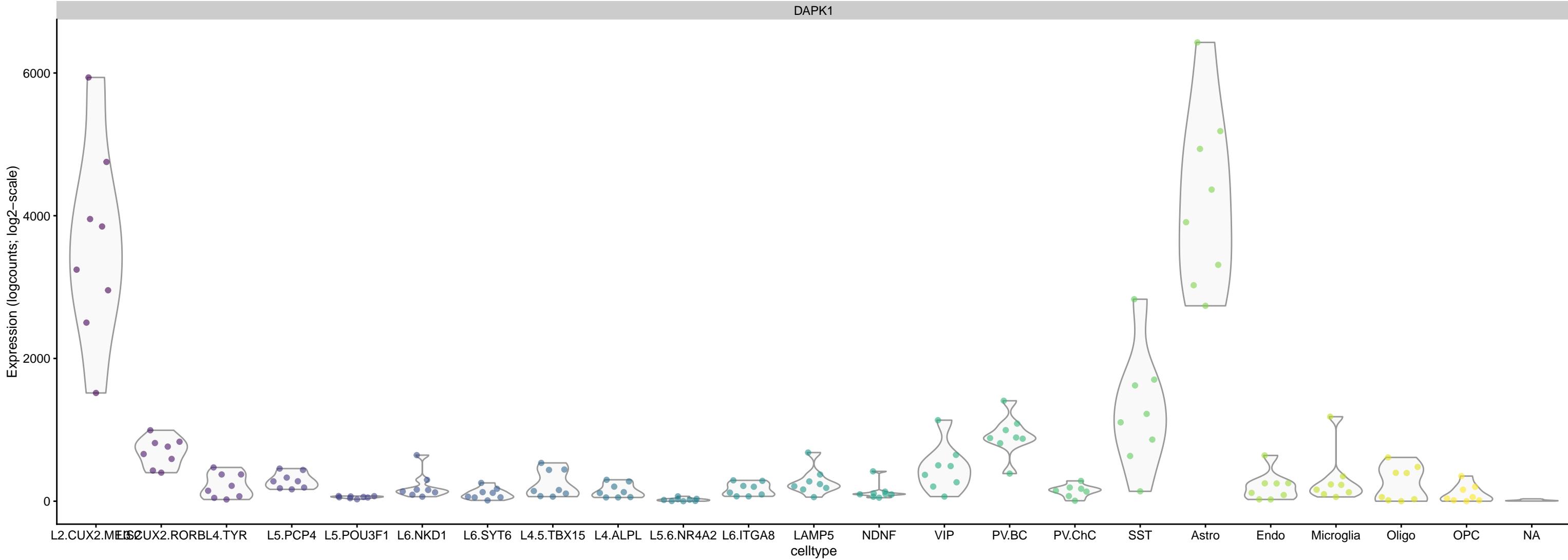
celltype: VIP, gene: TMEM132E, peak:VIP\_921\_TMEM132E

TMEM132E

Expression (logcounts; log2-scale)

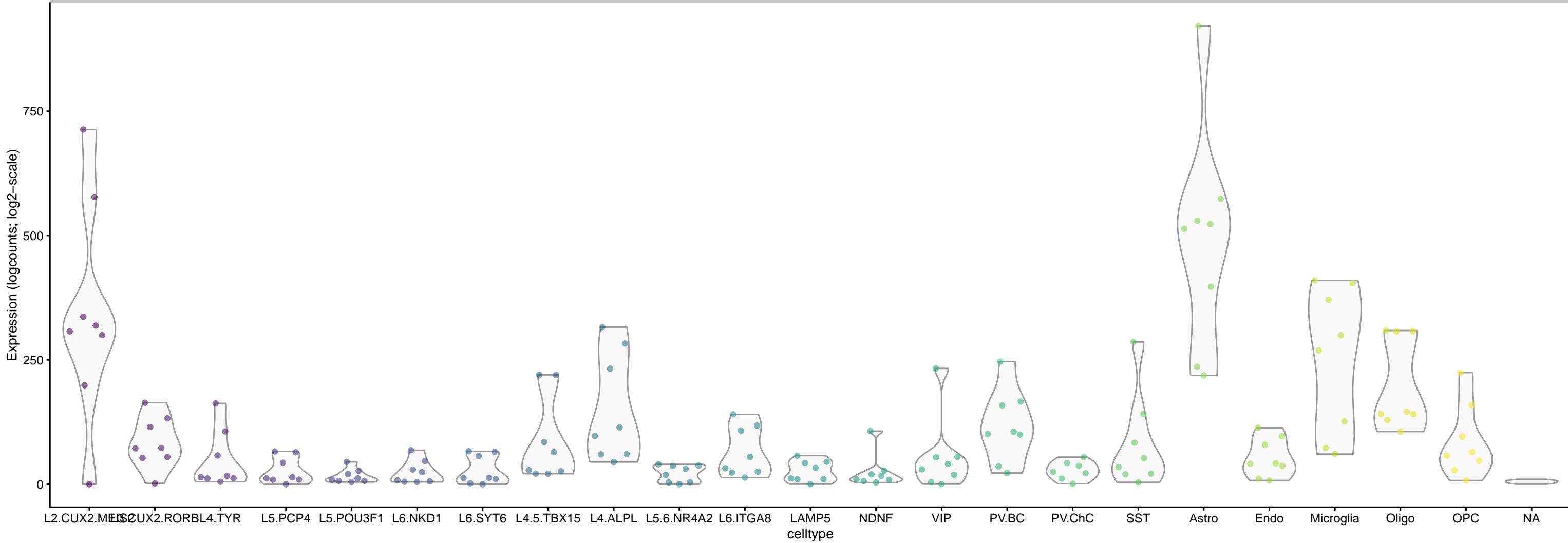


celltype: VIP, gene: DAPK1, peak:VIP\_927\_DAPK1,DAPK1-IT11

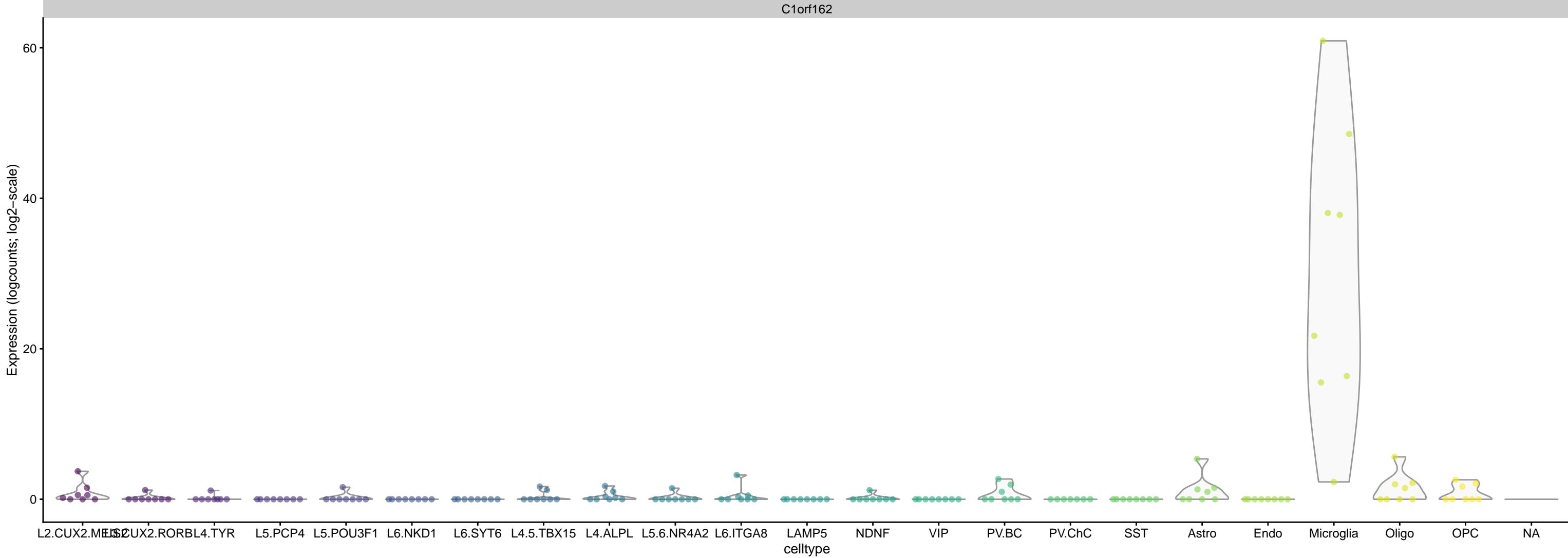


celltype: VIP, gene: ATP5PB, peak:VIP\_929\_ADORA3,ATP5PB,C1orf162,OVGP1,TMIGD32

ATP5PB

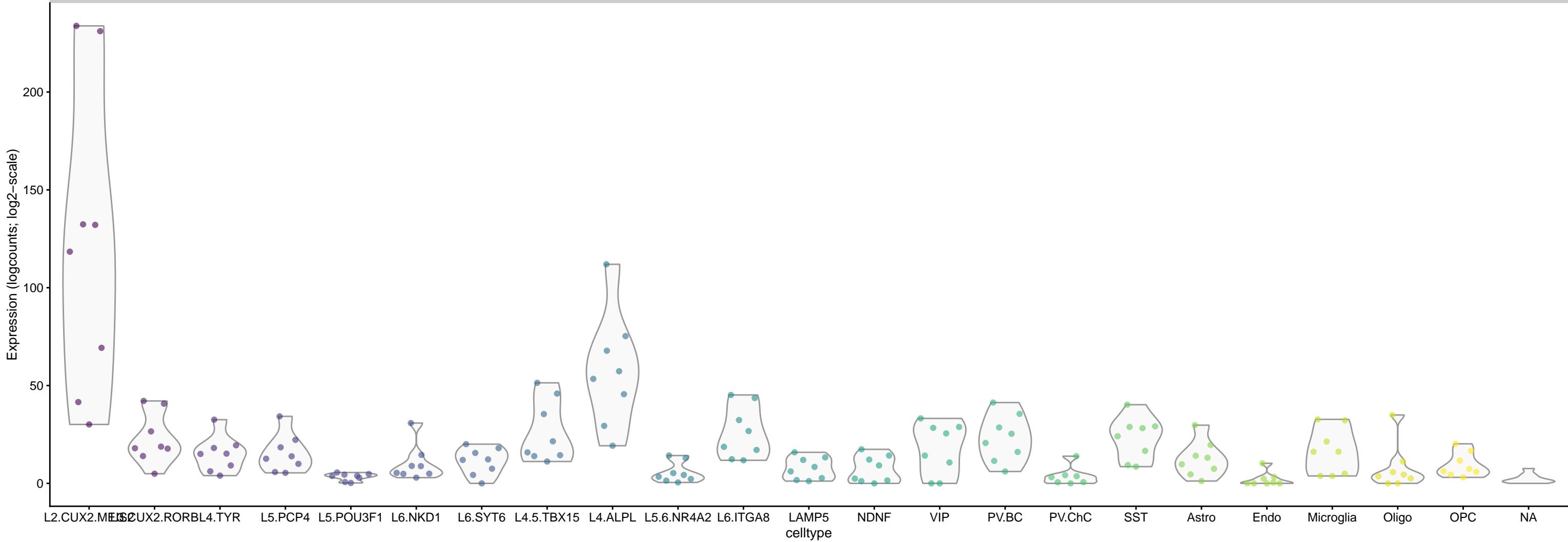


celltype: VIP, gene: C1orf162, peak:VIP\_929\_ADORA3,ATP5PB,C1orf162,OVGP1,TMIGD33



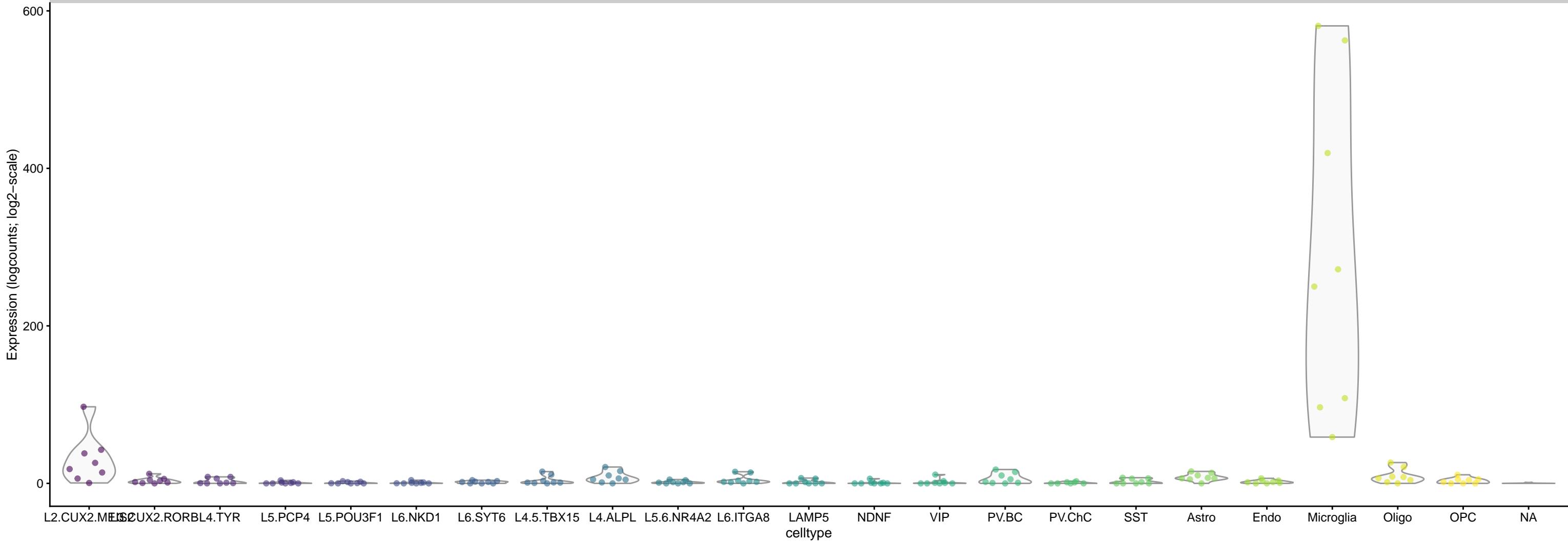
celltype: VIP, gene: OVGP1, peak:VIP\_929\_ADORA3,ATP5PB,C1orf162,OVGP1,TMIGD34

OVGP1



celltype: VIP, gene: TMIGD3, peak:VIP\_929\_ADORA3,ATP5PB,C1orf162,OVGP1,TMIGD35

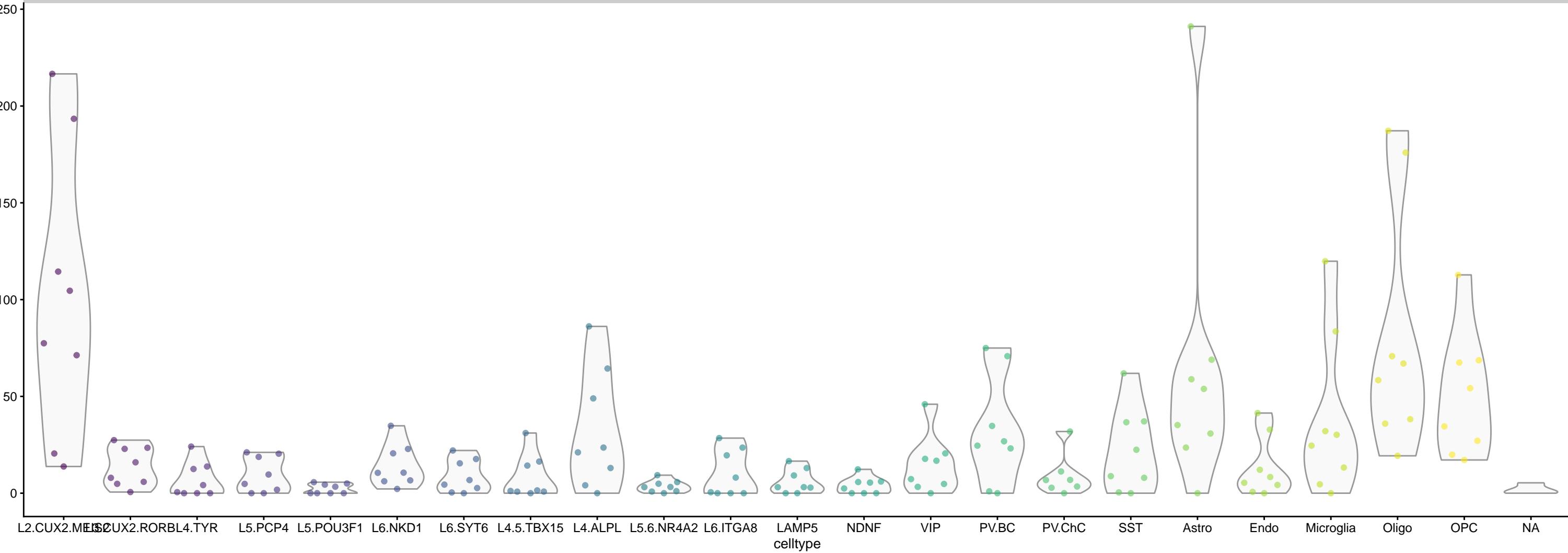
TMIGD3



celltype: VIP, gene: PKP4-AS1, peak:VIP\_931\_PKP4-AS1

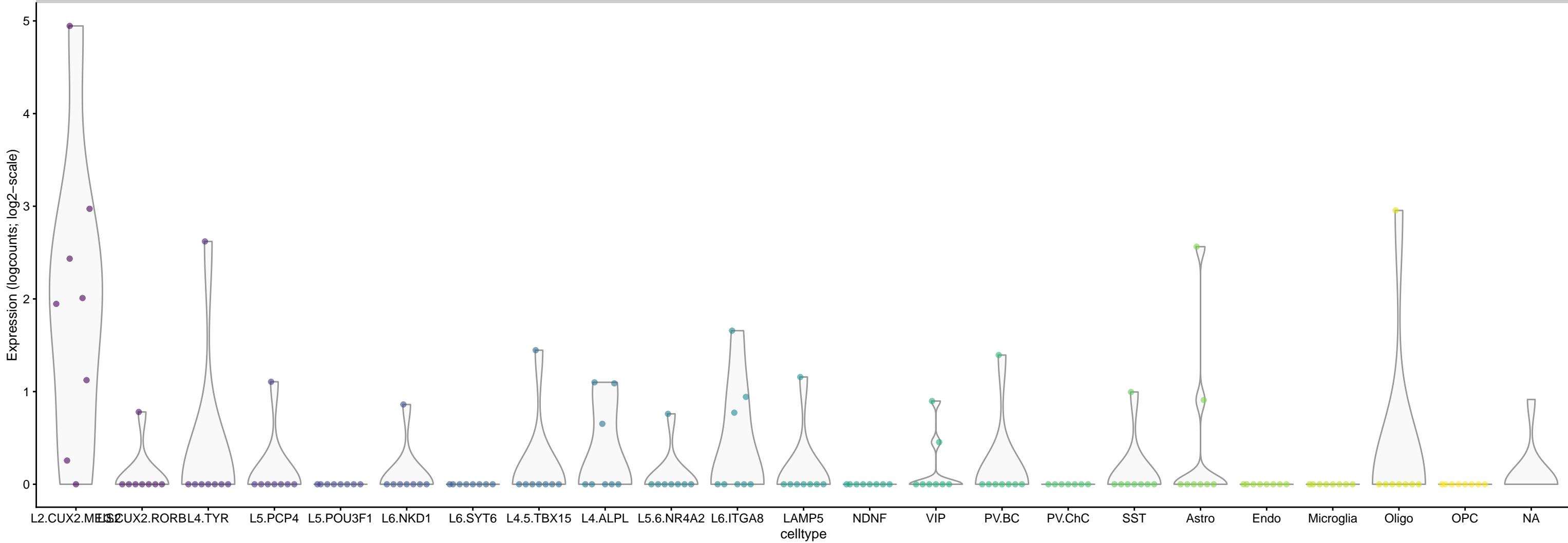
PKP4-AS1

Expression (logcounts; log<sub>2</sub>-scale)

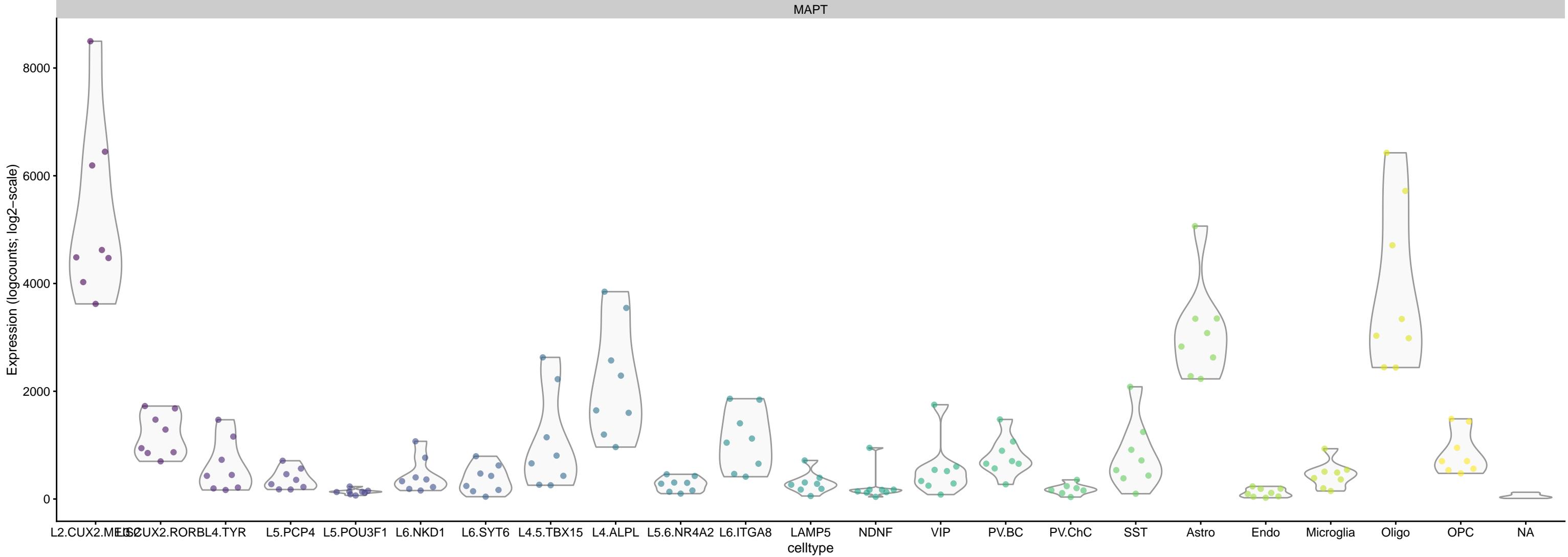


celltype: VIP, gene: CRHR1, peak:VIP\_935\_CRHR1,MAPT,MAPT-IT11

CRHR1

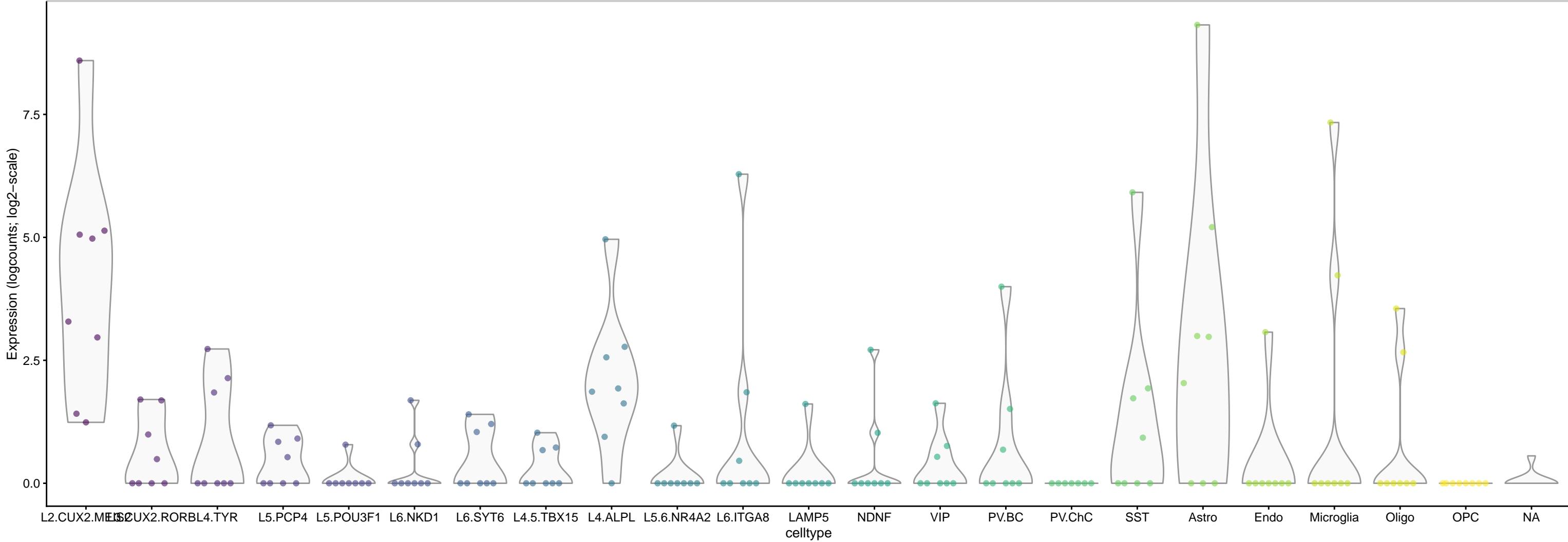


celltype: VIP, gene: MAPT, peak:VIP\_935\_CRHR1,MAPT,MAPT-IT12



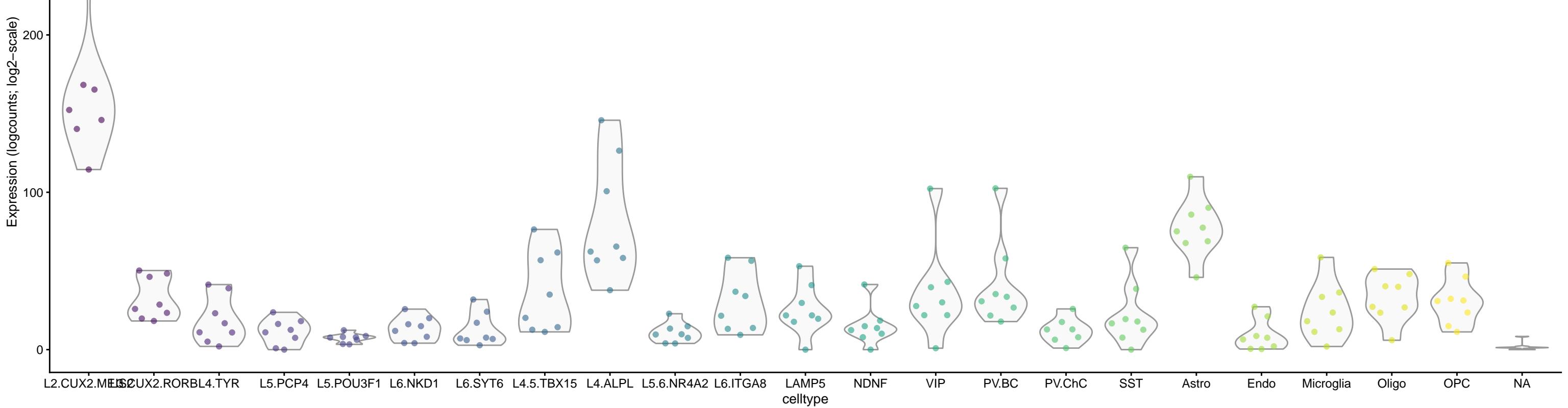
celltype: VIP, gene: LYPD3, peak:VIP\_944\_LYPD3

LYPD3



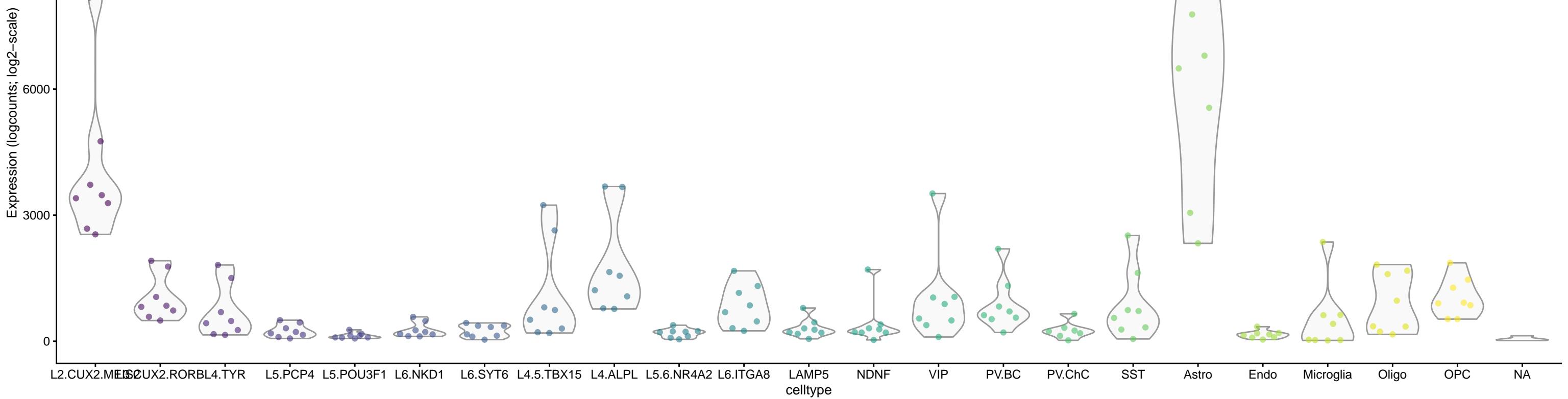
celltype: VIP, gene: SRD5A1, peak:VIP\_954\_SRD5A1

SRD5A1



celltype: VIP, gene: LINC00461, peak:VIP\_965\_LINC00461,LINC020601

LINC00461



celltype: VIP, gene: LINC02060, peak:VIP\_965\_LINC00461,LINC020602

LINC02060

Expression (logcounts; log<sub>2</sub>-scale)

300

200

100

0

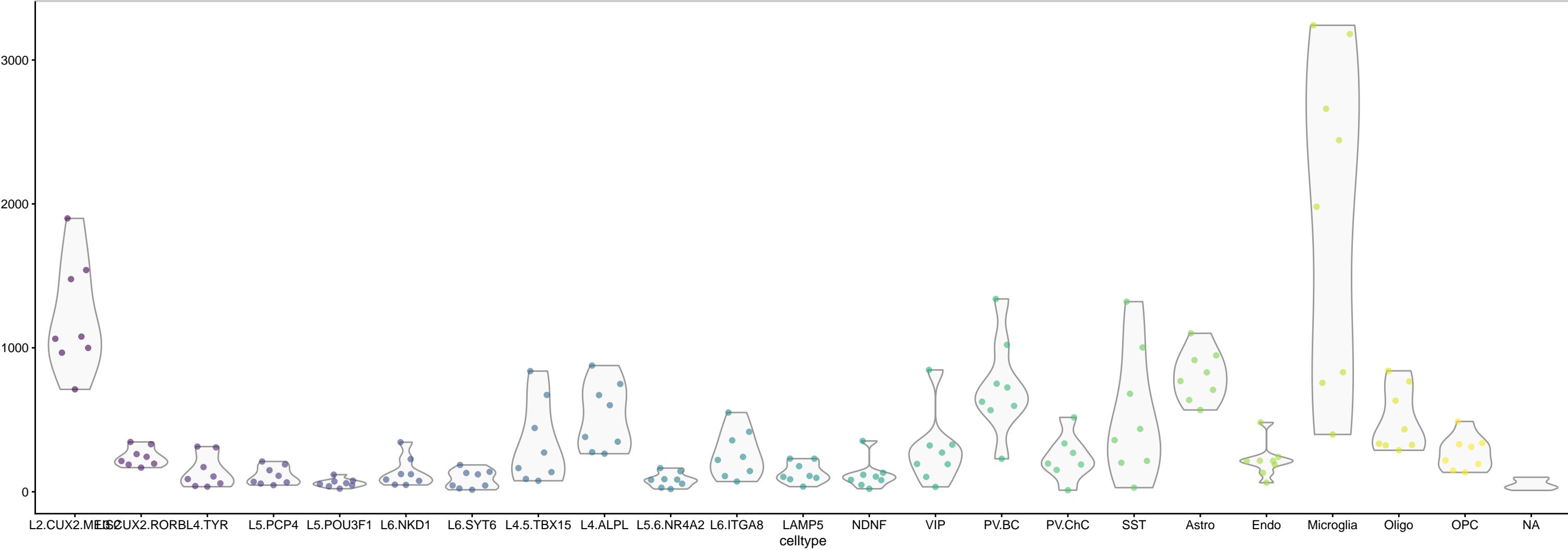
L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA celltype

LINC02060

celltype: VIP, gene: ANKS1A, peak:VIP\_973\_ANKS1A

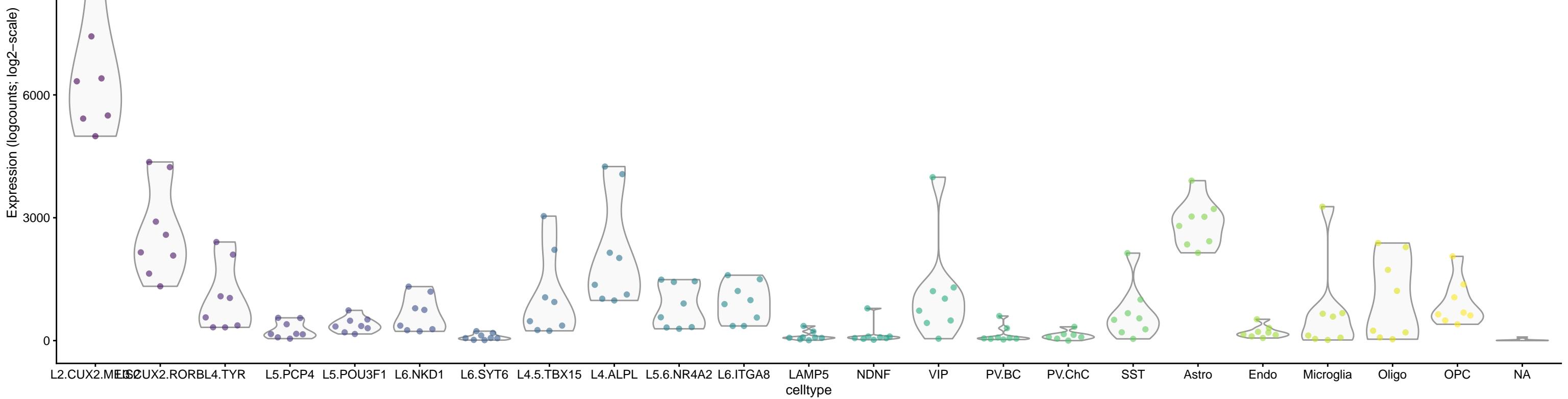
ANKS1A

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: FAT3, peak:VIP\_980\_FAT3

FAT3



celltype: VIP, gene: MRLN, peak:VIP\_982\_MRLN

MRLN

Expression (logcounts; log<sub>2</sub>-scale)

200

150

100

50

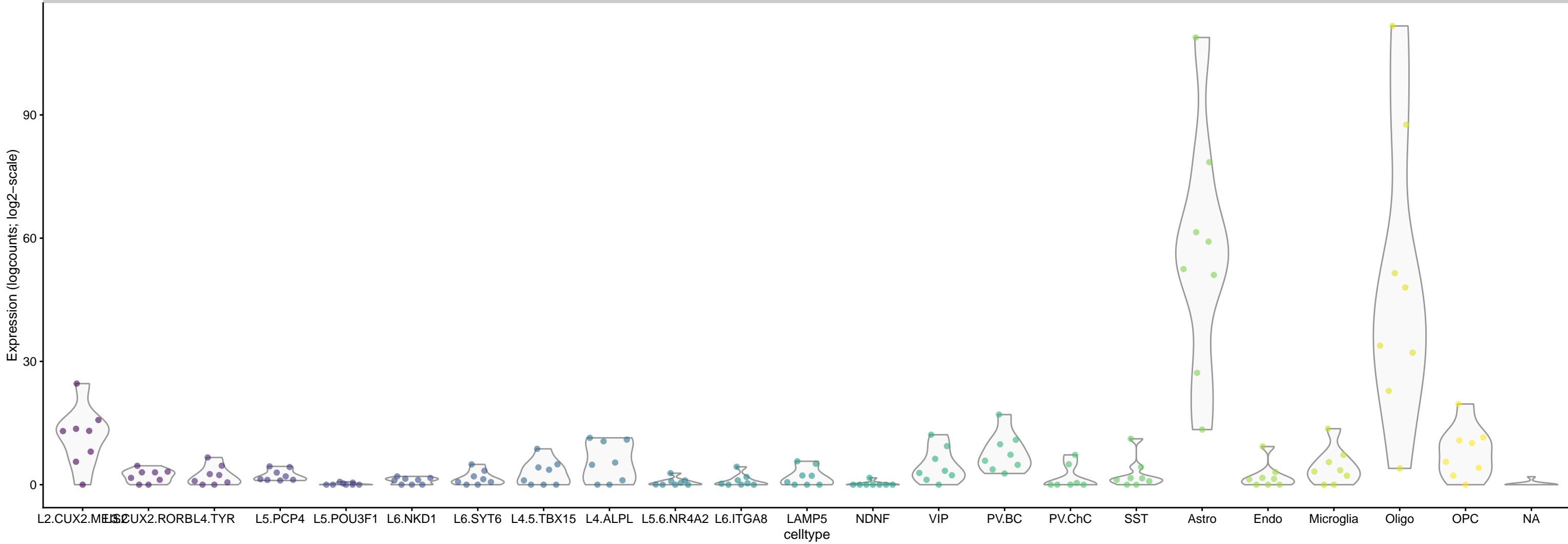
0

L2.CUX2.MES L5.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

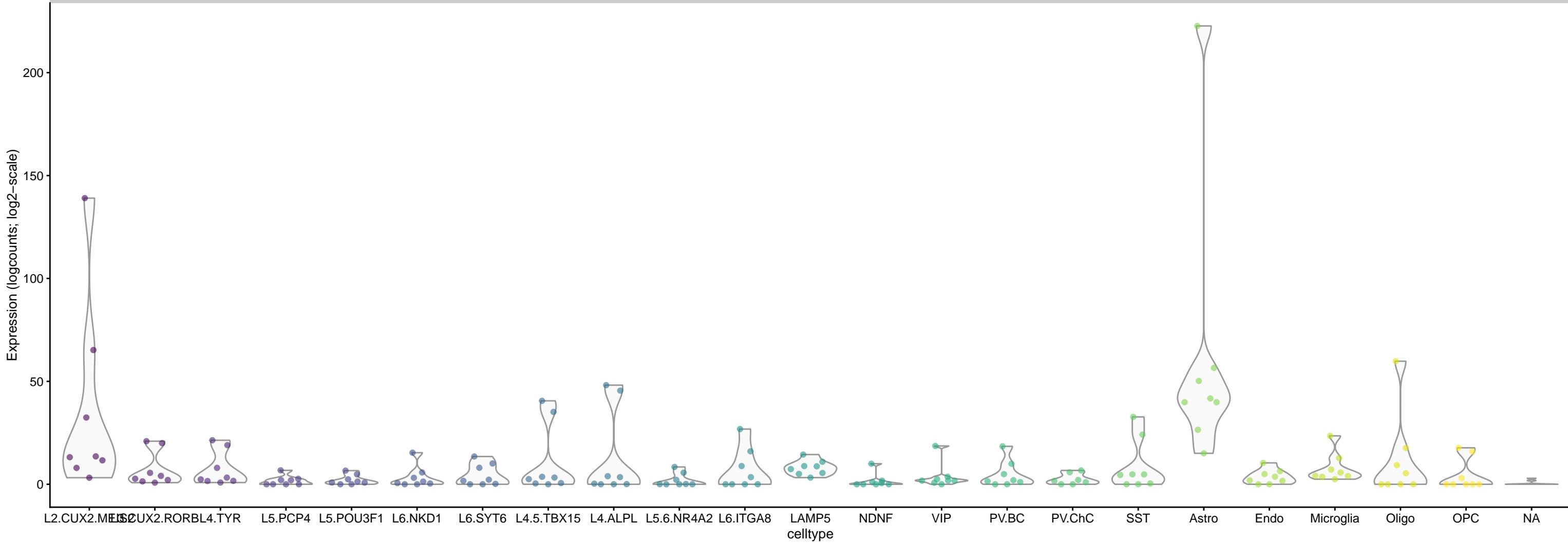
celltype: VIP, gene: PTPRD-AS1, peak:VIP\_986\_PTPRD-AS1

PTPRD-AS1



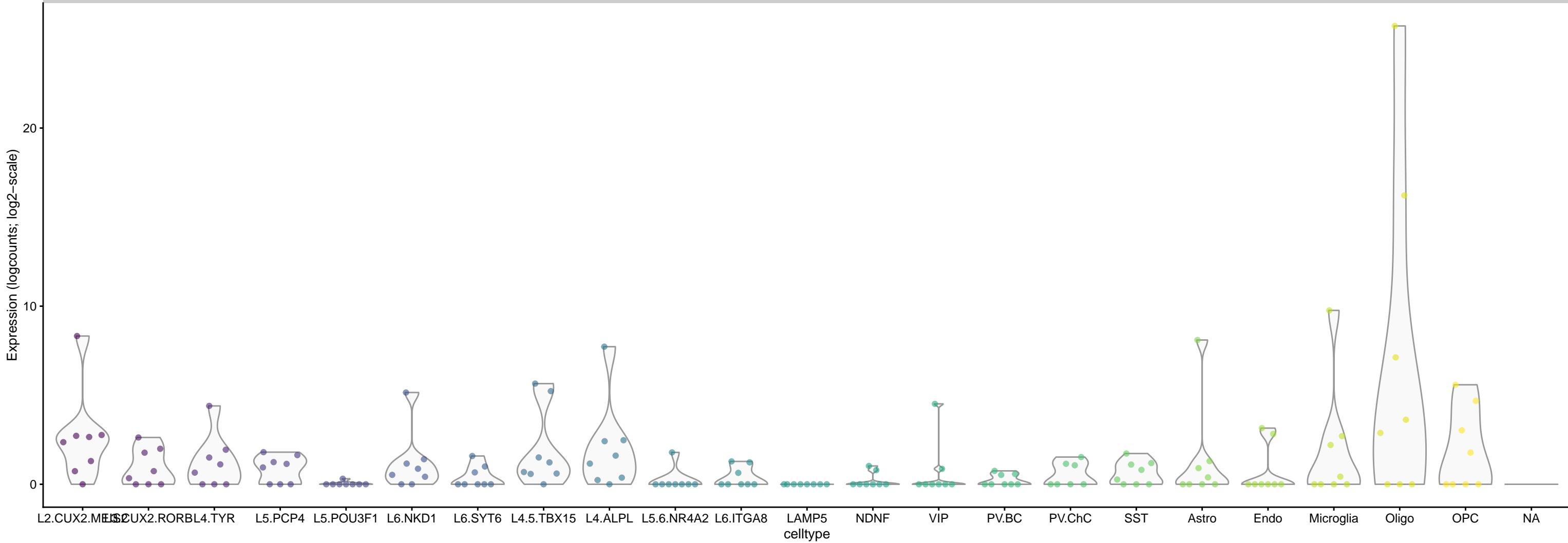
celltype: VIP, gene: ST6GALNAC2, peak:VIP\_989\_ST6GALNAC2

ST6GALNAC2



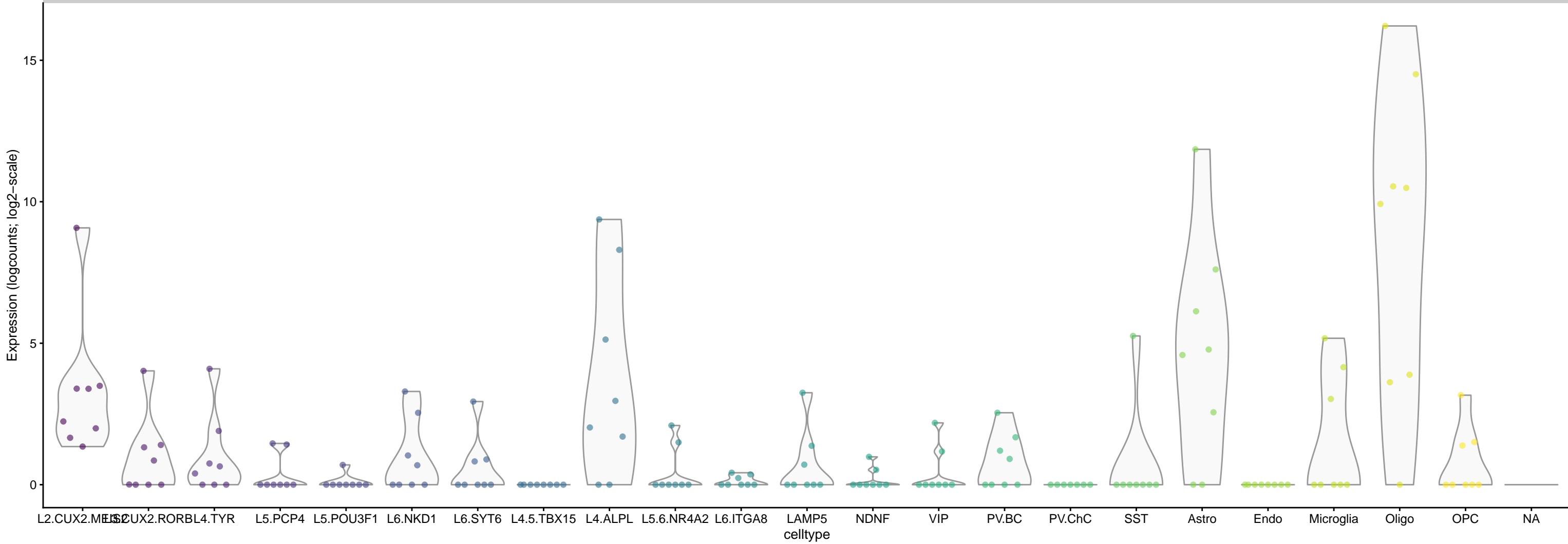
celltype: VIP, gene: CLRN2, peak:VIP\_992\_CLRN2

CLRN2



celltype: VIP, gene: LINC00870, peak:VIP\_994\_LINC00870

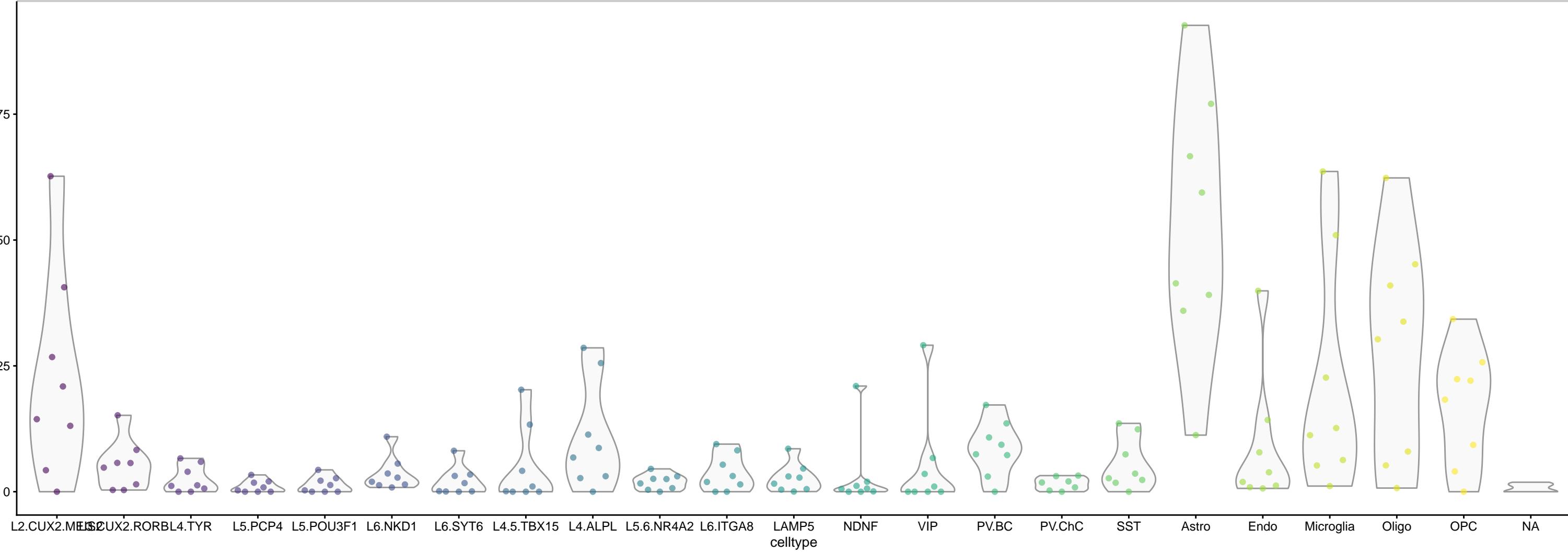
LINC00870



celltype: VIP, gene: ISCA2, peak:VIP\_1017\_ISCA2

ISCA2

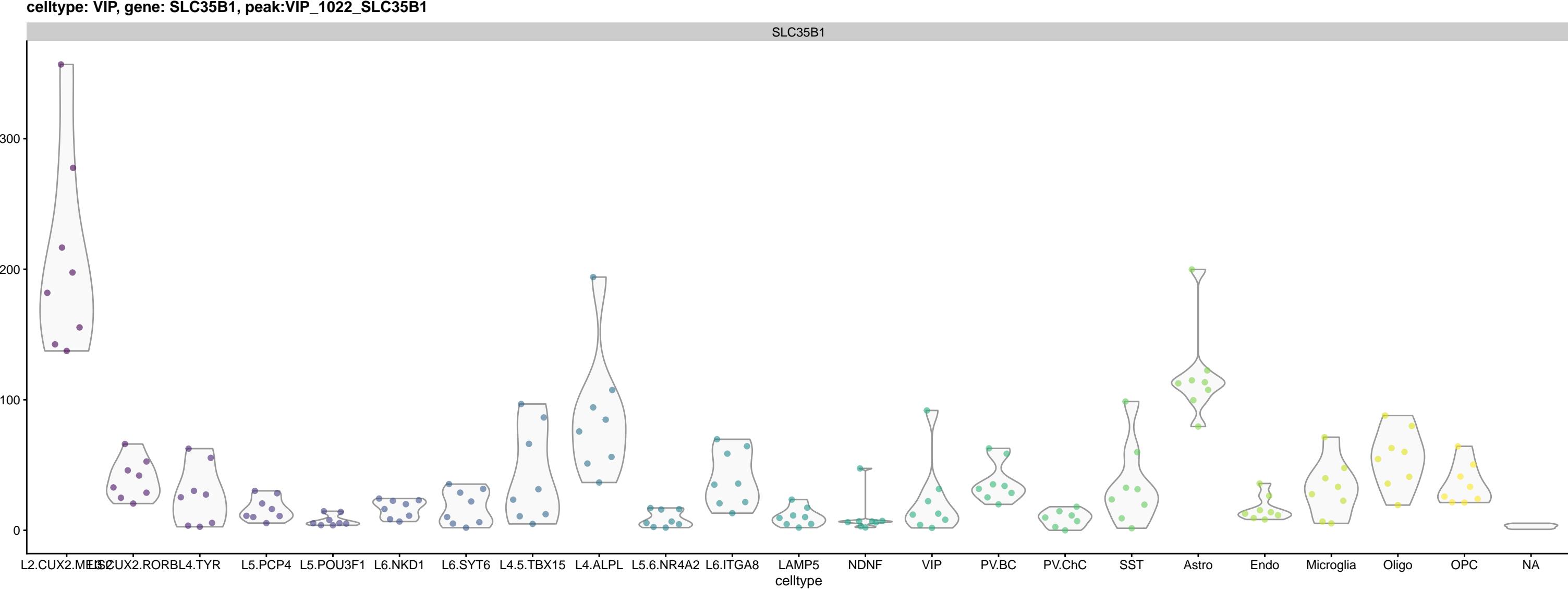
Expression (logcounts; log2-scale)



celltype: VIP, gene: SLC35B1, peak:VIP\_1022\_SLC35B1

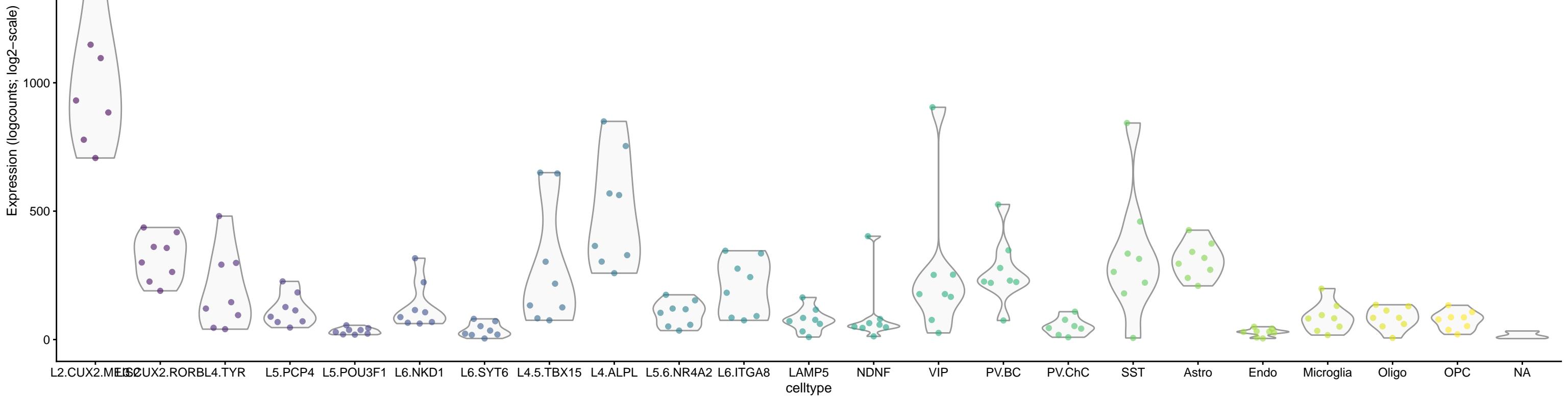
SLC35B1

Expression (logcounts; log2-scale)



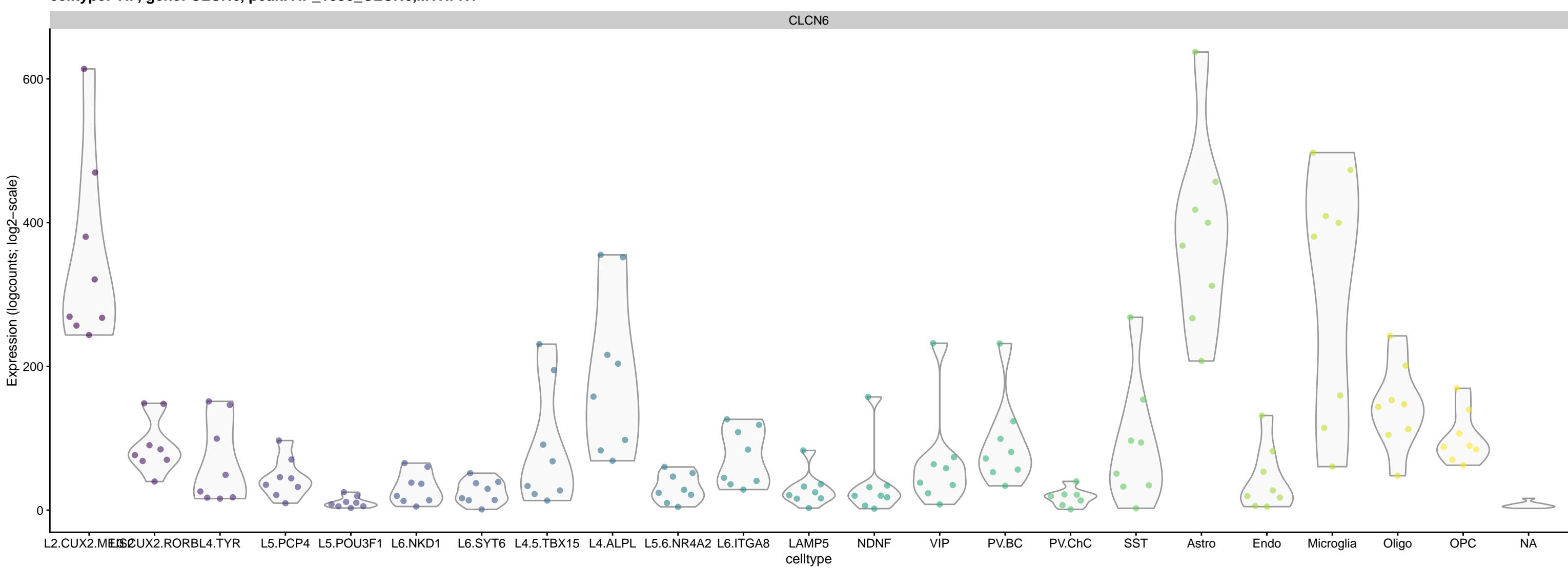
celltype: VIP, gene: PITPNM3, peak:VIP\_1044\_PITPNM3

PITPNM3



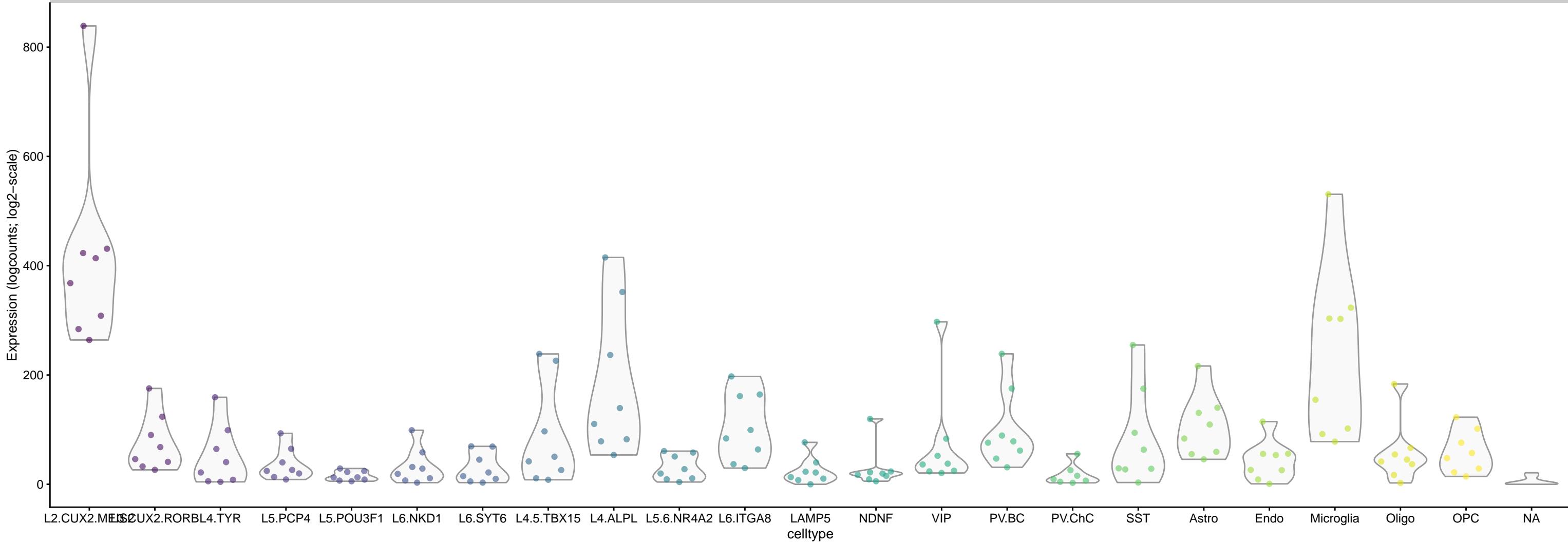
celltype: VIP, gene: CLCN6, peak:VIP\_1050\_CLCN6,MTHFR1

CLCN6



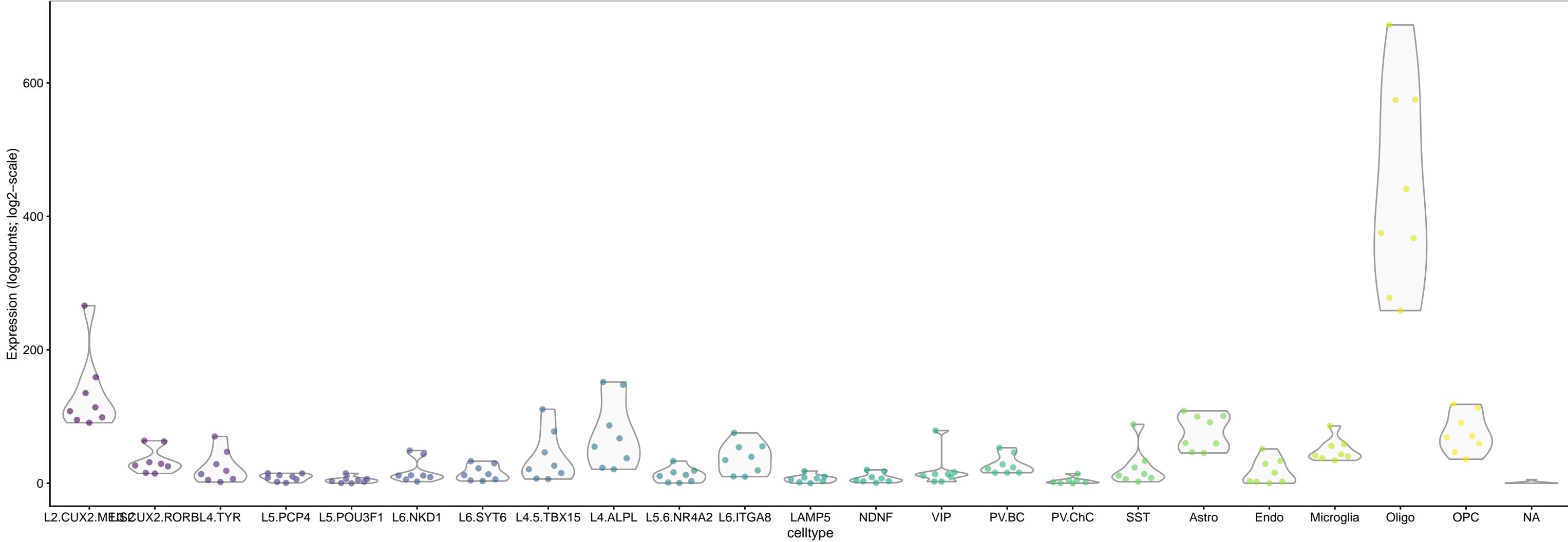
celltype: VIP, gene: MTHFR, peak:VIP\_1050\_CLCN6,MTHFR2

MTHFR



celltype: VIP, gene: PTPDC1, peak:VIP\_1062\_PTPDC1

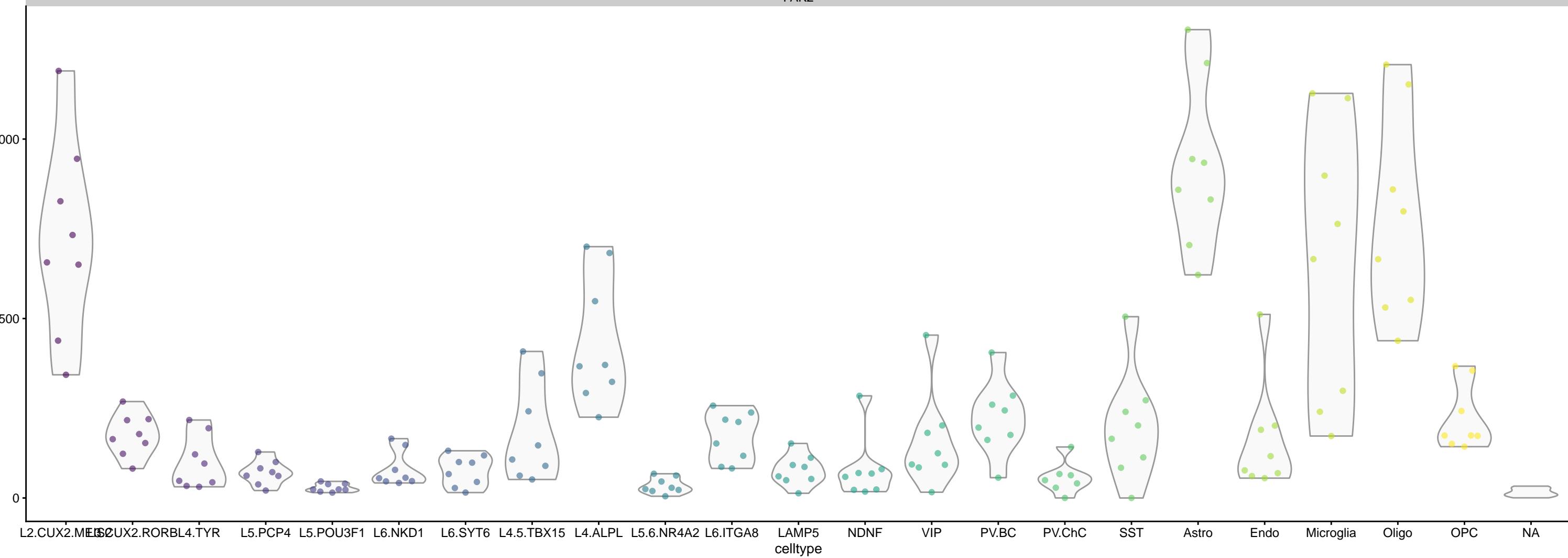
PTPDC1



celltype: VIP, gene: PAK2, peak:VIP\_1076\_PAK2

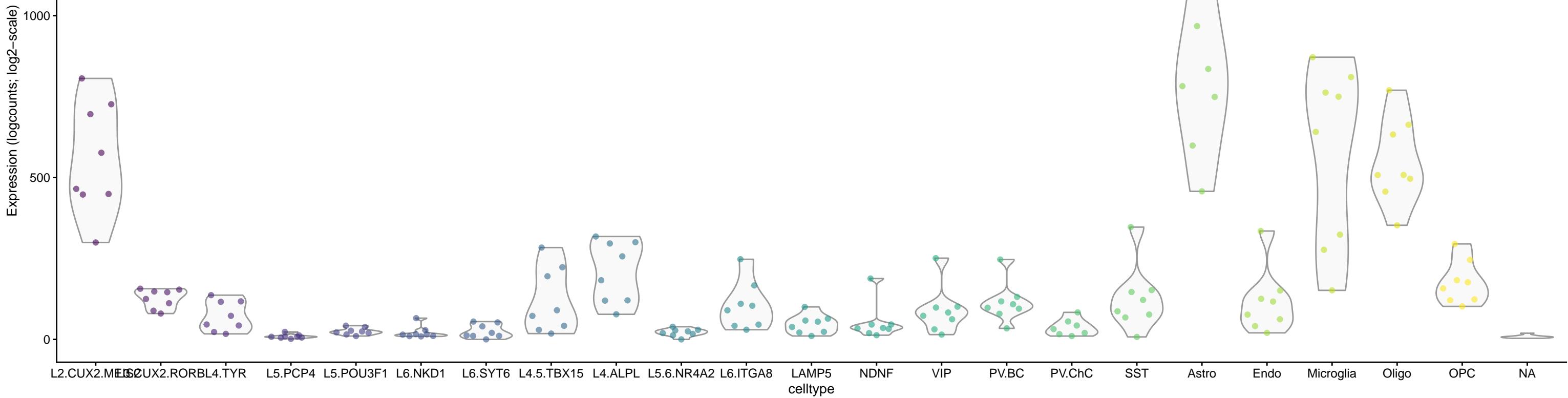
PAK2

Expression (logcounts; log2-scale)

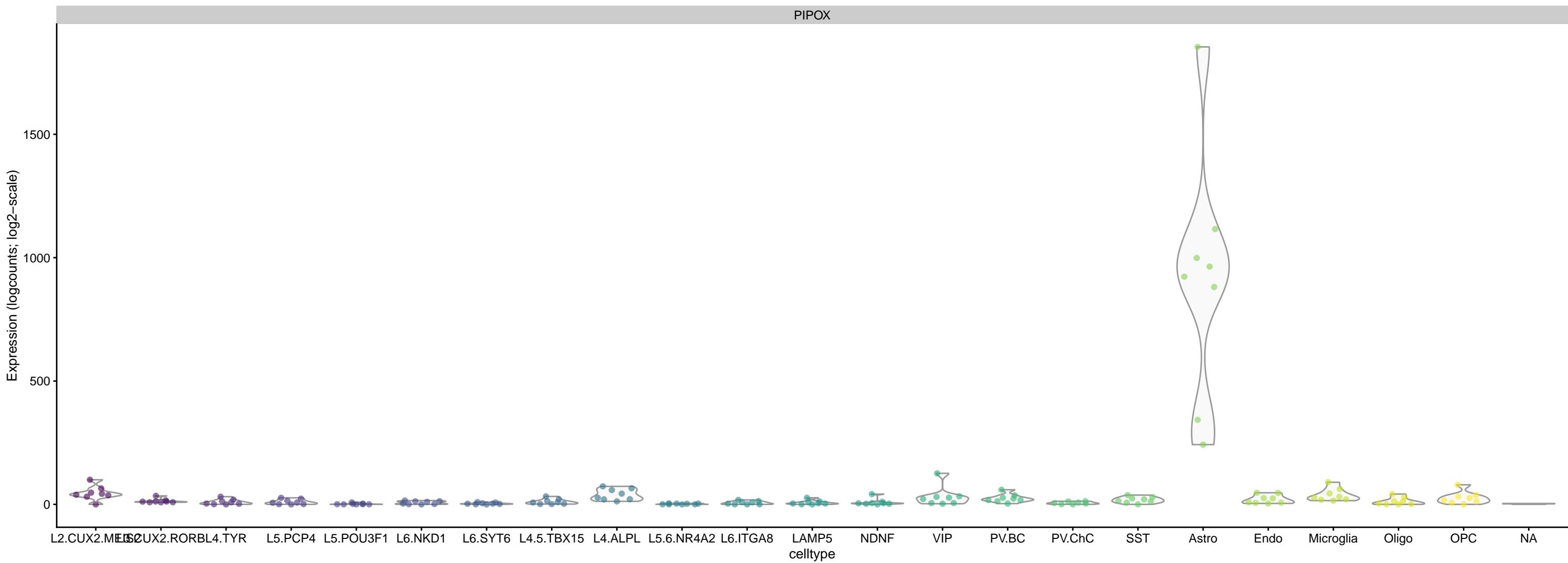


celltype: VIP, gene: IRF2, peak:VIP\_1078\_IRF2

IRF2



celltype: VIP, gene: PIPOX, peak:VIP\_1079\_PIPOX



celltype: VIP, gene: PVALB, peak:VIP\_1091\_PVALB

PVALB

Expression (logcounts; log2-scale)

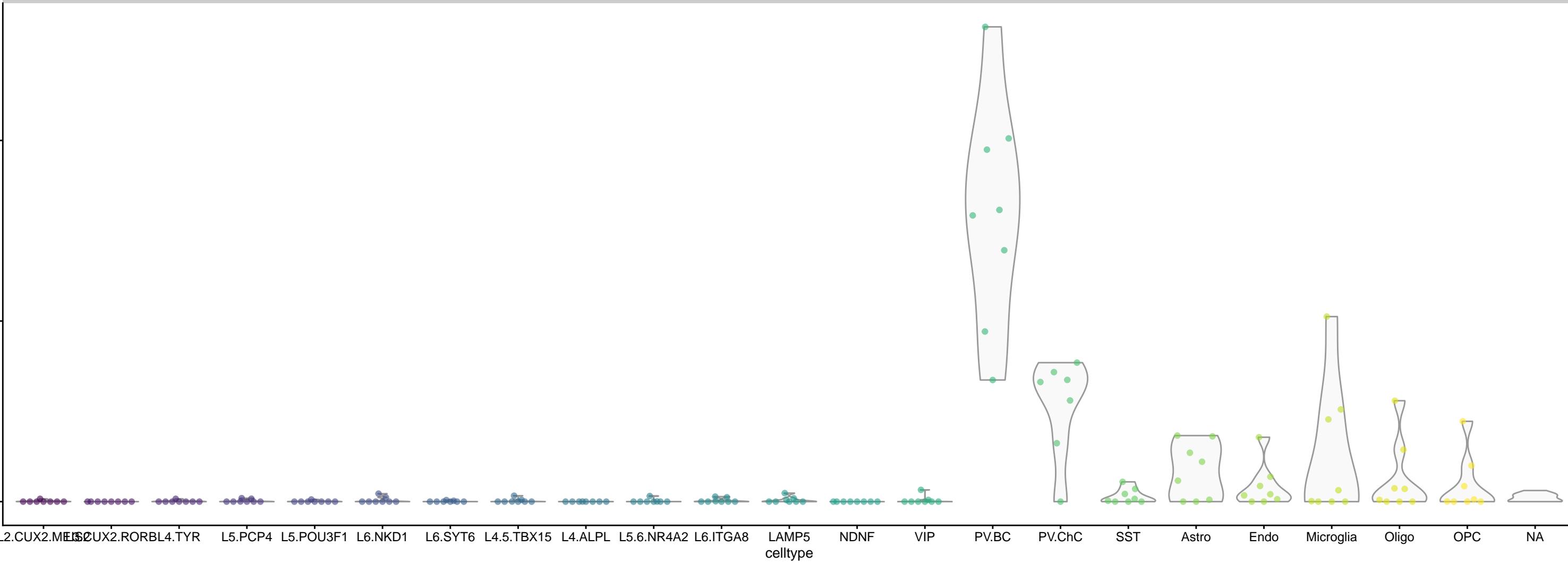
L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

100

50

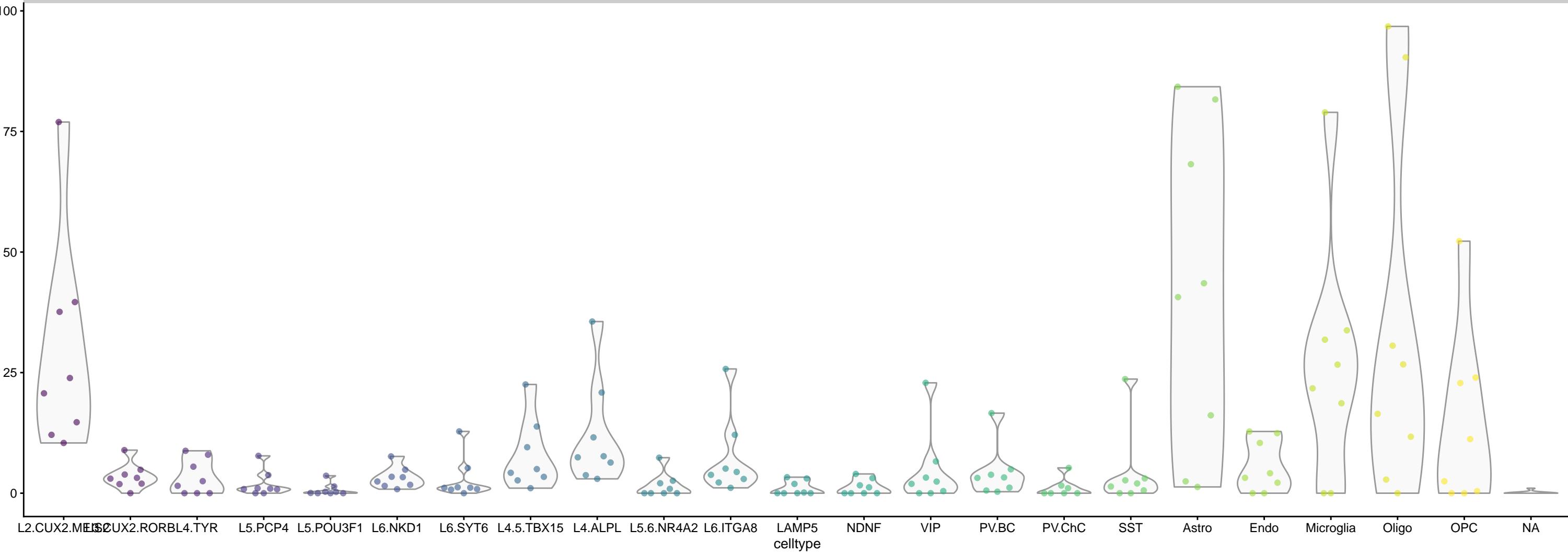
0



celltype: VIP, gene: LINC02414, peak:VIP\_1103\_LINC02414

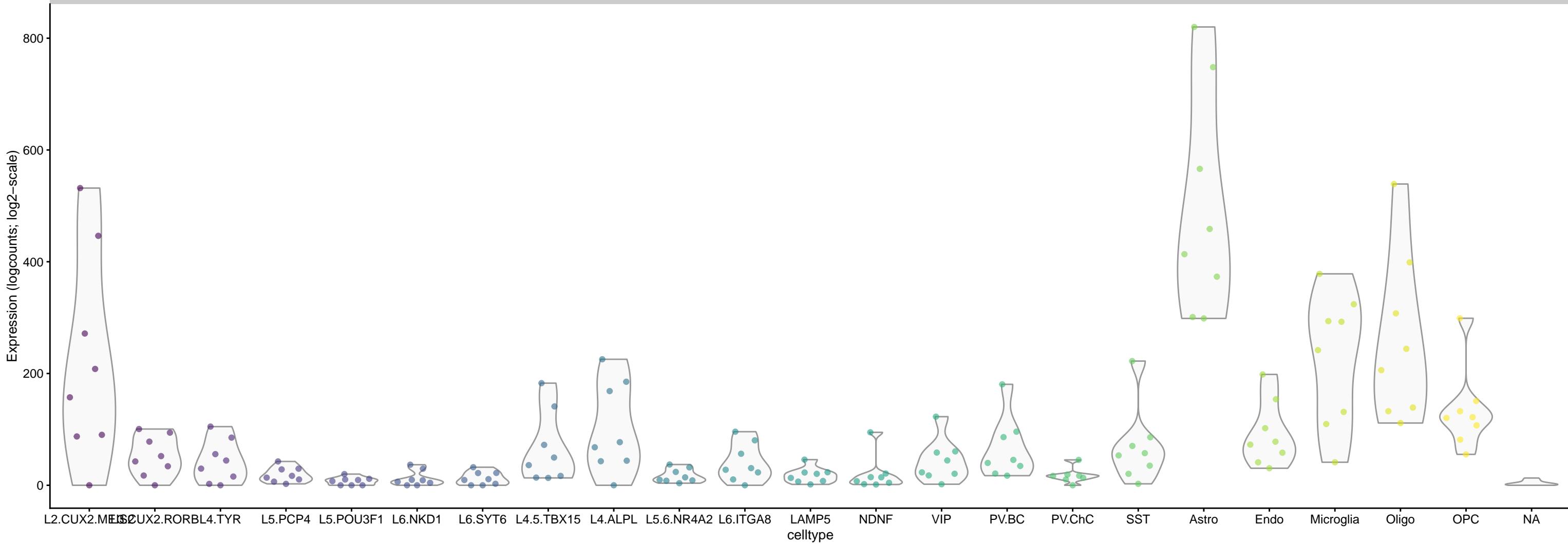
LINC02414

Expression (logcounts; log2-scale)



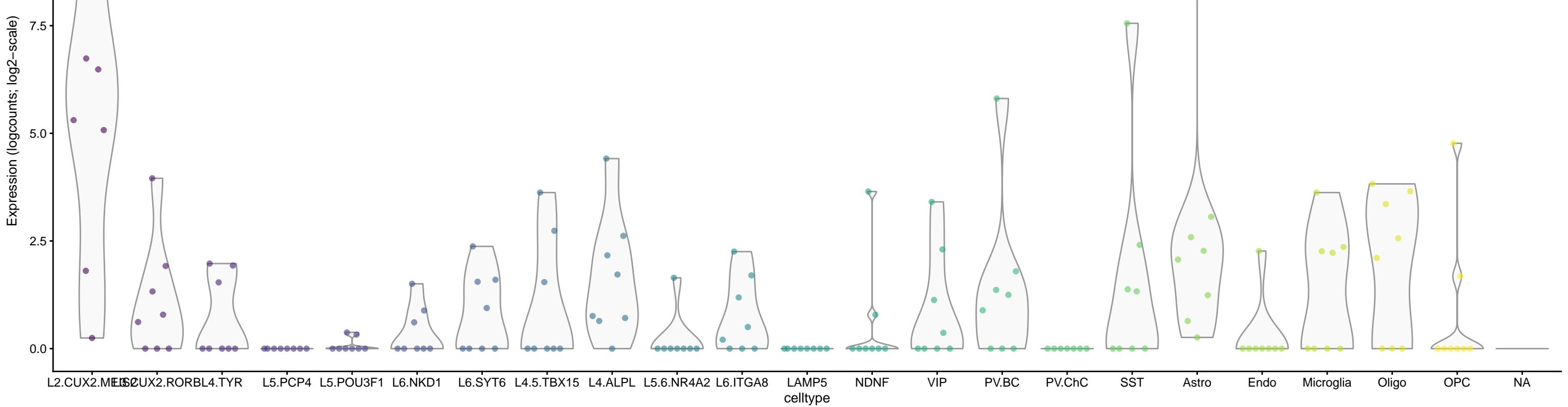
celltype: VIP, gene: PRKAR1A, peak:VIP\_1104\_PRKAR1A

PRKAR1A



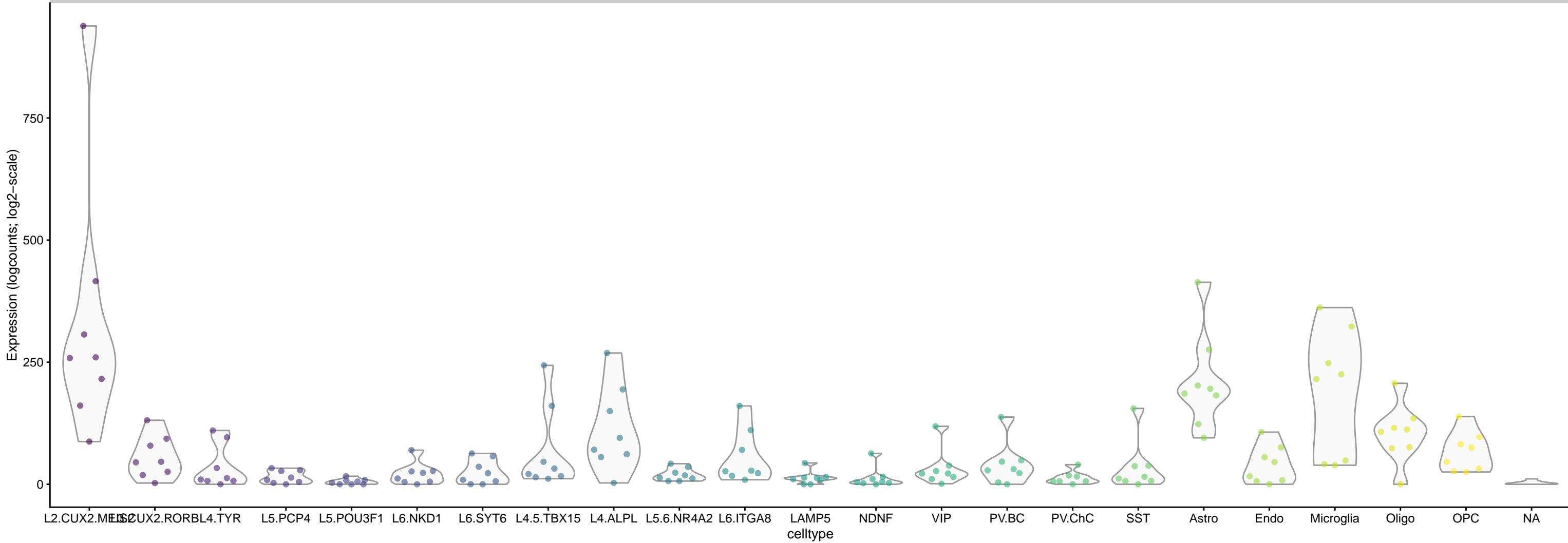
celltype: VIP, gene: LINC02213, peak:VIP\_1122\_LINC02213

LINC02213



celltype: VIP, gene: BRK1, peak:VIP\_1138\_BRK1

BRK1



celltype: VIP, gene: MSANTD3, peak:VIP\_1139\_MSANTD3

MSANTD3

Expression (logcounts; log<sub>2</sub>-scale)

150

100

50

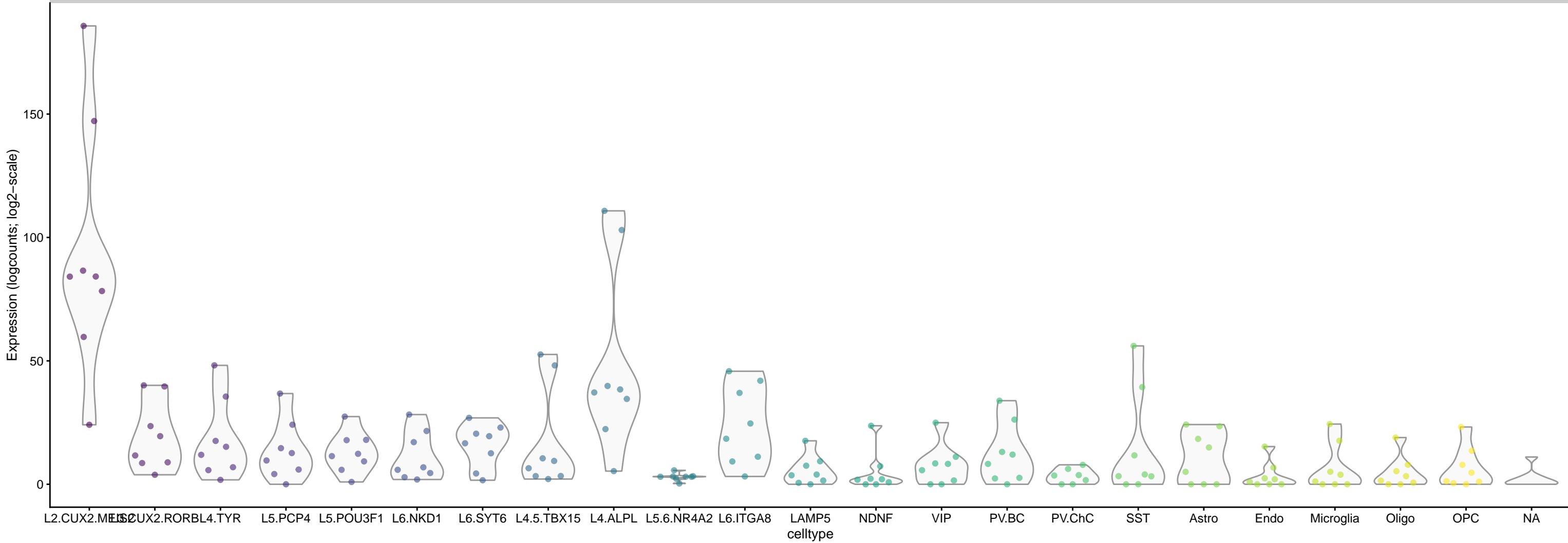
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

celltype: VIP, gene: EFNB3, peak:VIP\_1140\_EFNB3

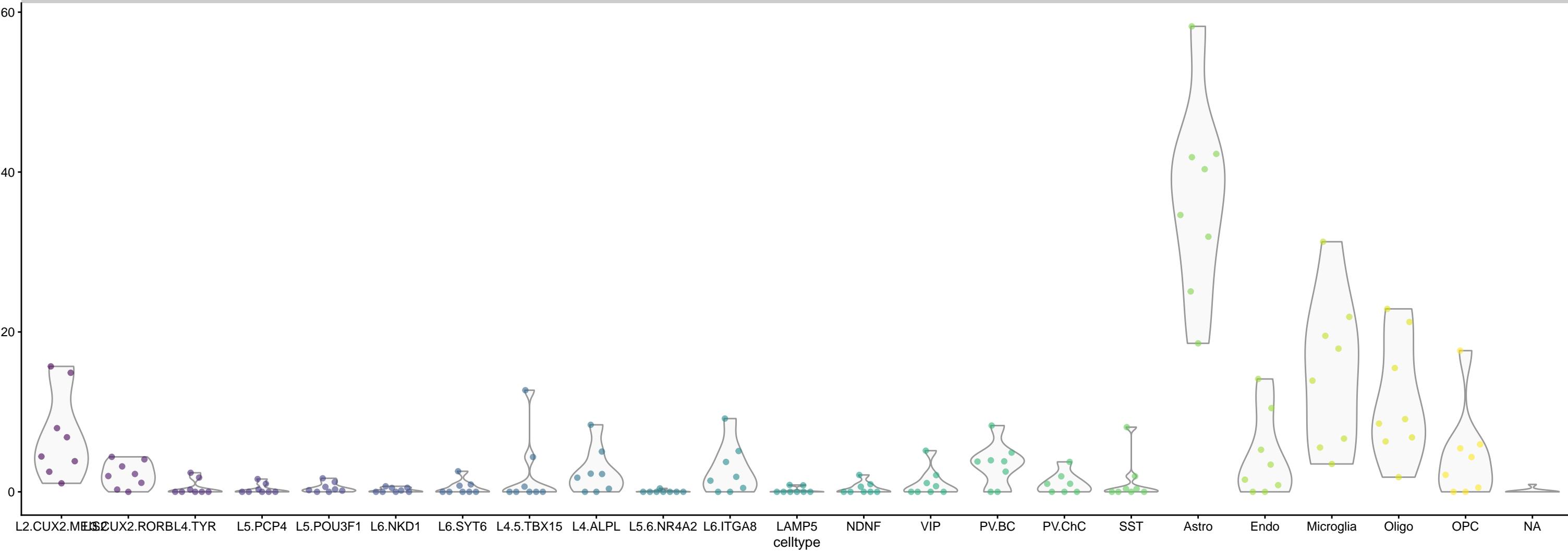
EFNB3



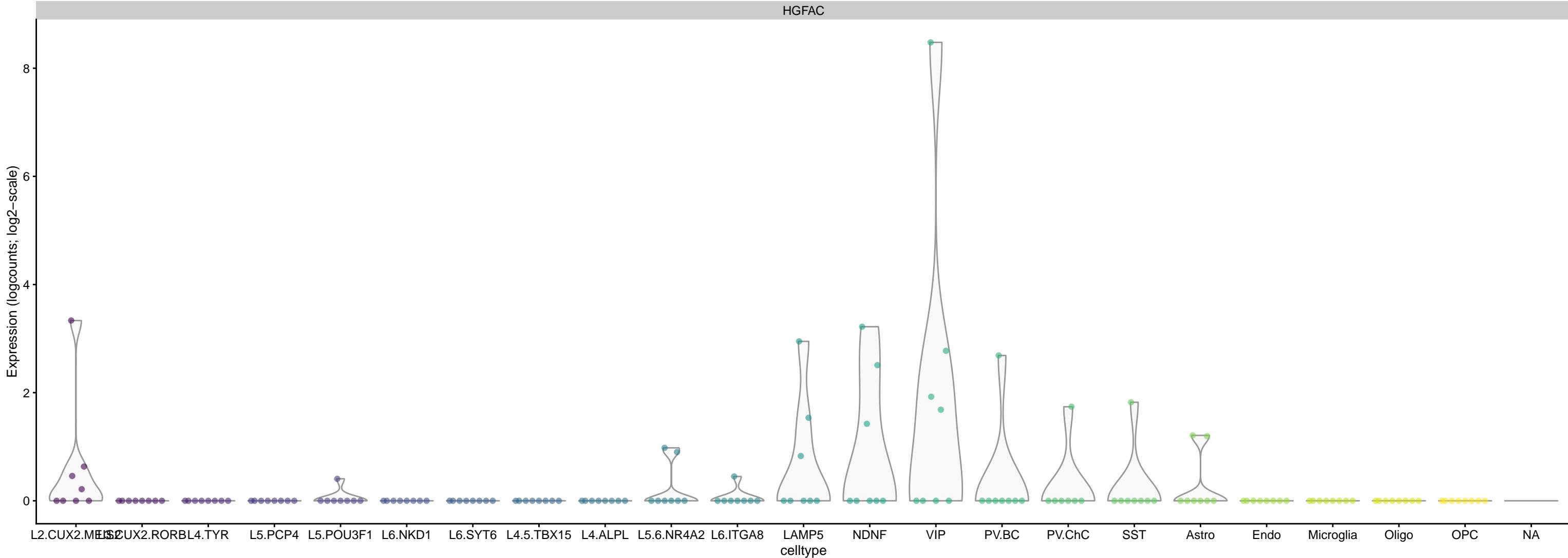
celltype: VIP, gene: LINC00899, peak:VIP\_1146\_LINC00899

LINC00899

Expression (logcounts; log<sub>2</sub>-scale)

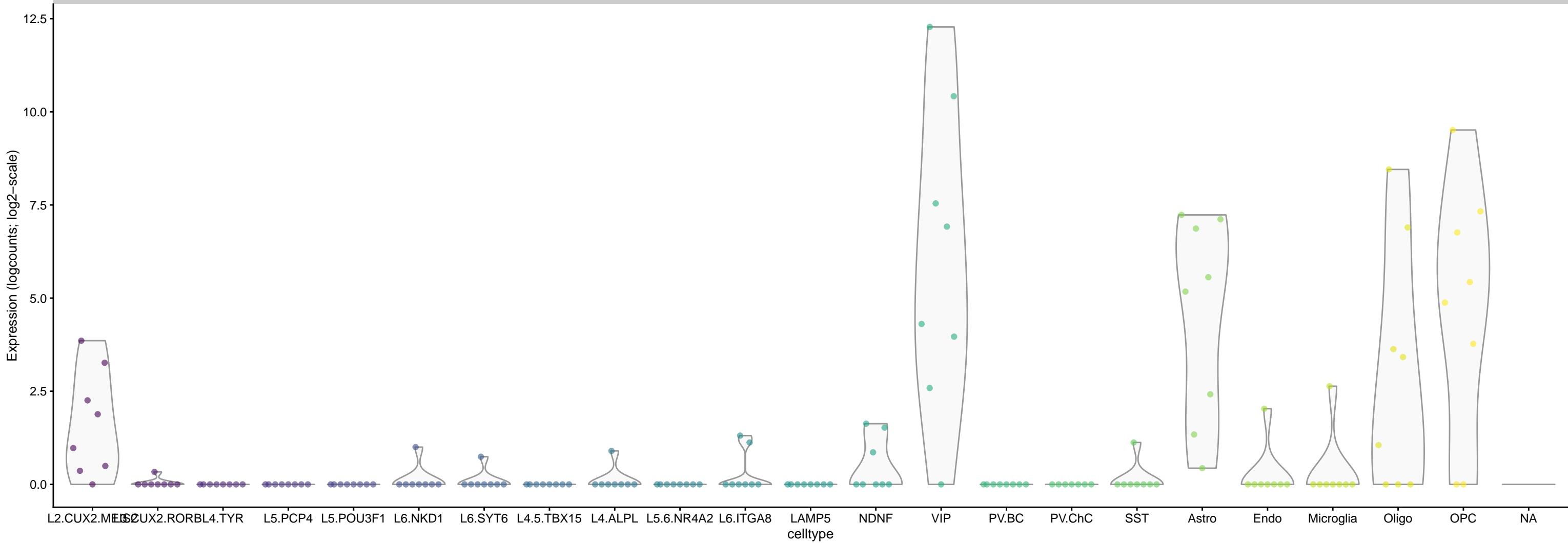


celltype: VIP, gene: HGFAC, peak:VIP\_1149\_HGFAC



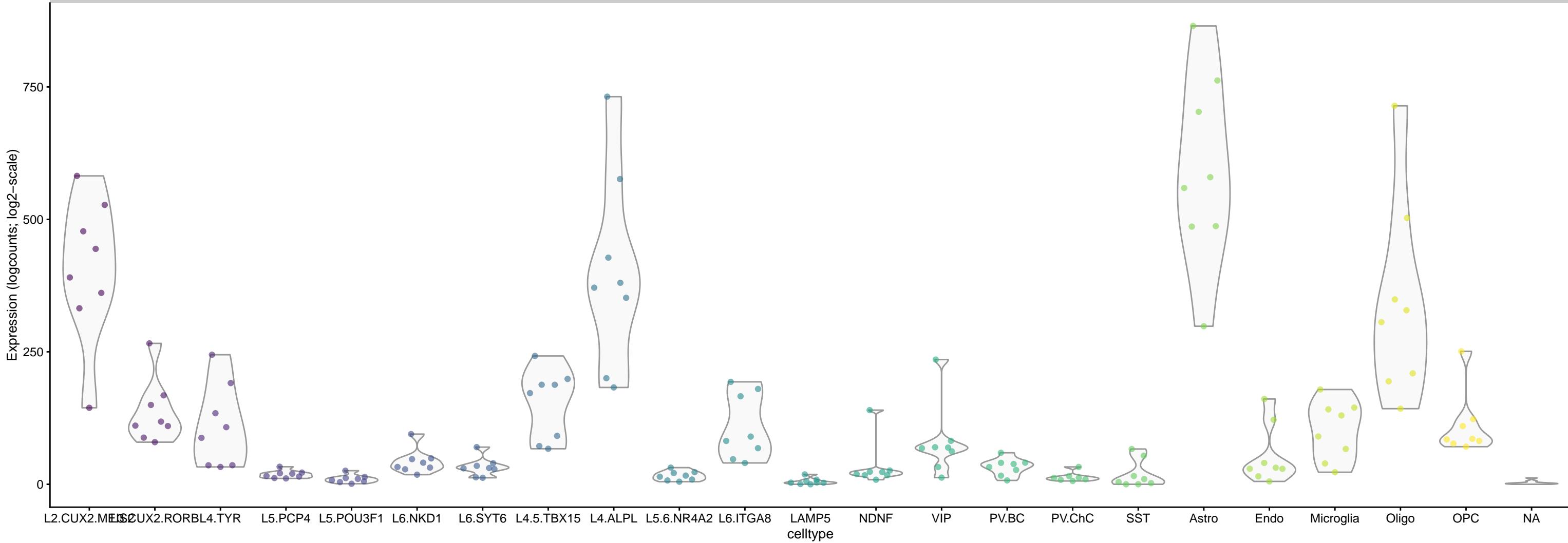
celltype: VIP, gene: LINC01561, peak:VIP\_1158\_LINC01561

LINC01561

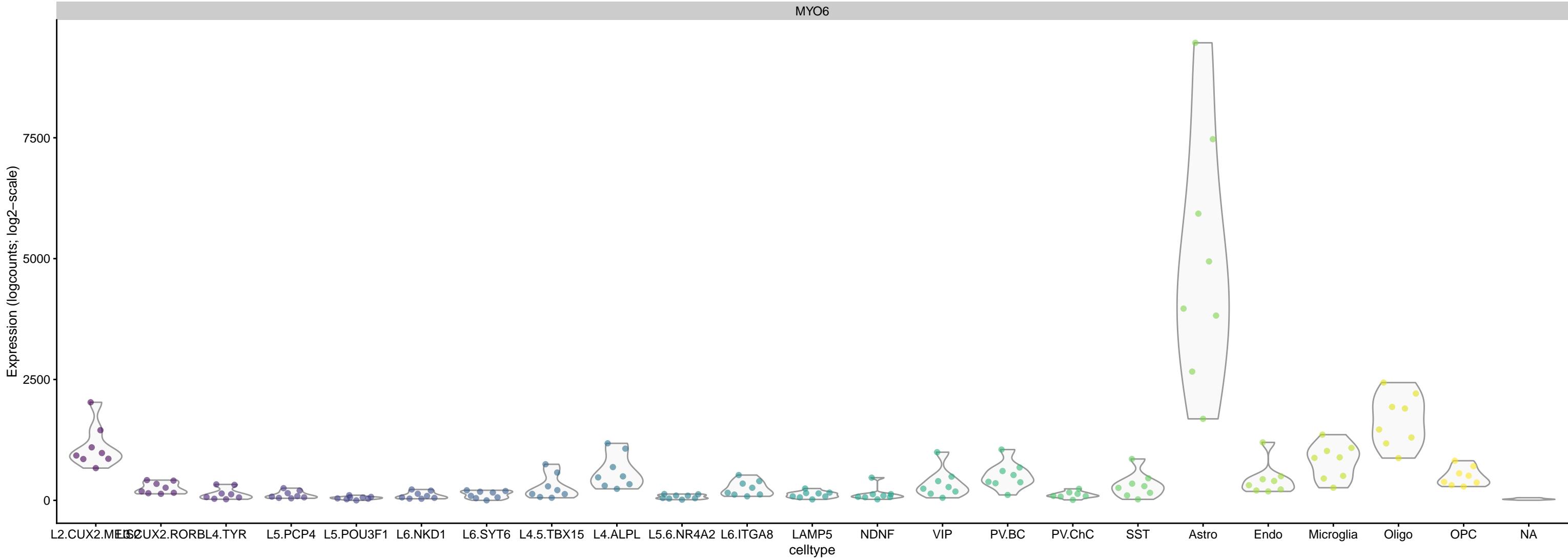


celltype: VIP, gene: CXXC5, peak:VIP\_1160\_CXXC5

CXXC5



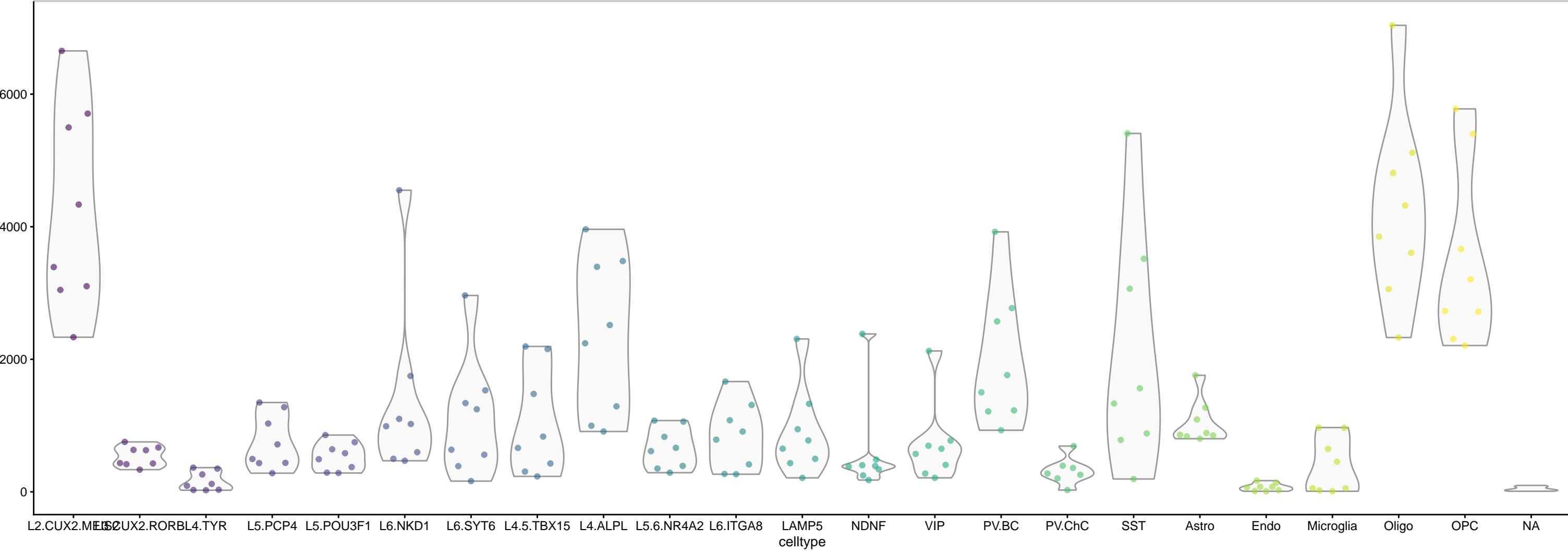
celltype: VIP, gene: MYO6, peak:VIP\_1171\_MYO6



celltype: VIP, gene: DSCAML1, peak:VIP\_1178\_DSCAML1

DSCAML1

Expression (logcounts; log2-scale)



celltype: VIP, gene: ZBTB20, peak:VIP\_1181\_ZBTB20

ZBTB20

Expression (logcounts, log2-scale)

50000  
40000  
30000  
20000  
10000  
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

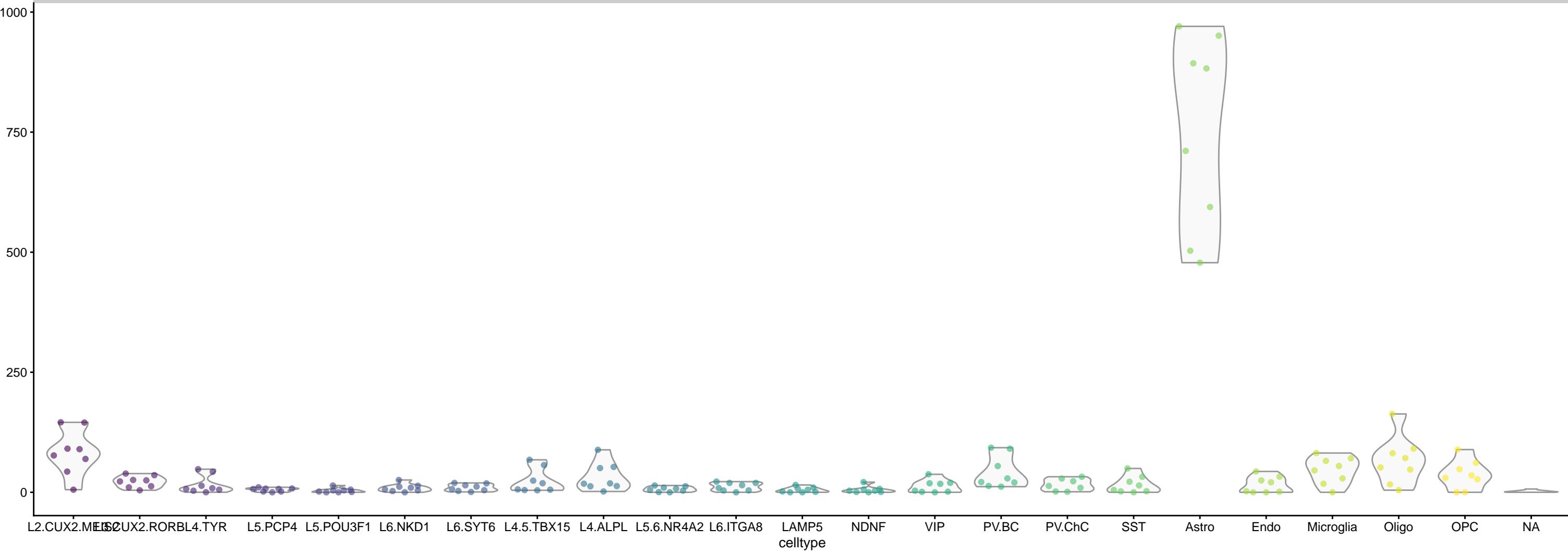
celltype

ZBTB20

celltype: VIP, gene: IFT27, peak:VIP\_1190IFT27

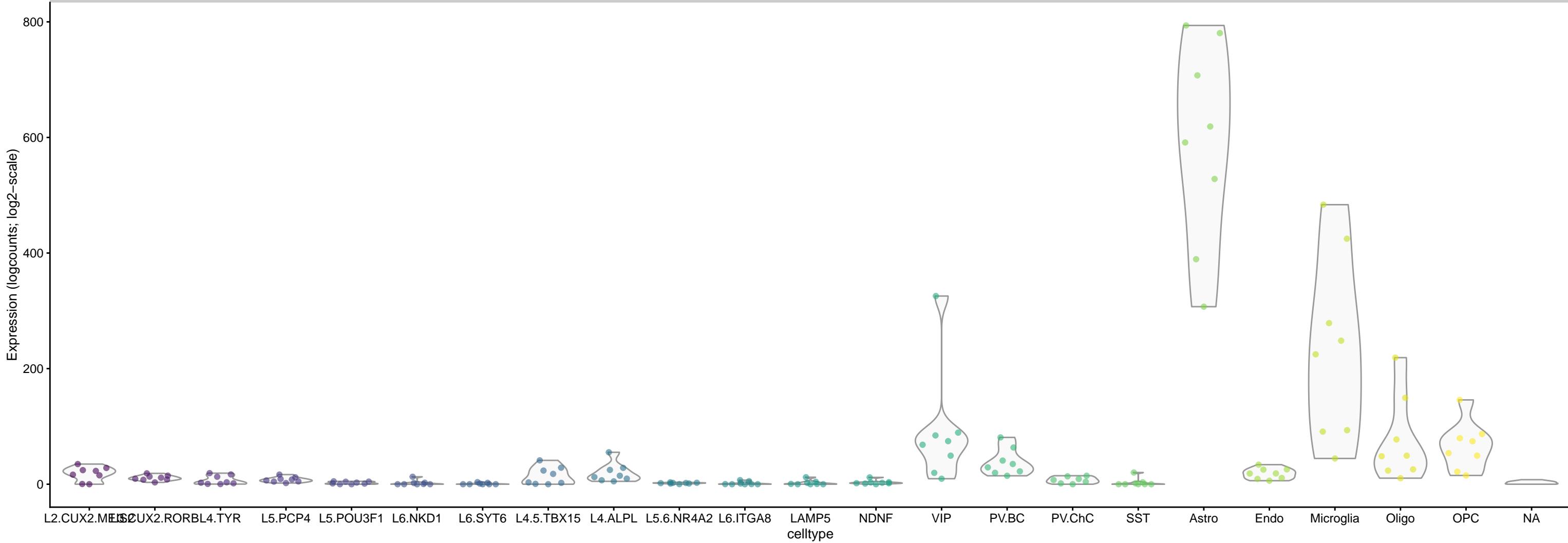
IFT27

Expression (logcounts; log2-scale)



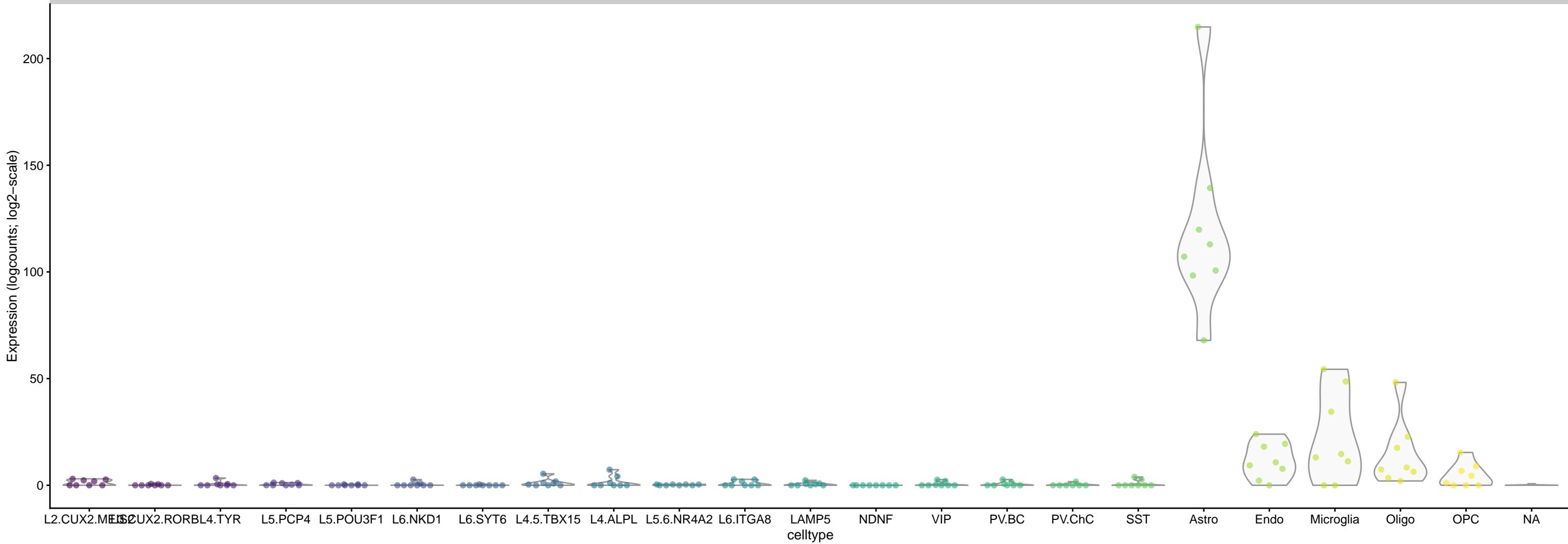
celltype: VIP, gene: RASSF4, peak:VIP\_1199\_RASSF4

RASSF4



celltype: VIP, gene: BAG3, peak:VIP\_1206\_BAG3,INPP5F1

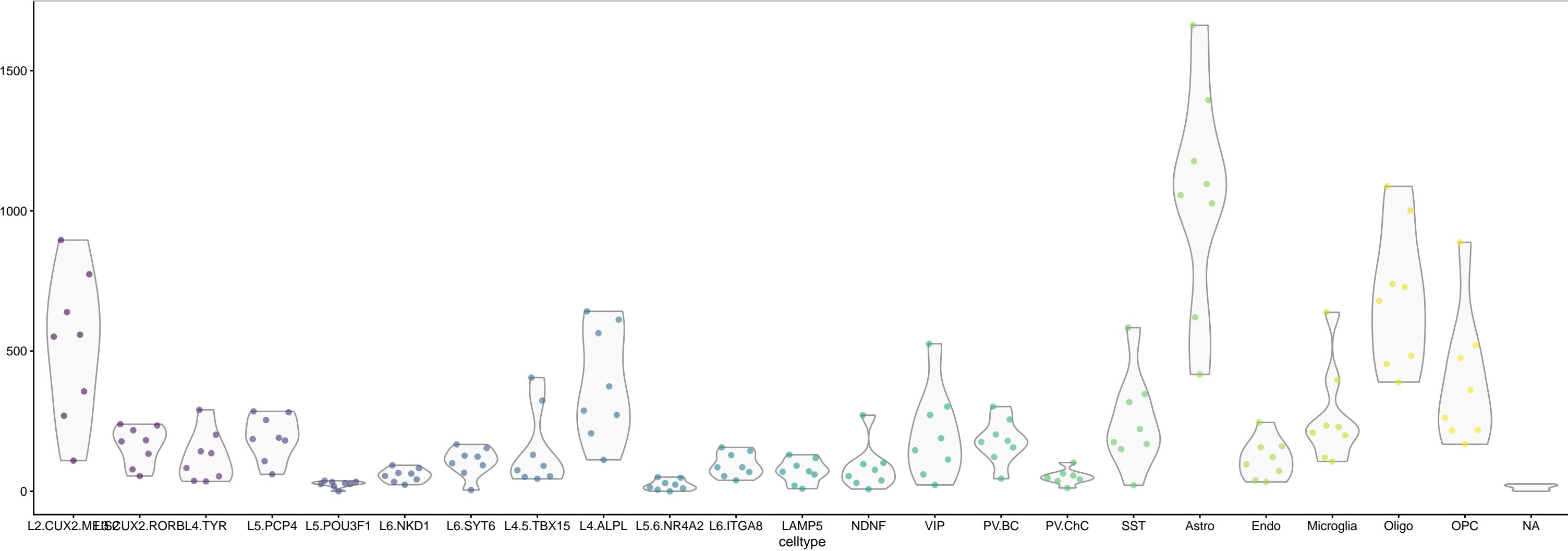
BAG3



celltype: VIP, gene: INPP5F, peak:VIP\_1206\_BAG3,INPP5F2

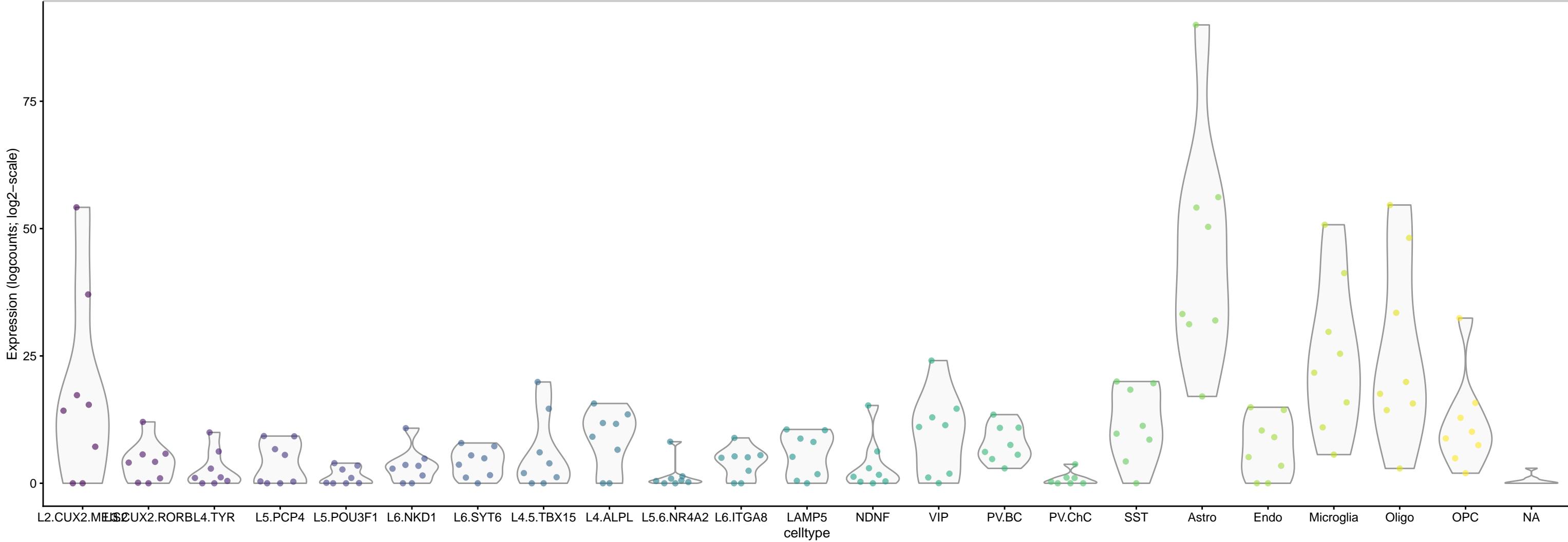
INPP5F

Expression (logcounts; log2-scale)



celltype: VIP, gene: PRPS1, peak:VIP\_1214\_PRPS1

PRPS1



celltype: VIP, gene: PURPL, peak:VIP\_1219\_PURPL

PURPL

Expression (logcounts; log2-scale)

60

40

20

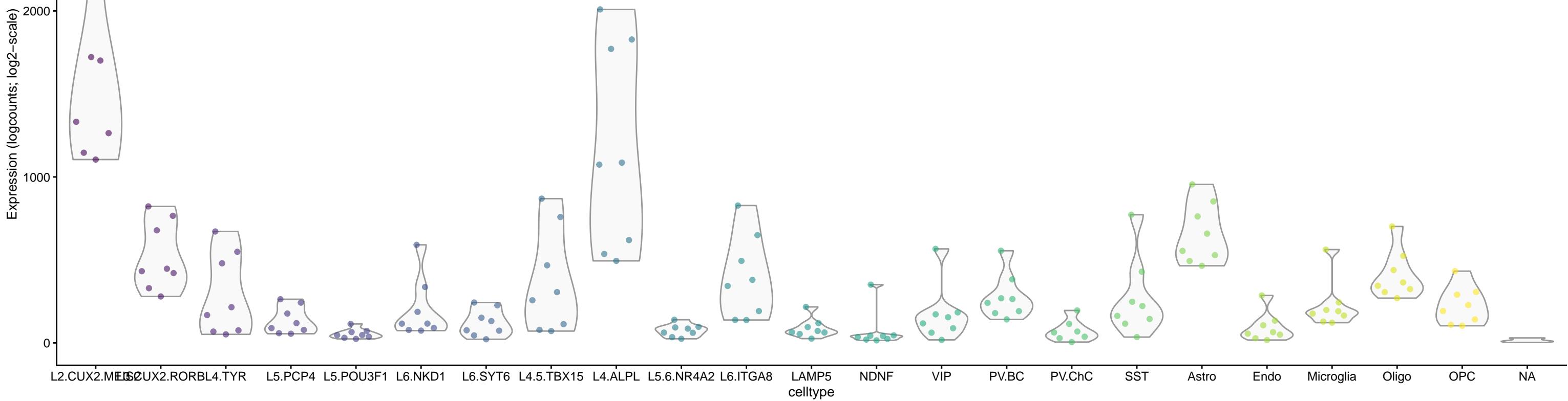
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

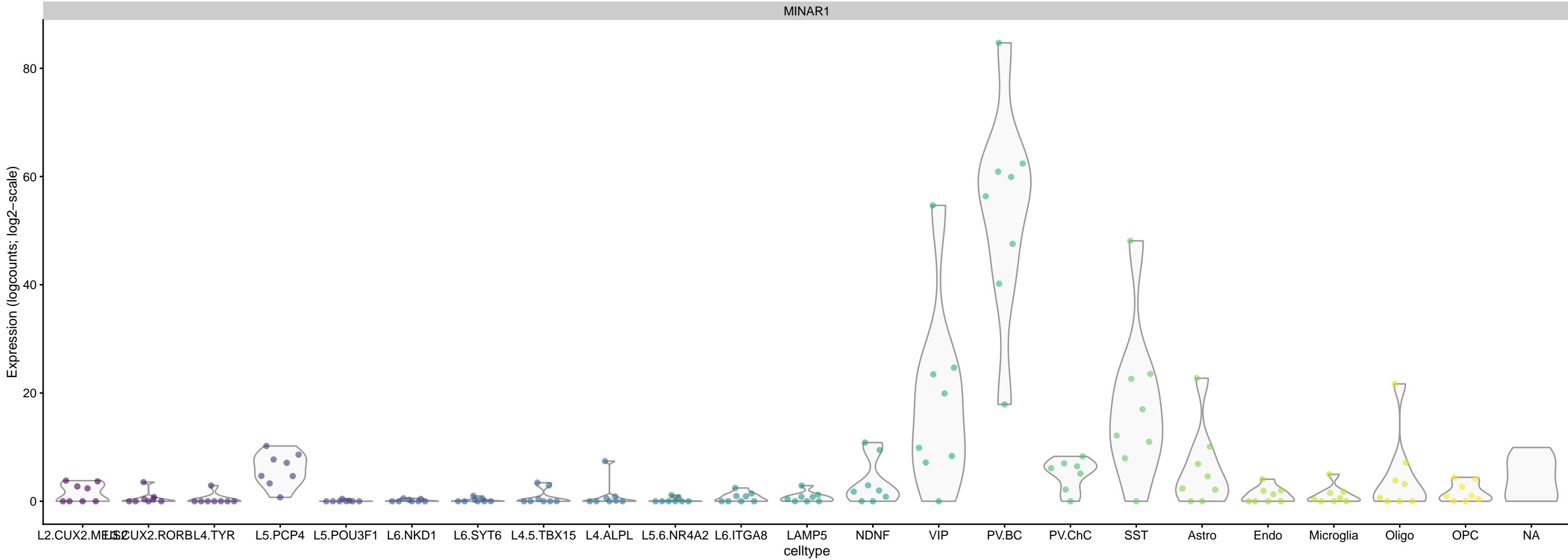
celltype

celltype: VIP, gene: ERGIC1, peak:VIP\_1226\_ERGIC1

ERGIC1

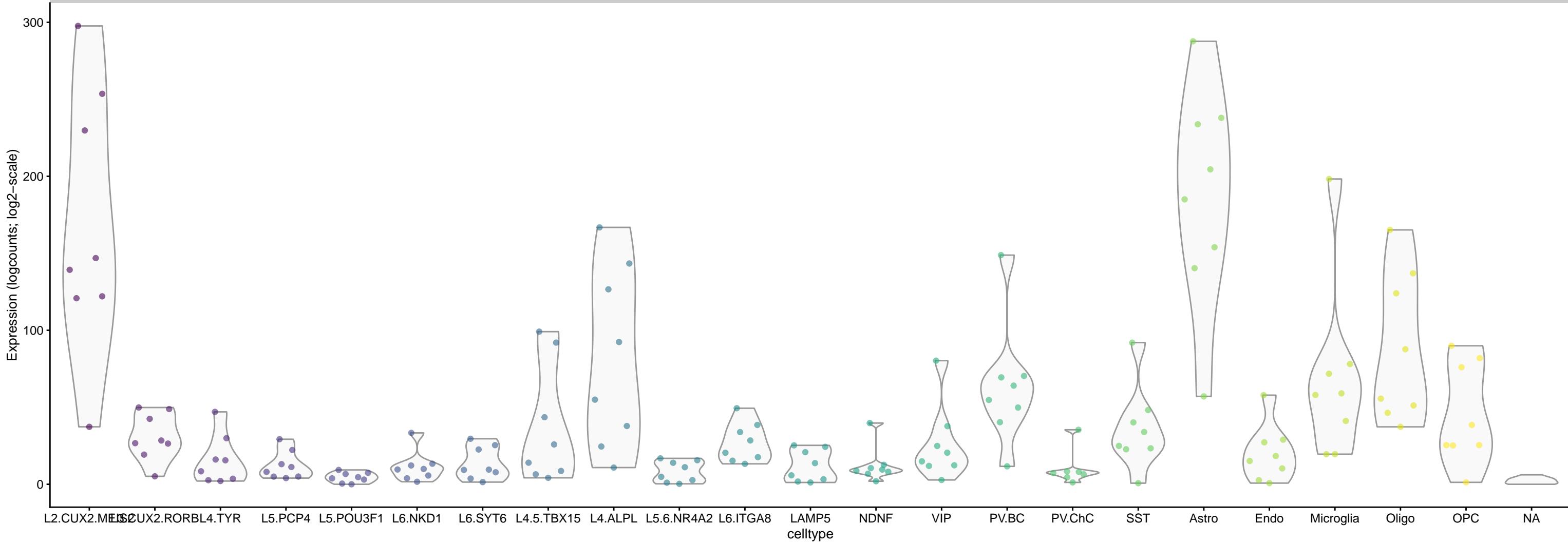


celltype: VIP, gene: MINAR1, peak:VIP\_1239\_MINAR1



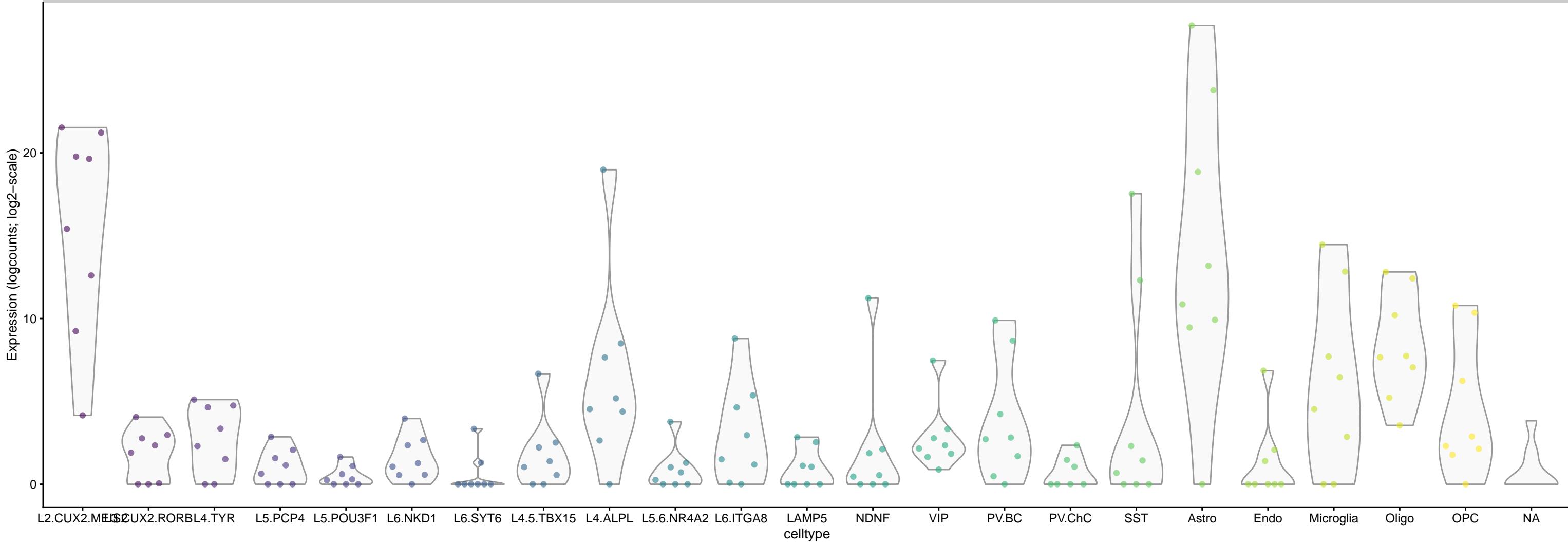
celltype: VIP, gene: PLEKHA8, peak:VIP\_1247\_PLEKHA8

PLEKHA8



celltype: VIP, gene: LINC01478, peak:VIP\_1250\_LINC01478

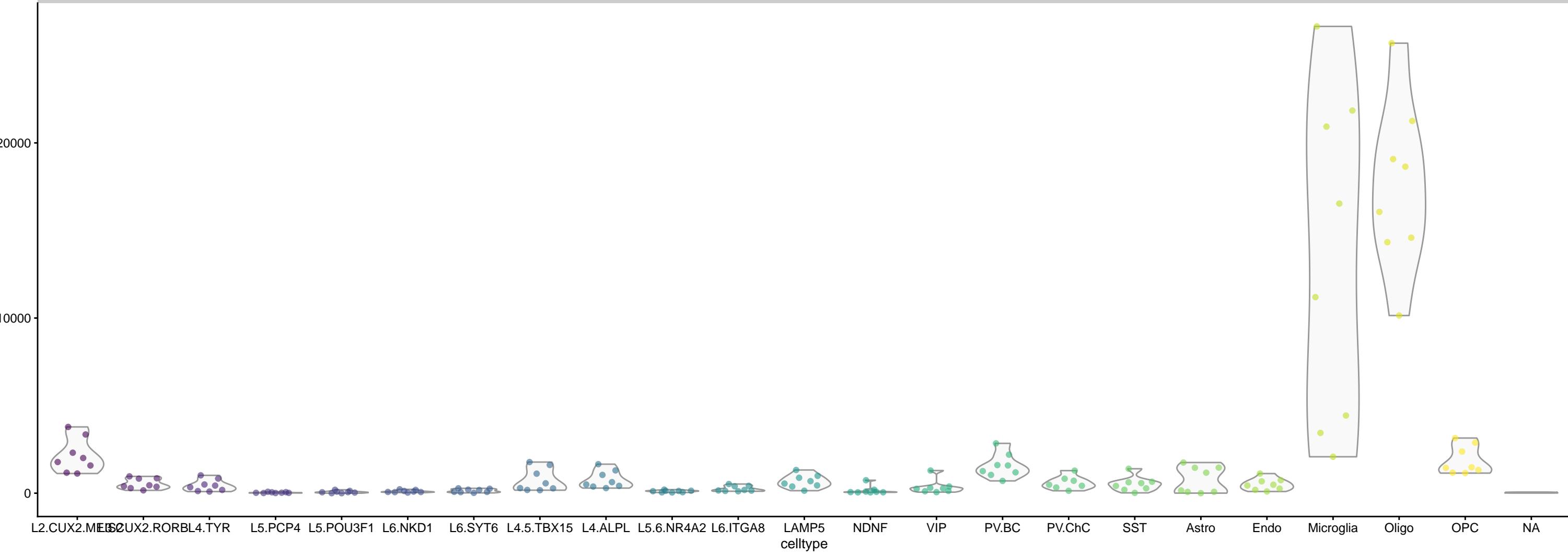
LINC01478



celltype: VIP, gene: ELMO1, peak:VIP\_1256\_ELMO1

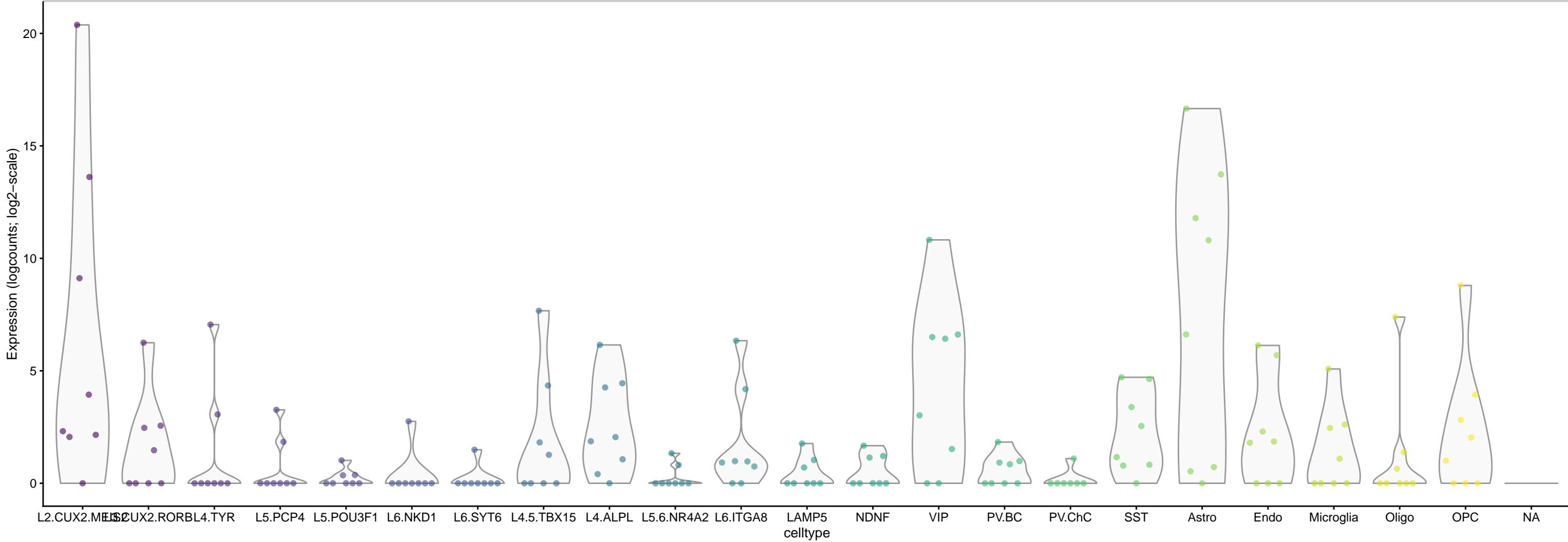
ELMO1

Expression (logcounts; log2-scale)



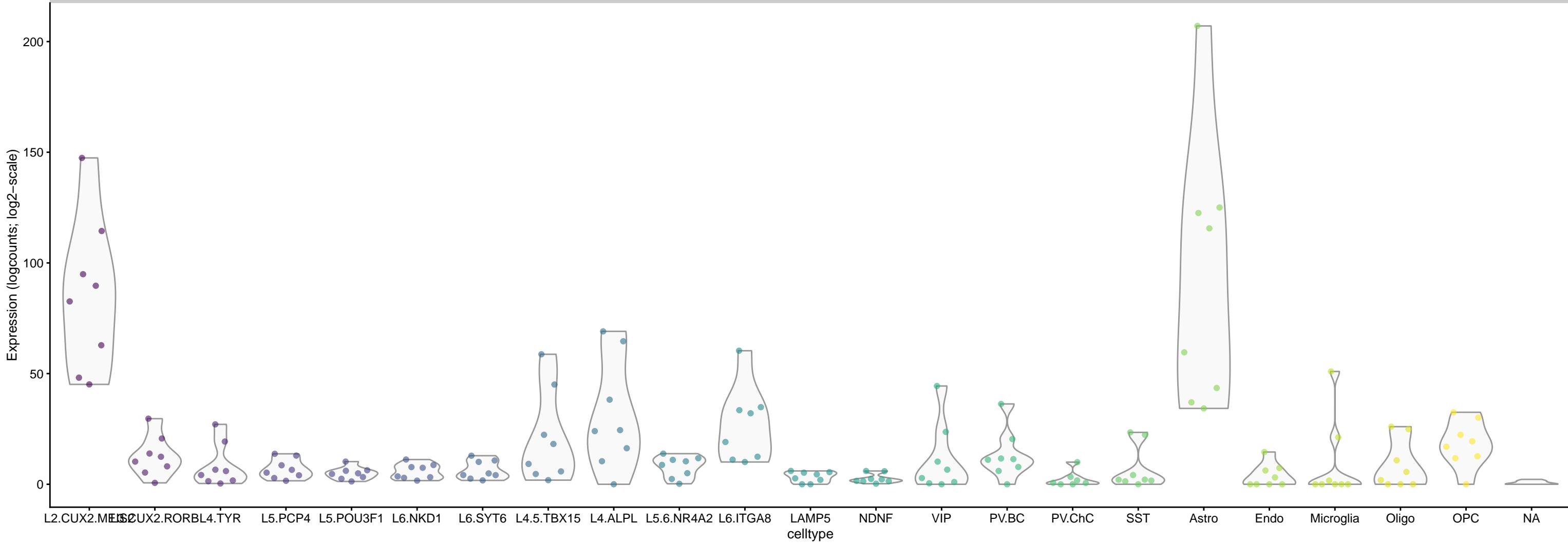
celltype: VIP, gene: EGOT, peak:VIP\_1265\_EGOT

EGOT



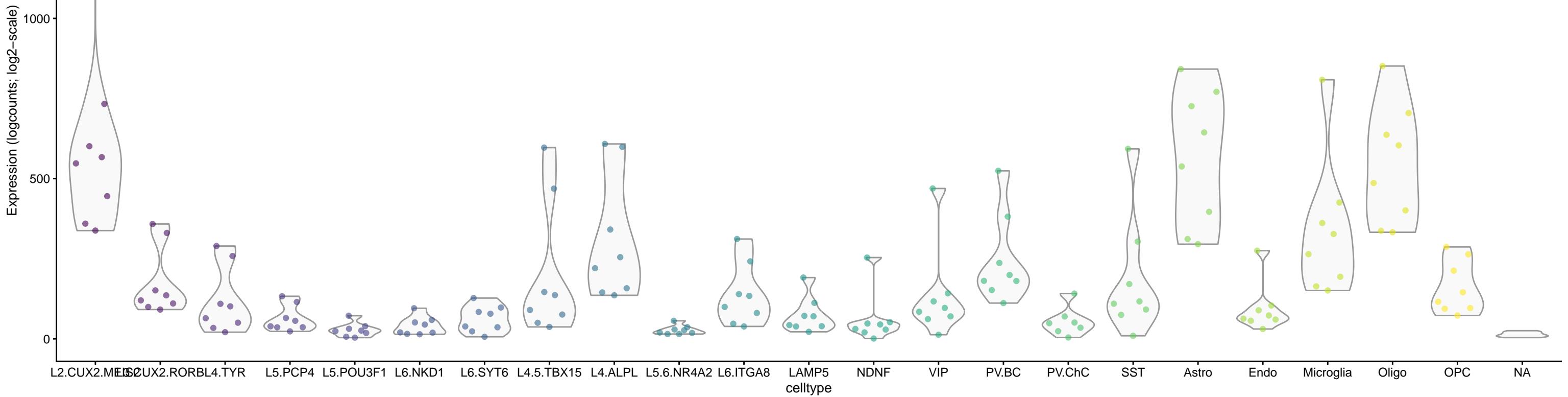
celltype: VIP, gene: LINC02094, peak:VIP\_1268\_LINC02094

LINC02094



celltype: VIP, gene: GMCL1, peak:VIP\_1272\_GMCL1

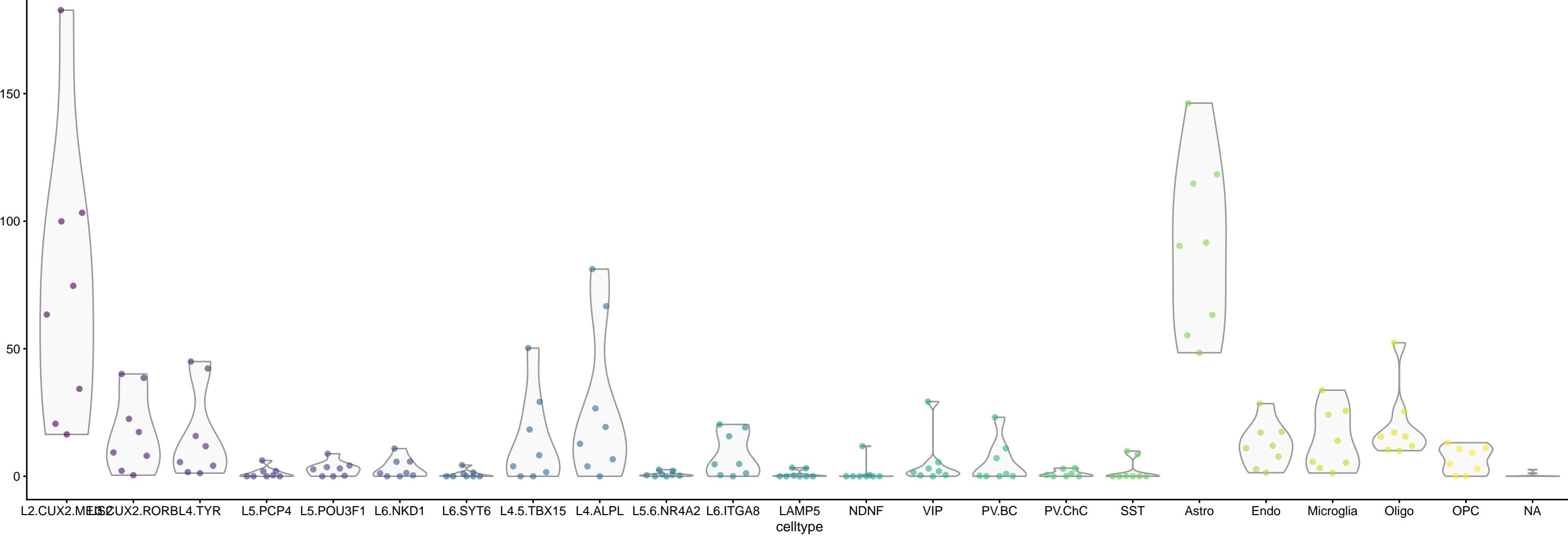
GMCL1



celltype: VIP, gene: LINC01273, peak:VIP\_1275\_LINC01273

LINC01273

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: LINC00498, peak:VIP\_1282\_LINC00498

LINC00498

Expression (logcounts; log<sub>2</sub>-scale)

400

300

200

100

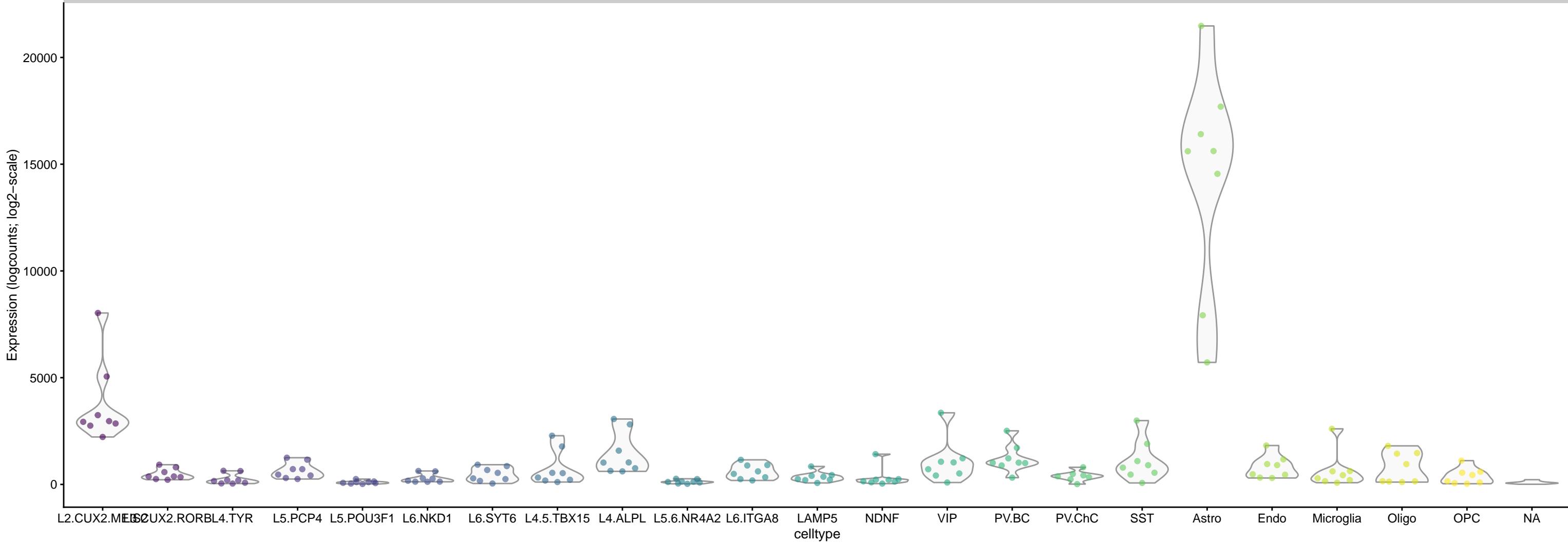
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

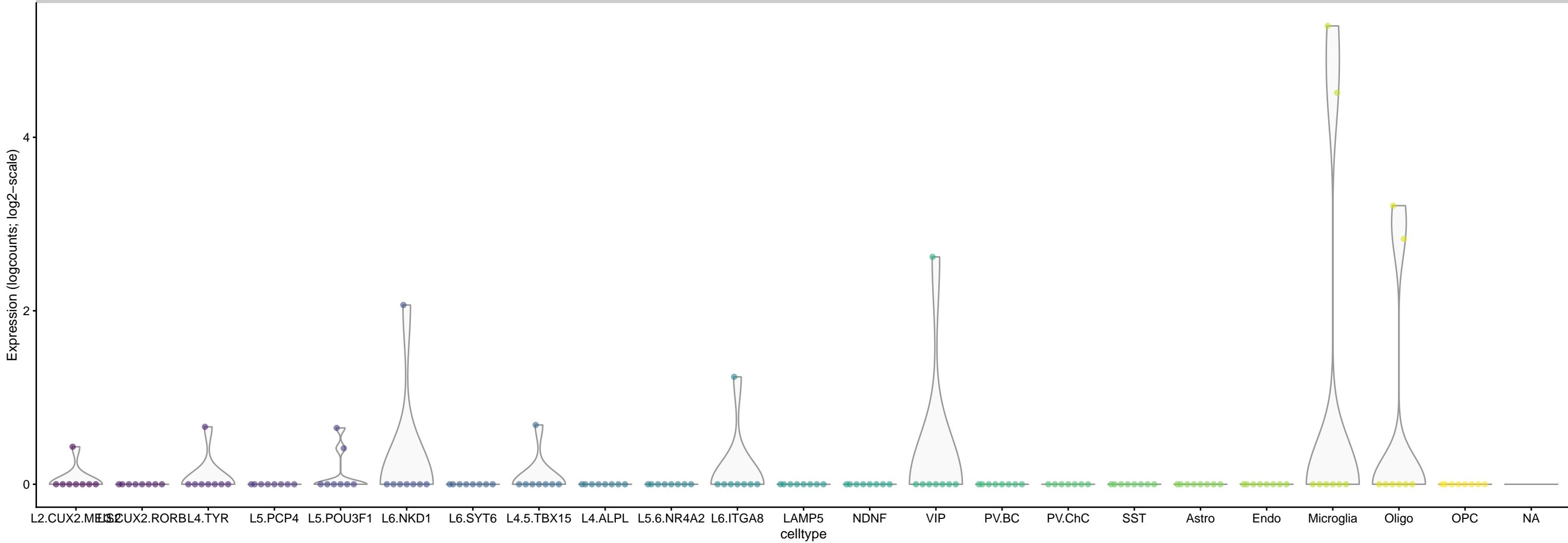
celltype: VIP, gene: ABLIM1, peak:VIP\_1284\_ABLIM1

ABLIM1



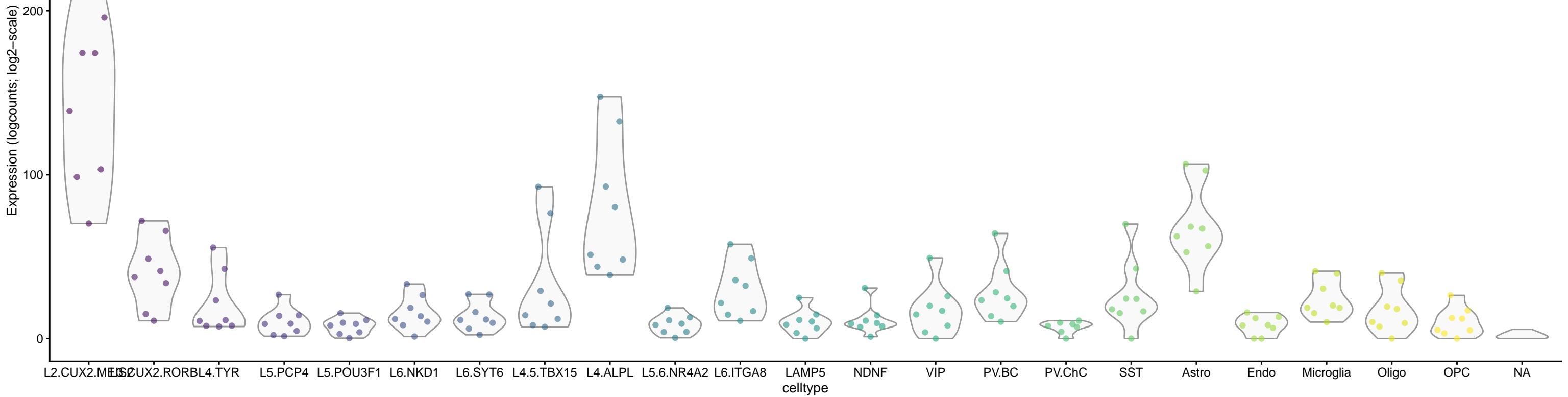
celltype: VIP, gene: EWSAT1, peak:VIP\_1287\_EWSAT1

EWSAT1



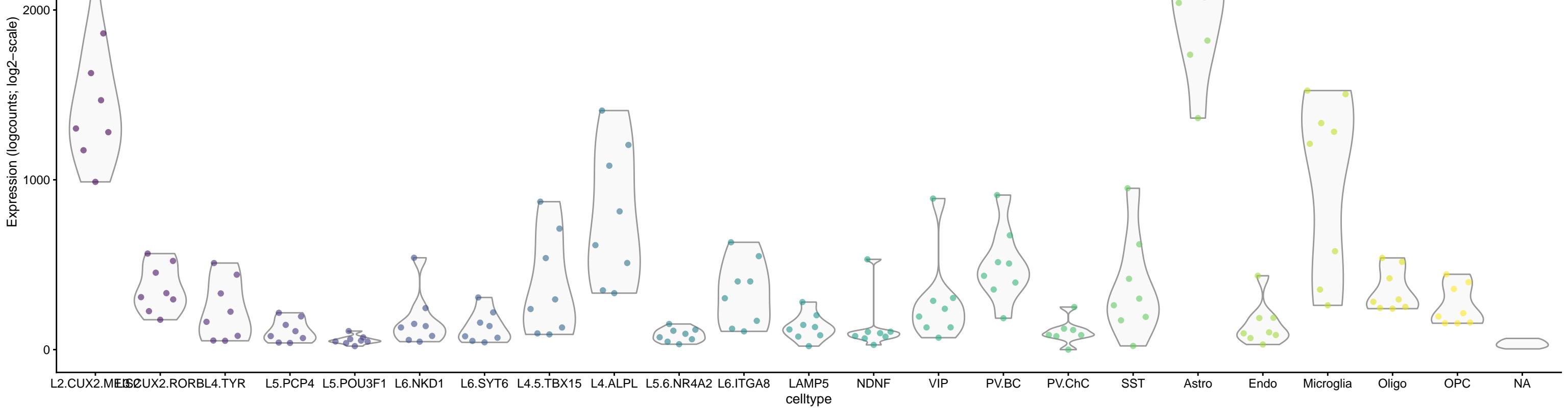
celltype: VIP, gene: C19orf44, peak:VIP\_1295\_C19orf44,EPS15L11

C19orf44



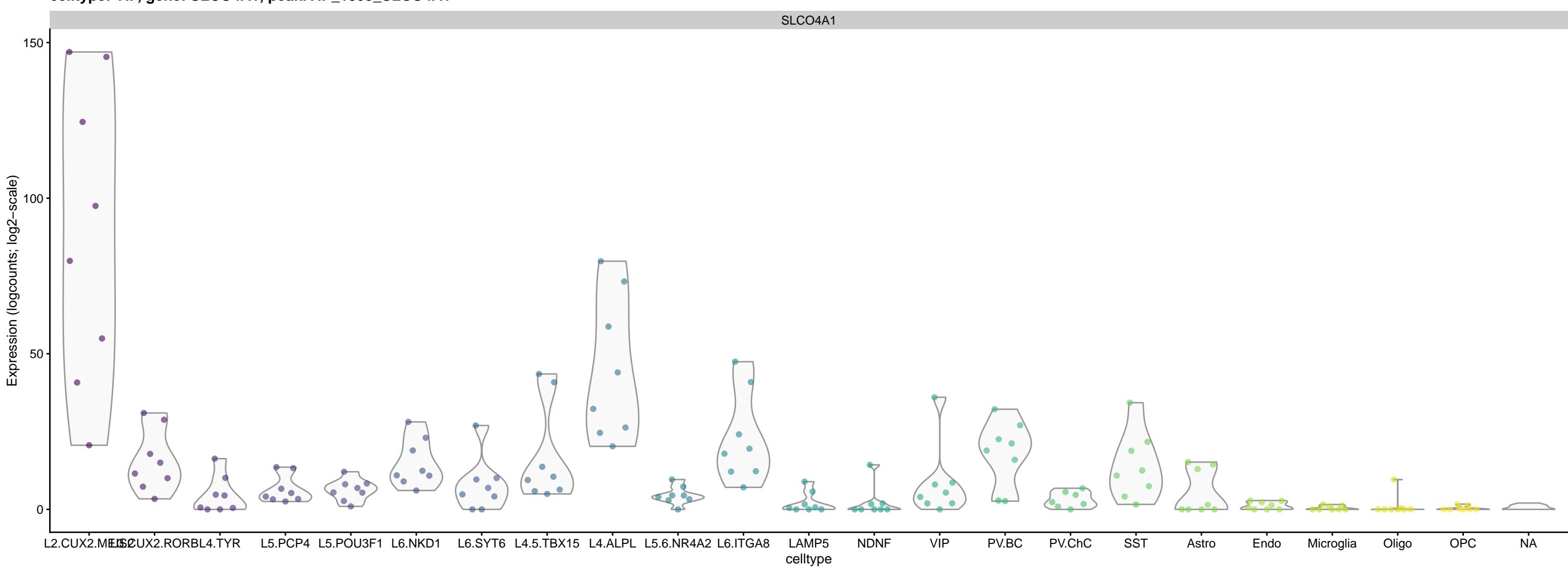
celltype: VIP, gene: EPS15L1, peak:VIP\_1295\_C19orf44,EPS15L12

EPS15L1



celltype: VIP, gene: SLCO4A1, peak:VIP\_1303\_SLCO4A1

SLCO4A1



celltype: VIP, gene: LINC00498, peak:VIP\_1305\_LINC00498

LINC00498

Expression (logcounts; log<sub>2</sub>-scale)

400

300

200

100

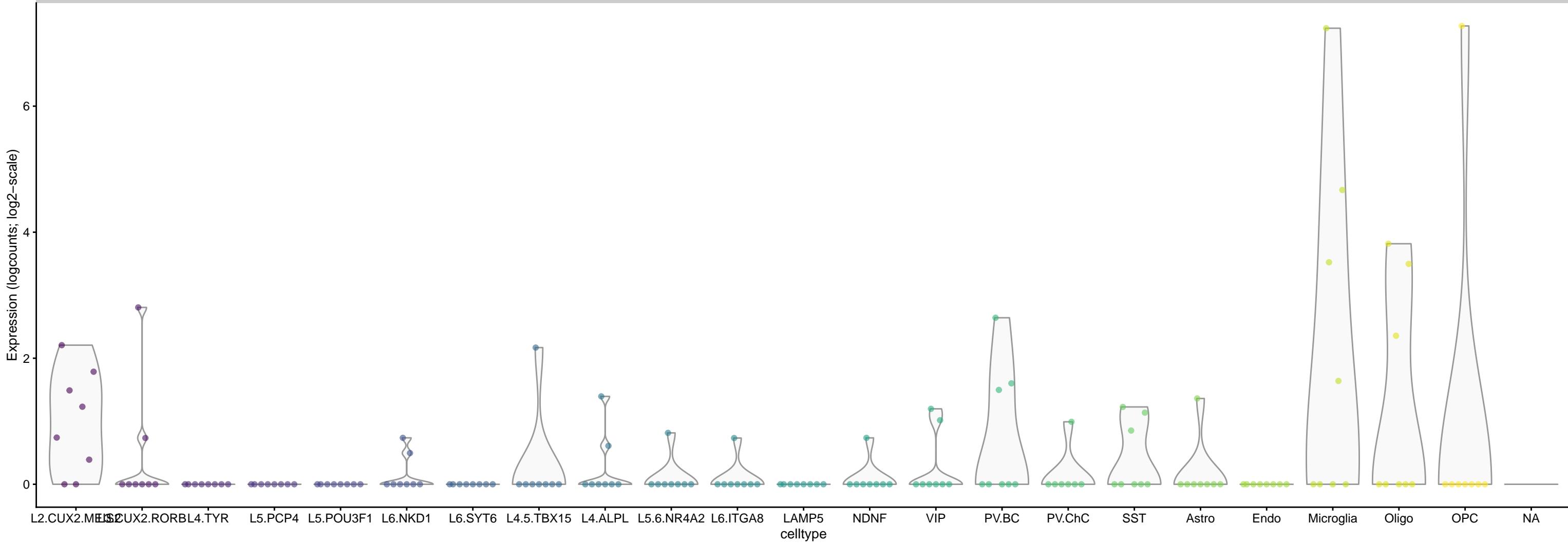
0

L2.CUX2.MES L5.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

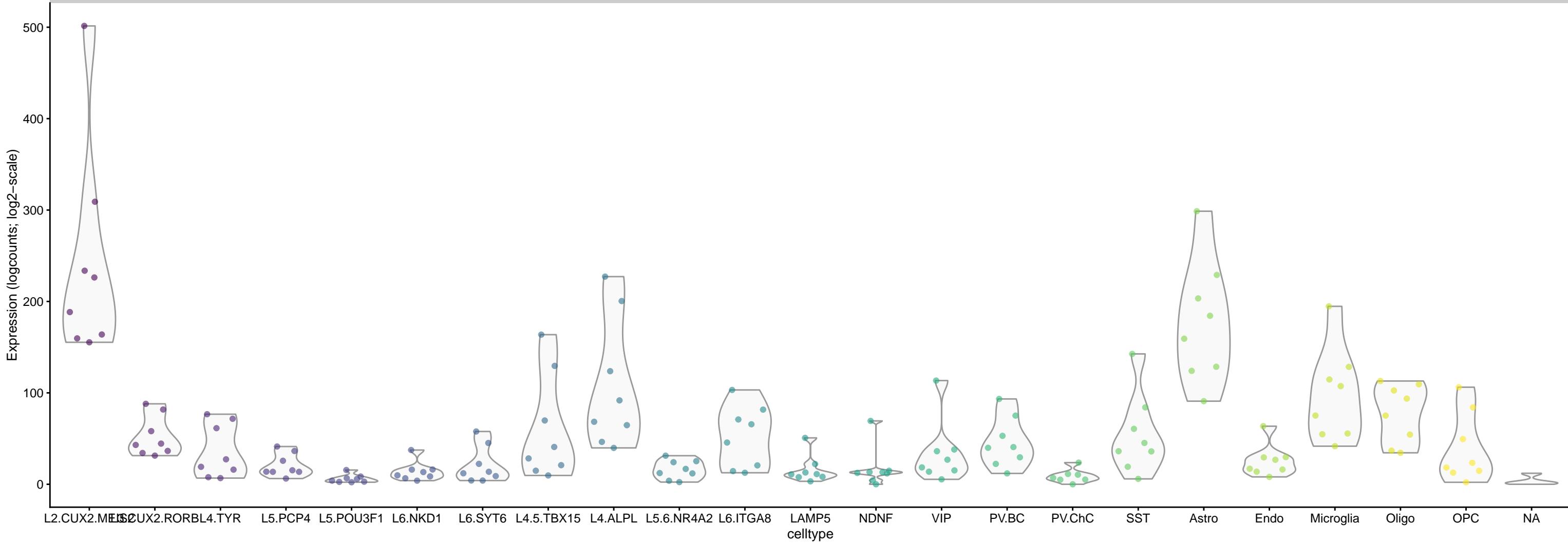
celltype: VIP, gene: LINC02685, peak:VIP\_1312\_LINC02685

LINC02685



celltype: VIP, gene: PRKRP1, peak:VIP\_1323\_PRKRP1

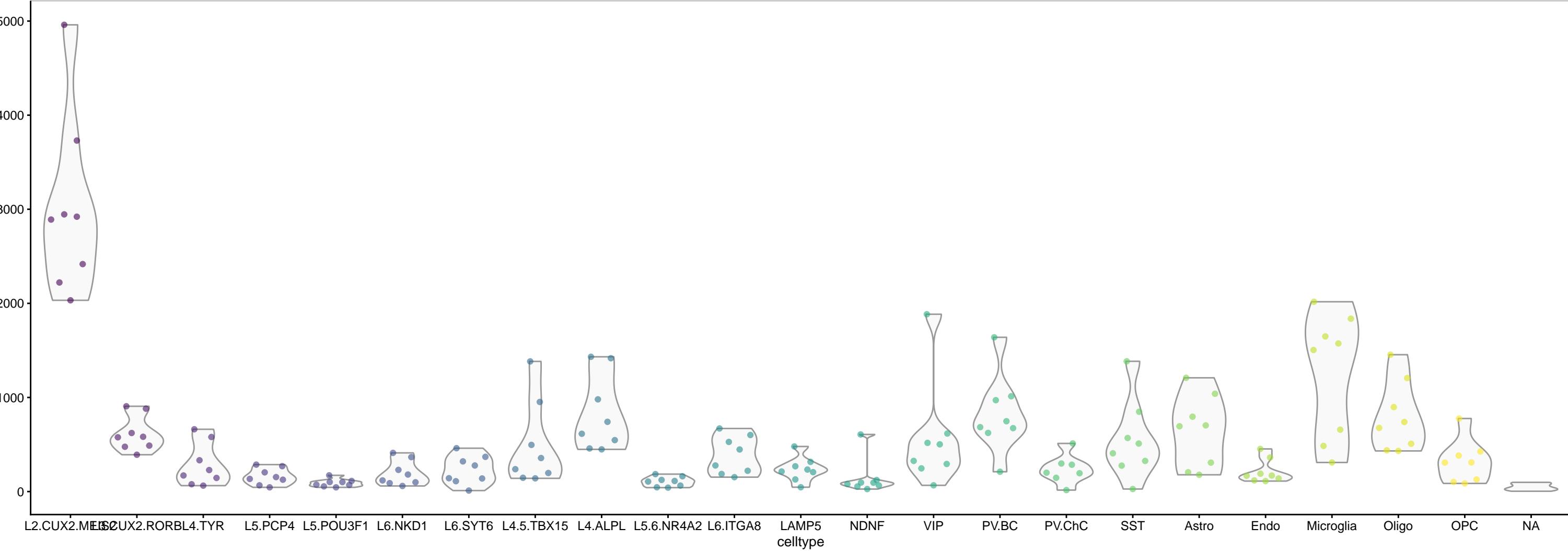
PRKRP1



celltype: VIP, gene: SPECC1, peak:VIP\_1330\_SPECC1

SPECC1

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: COP1, peak:VIP\_1363\_COP1

COP1

Expression (logcounts; log<sub>2</sub>-scale)

5000

4000

3000

2000

1000

0

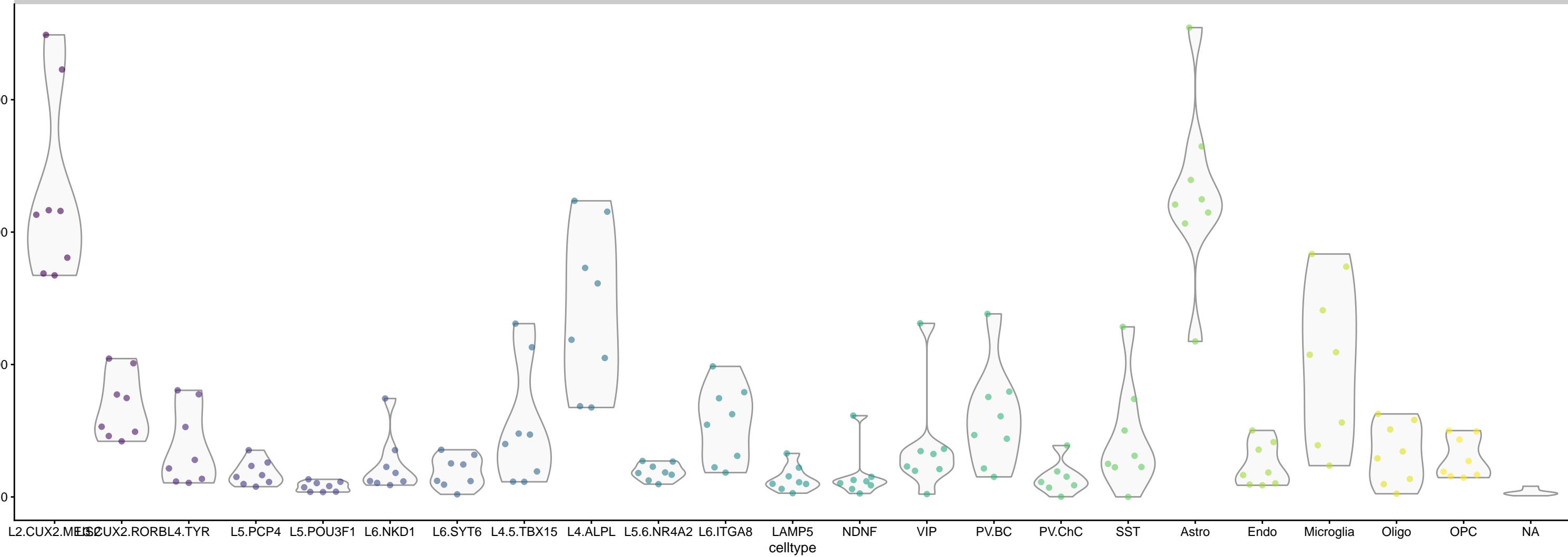
L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

celltype: VIP, gene: HK1, peak:VIP\_1368\_HK1

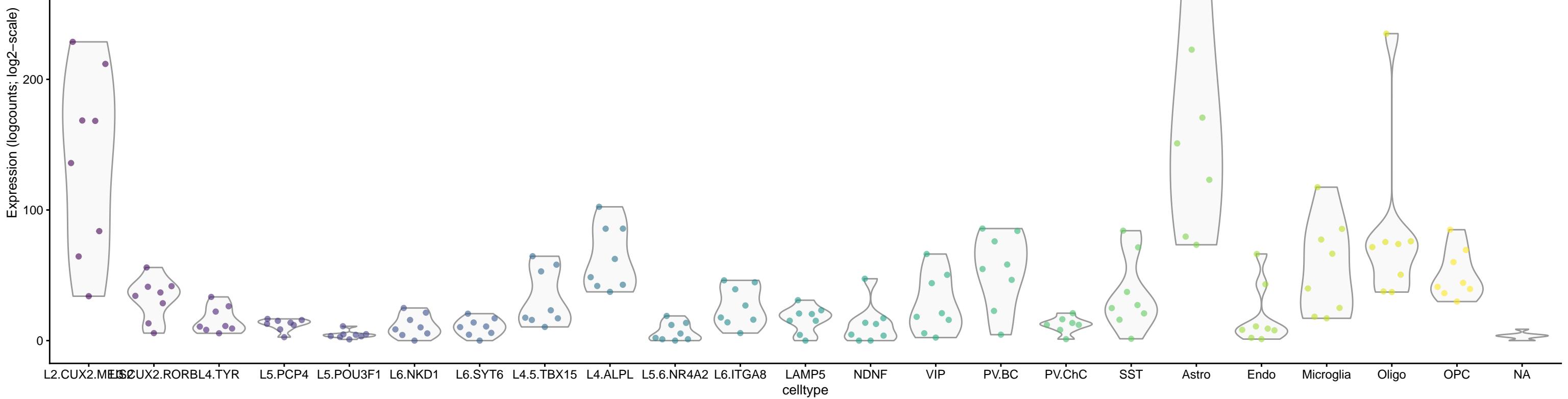
HK1

Expression (logcounts; log2-scale)



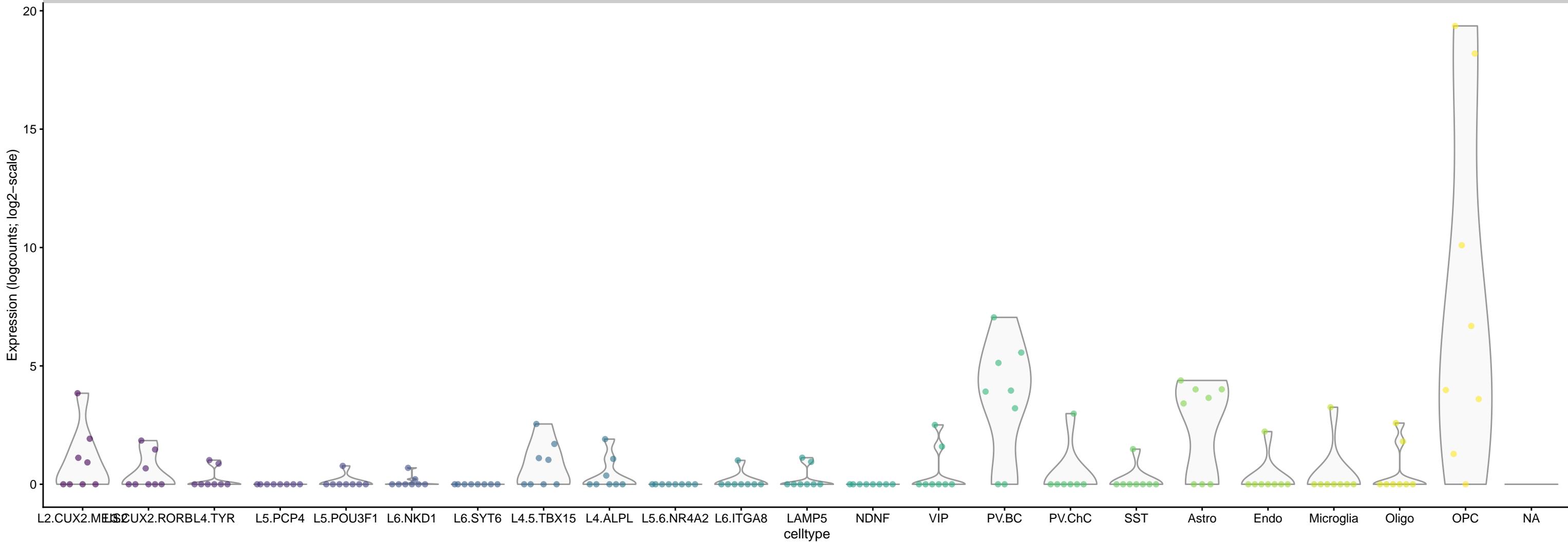
celltype: VIP, gene: TTI2, peak:VIP\_1376\_TTI2

TTI2



celltype: VIP, gene: KCNG4, peak:VIP\_1379\_KCNG4

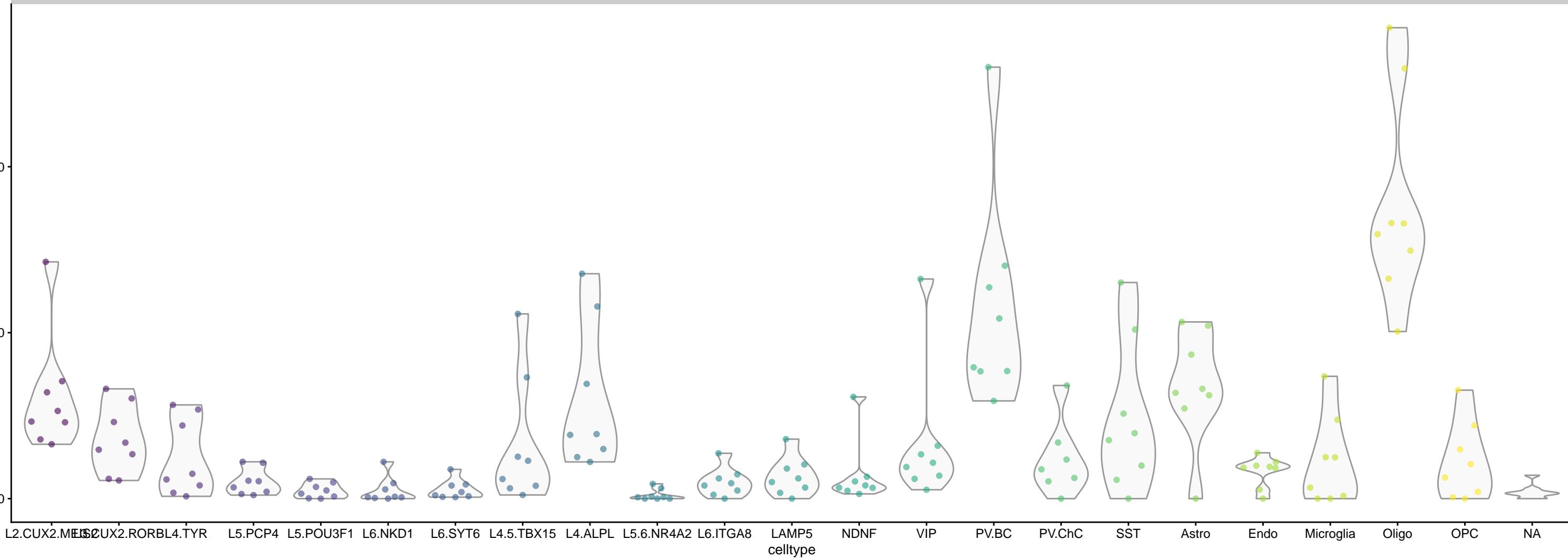
KCNG4



celltype: VIP, gene: CDR2L, peak:VIP\_1388\_CDR2L,HID11

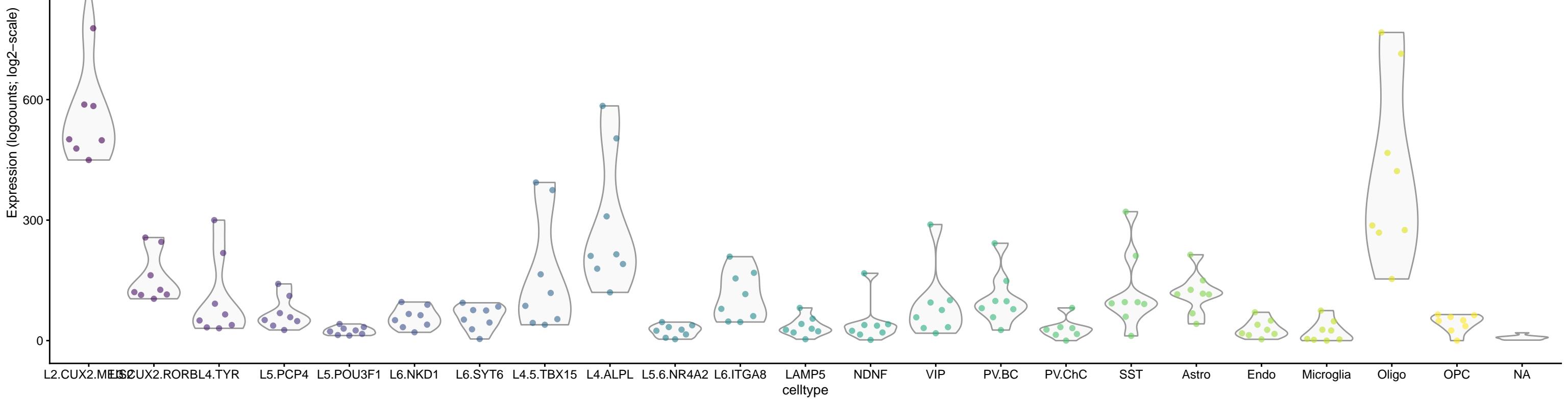
CDR2L

Expression (logcounts; log2-scale)



celltype: VIP, gene: HID1, peak:VIP\_1388\_CDR2L,HID12

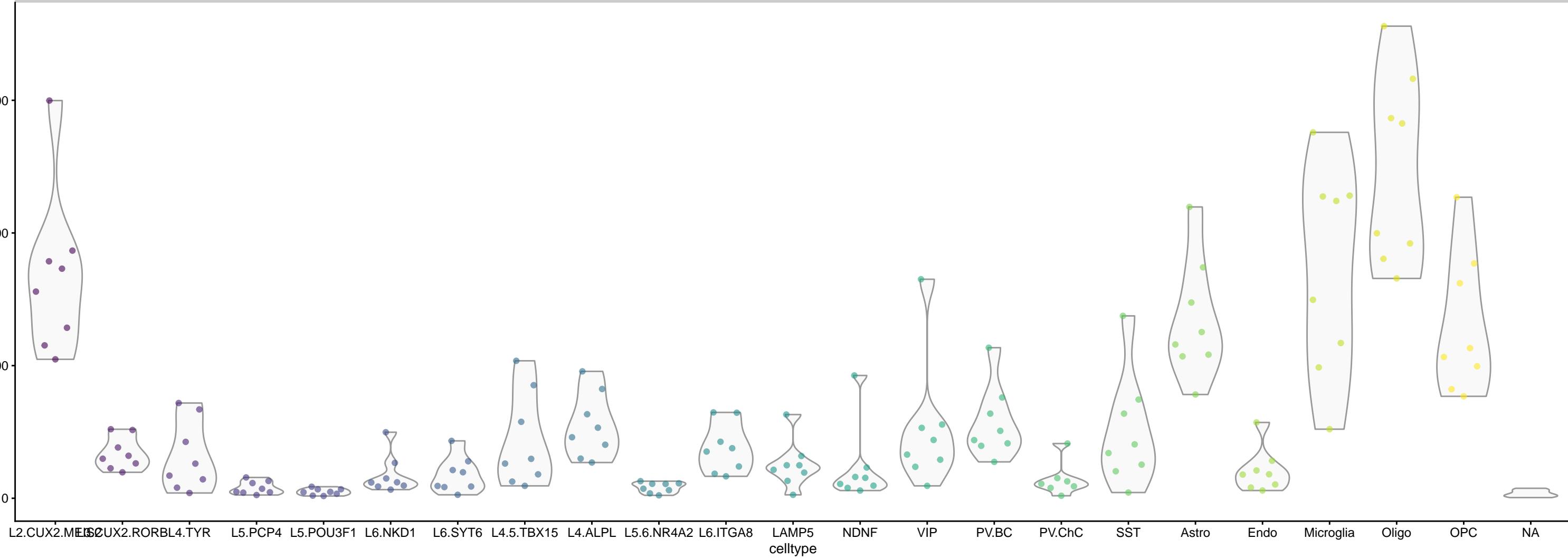
HID1



celltype: VIP, gene: SOGA1, peak:VIP\_1390\_SOGA1

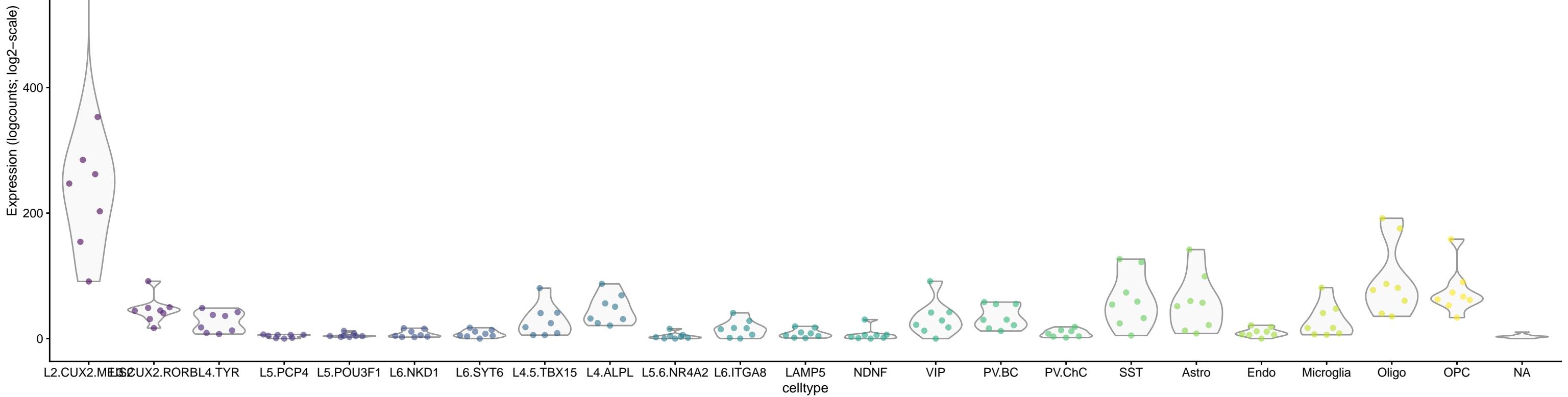
SOGA1

Expression (logcounts; log2-scale)



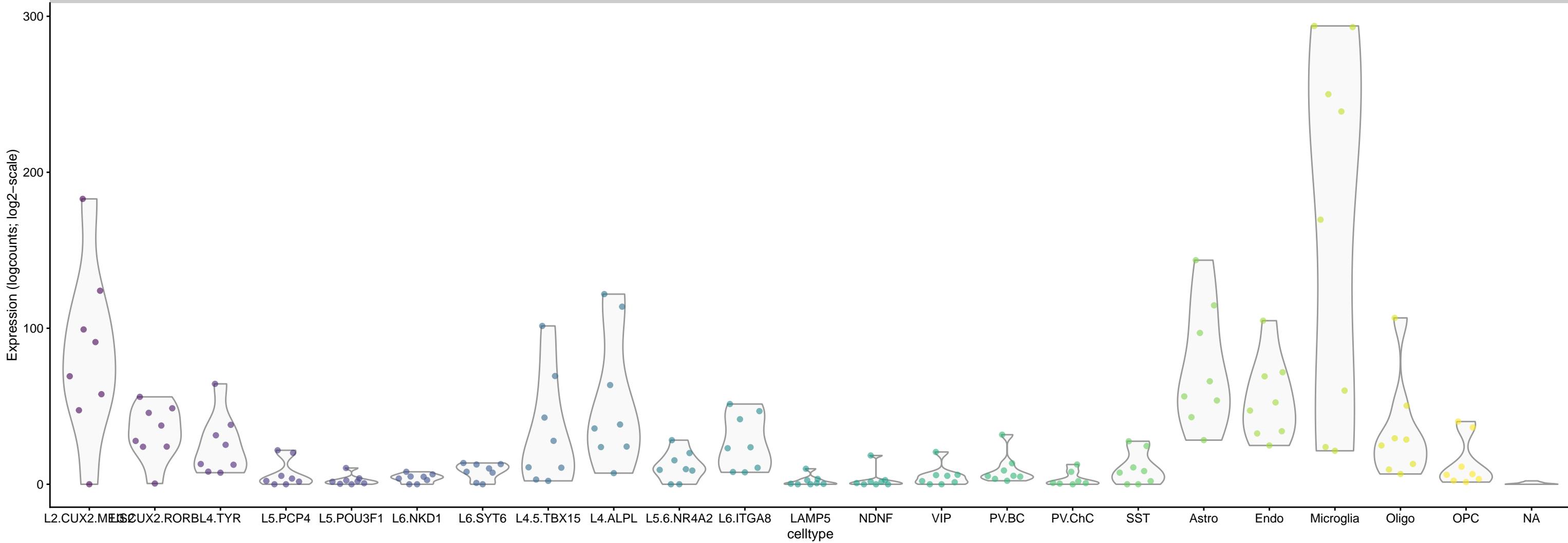
celltype: VIP, gene: LINC00643, peak:VIP\_1395\_LINC00643

LINC00643



celltype: VIP, gene: KLF6, peak:VIP\_1397\_KLF6

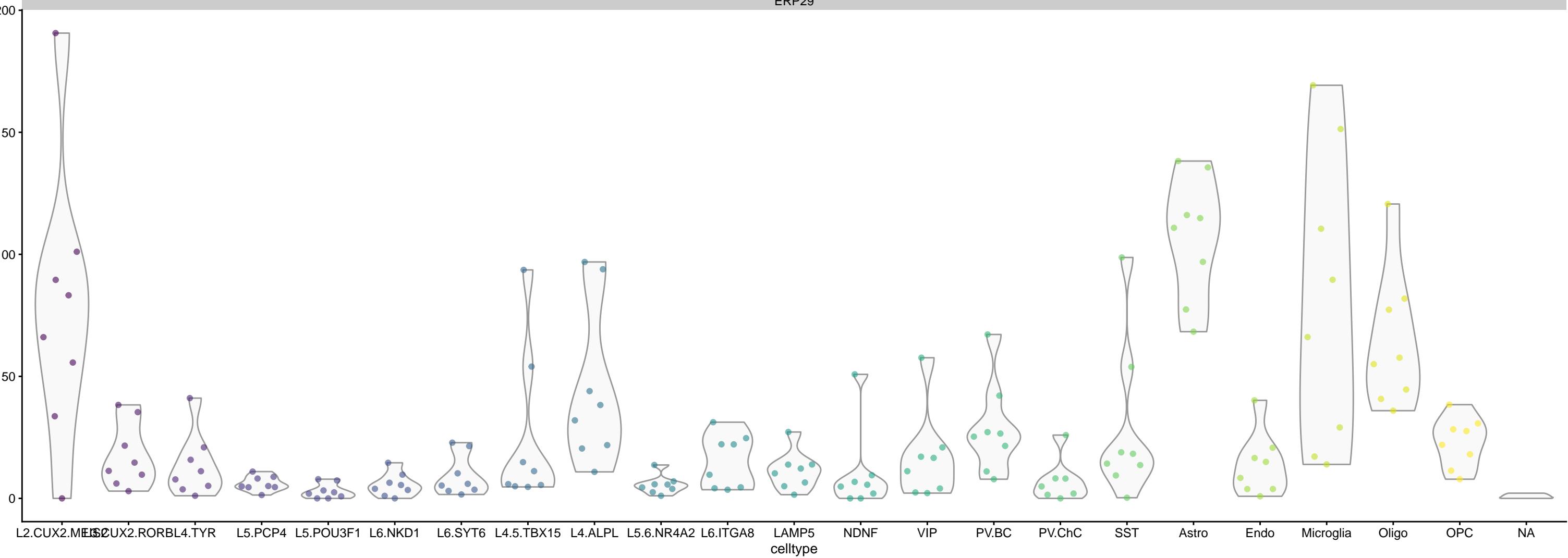
KLF6



celltype: VIP, gene: ERP29, peak:VIP\_1418\_ERP29

ERP29

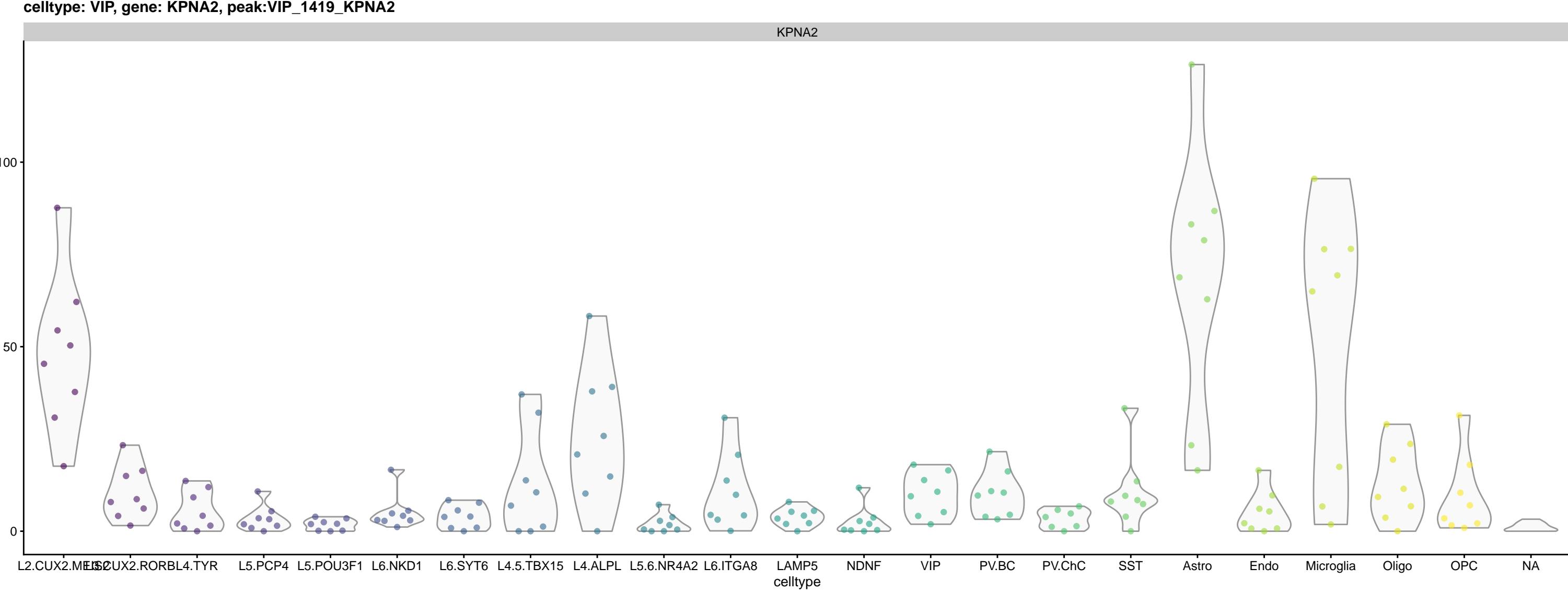
Expression (logcounts; log2-scale)



celltype: VIP, gene: KPNA2, peak:VIP\_1419\_KPNA2

KPNA2

Expression (logcounts; log2-scale)



celltype: VIP, gene: BVES, peak:VIP\_1422\_BVES,POPDC31

BVES

Expression (logcounts; log2-scale)

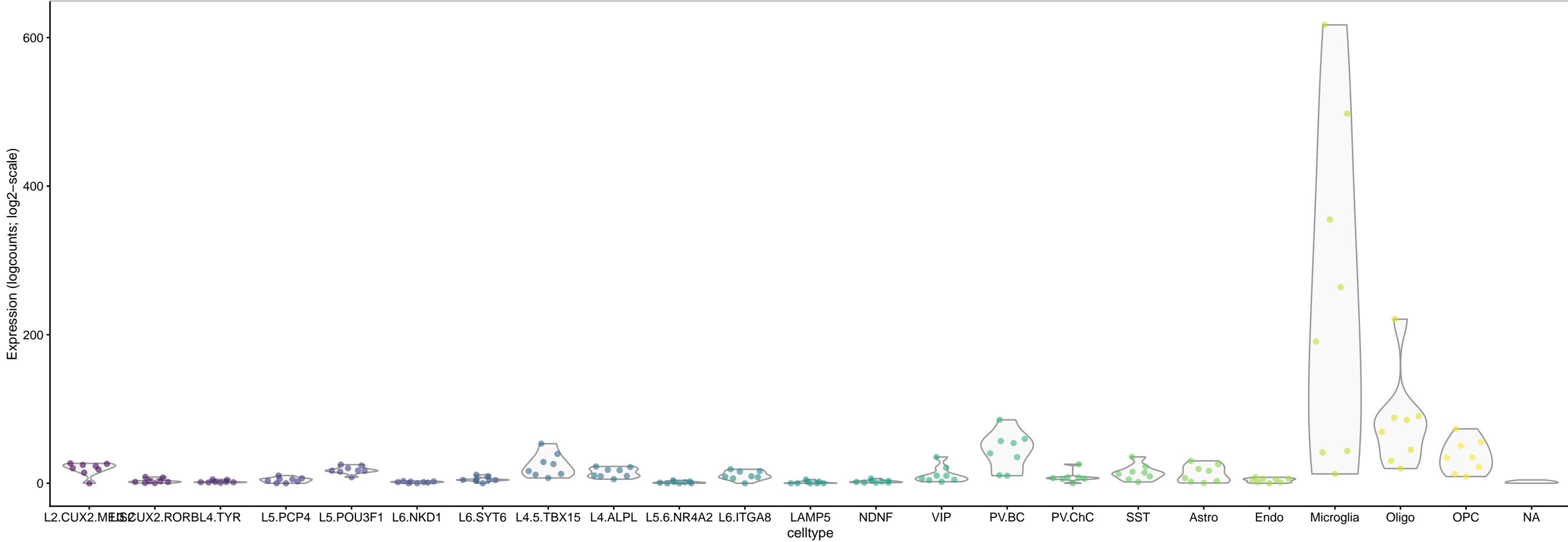
600  
400  
200  
0

L2.CUX2.MES L2.CUX2.RORBL4.TYR L5.PCP4 L5.POU3F1 L6.NKD1 L6.SYT6 L4.5.TBX15 L4.ALPL L5.6.NR4A2 L6.ITGA8 LAMP5 NDNF VIP PV.BC PV.ChC SST Astro Endo Microglia Oligo OPC NA

celltype

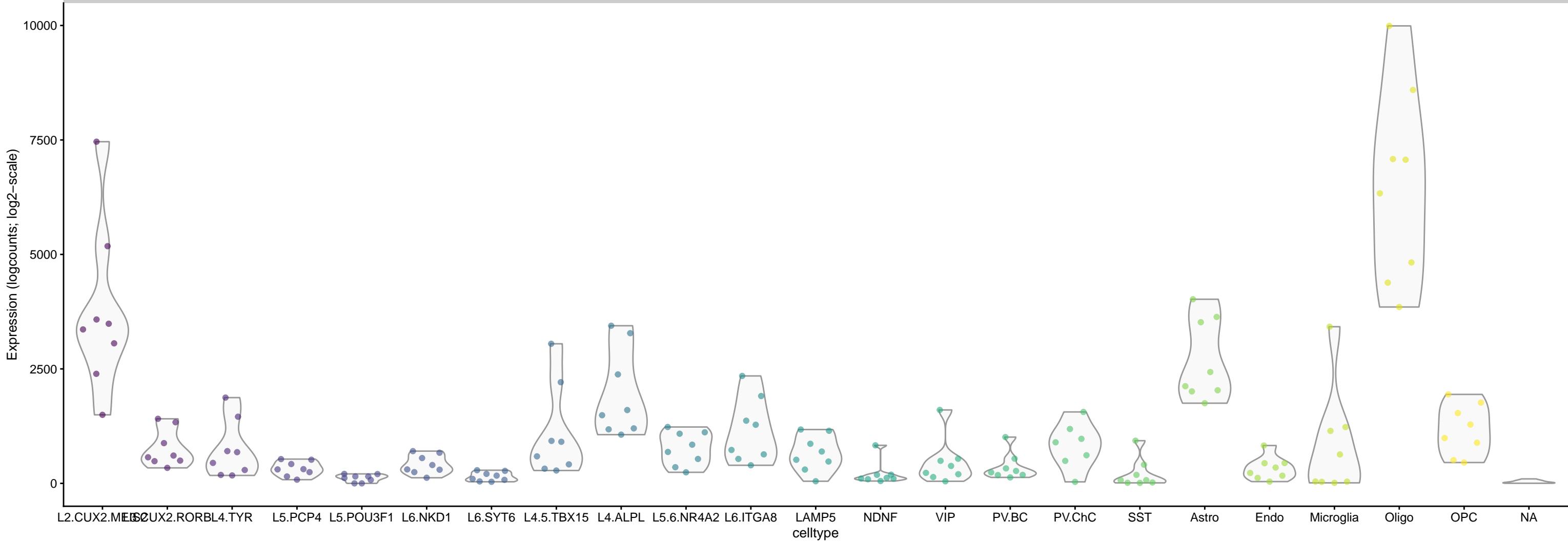
celltype: VIP, gene: POPDC3, peak:VIP\_1422\_BVES,POPDC32

POPDC3

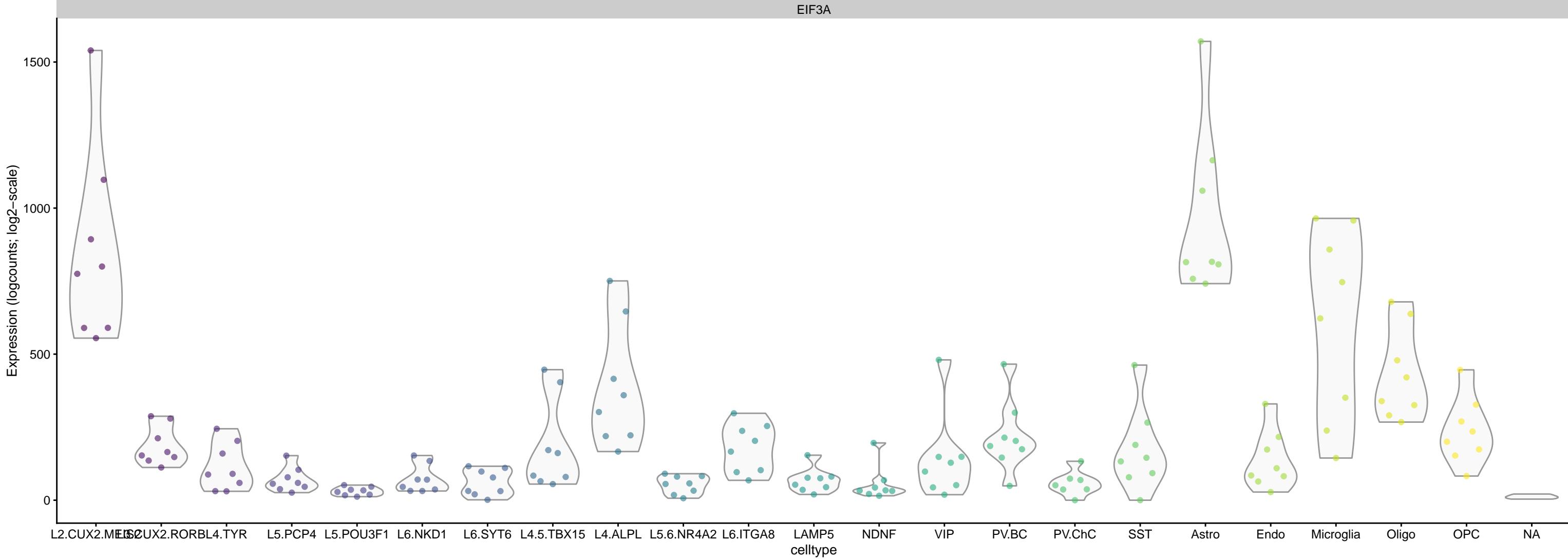


celltype: VIP, gene: UNC5C, peak:VIP\_1425\_UNC5C

UNC5C



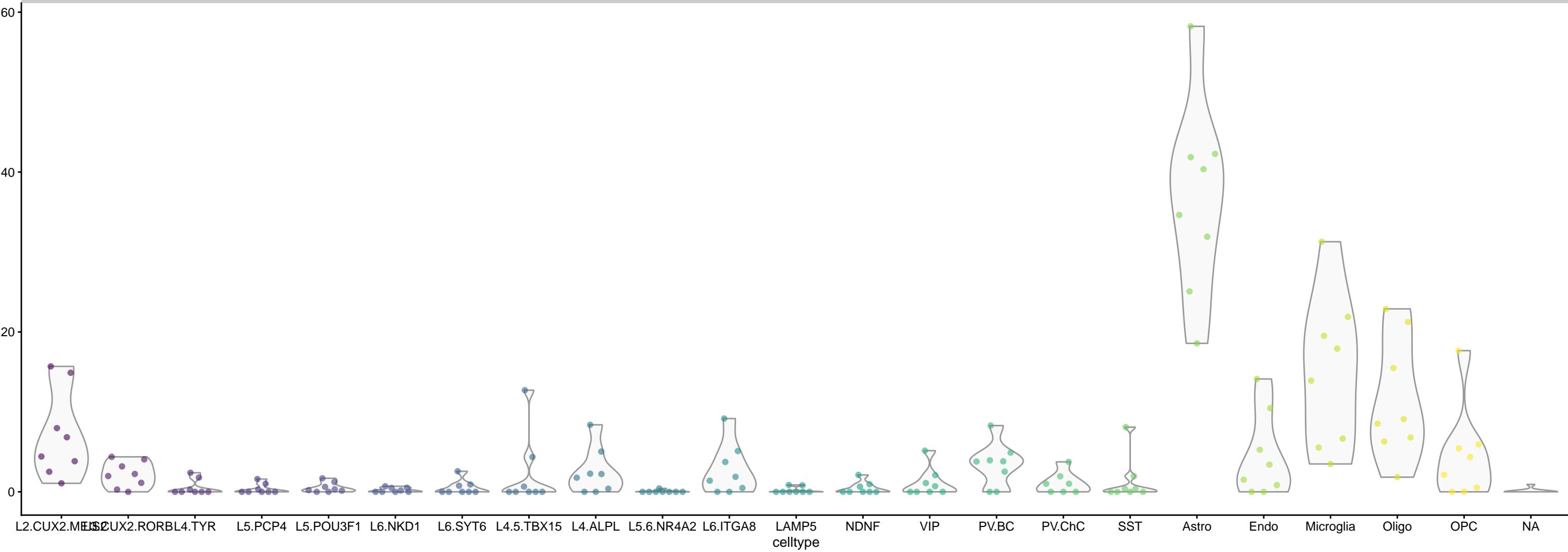
celltype: VIP, gene: EIF3A, peak:VIP\_1432\_EIF3A



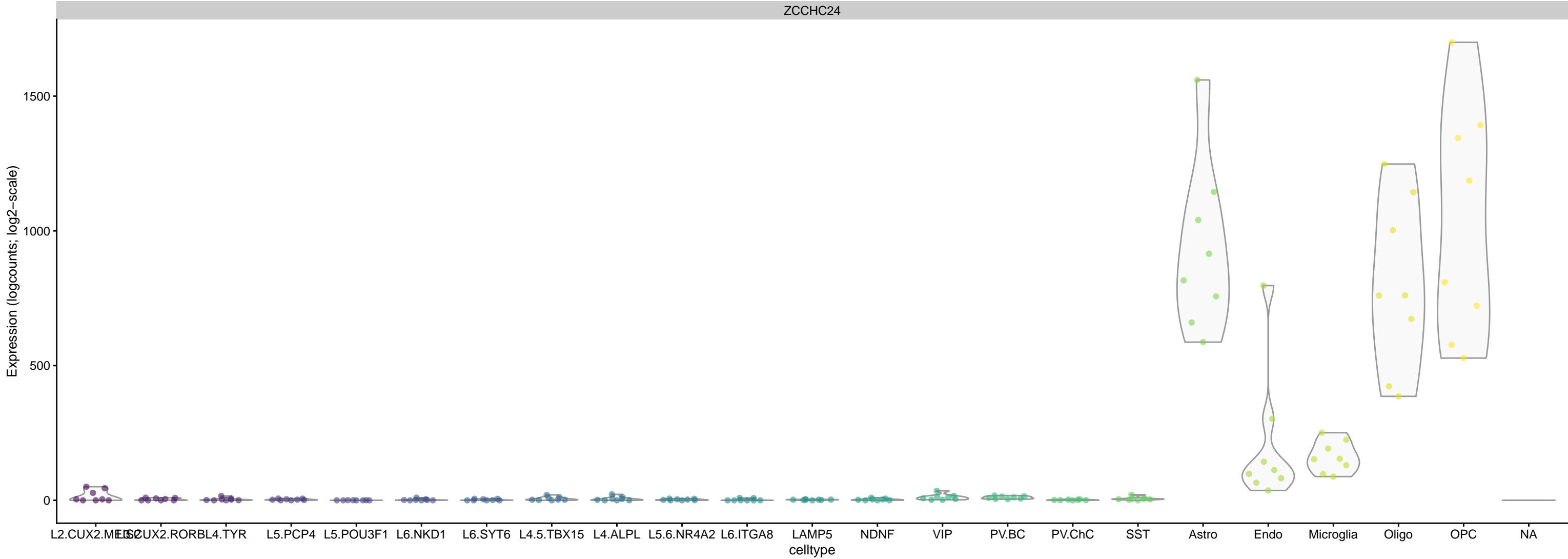
celltype: VIP, gene: LINC00899, peak:VIP\_1434\_LINC00899

LINC00899

Expression (logcounts; log<sub>2</sub>-scale)

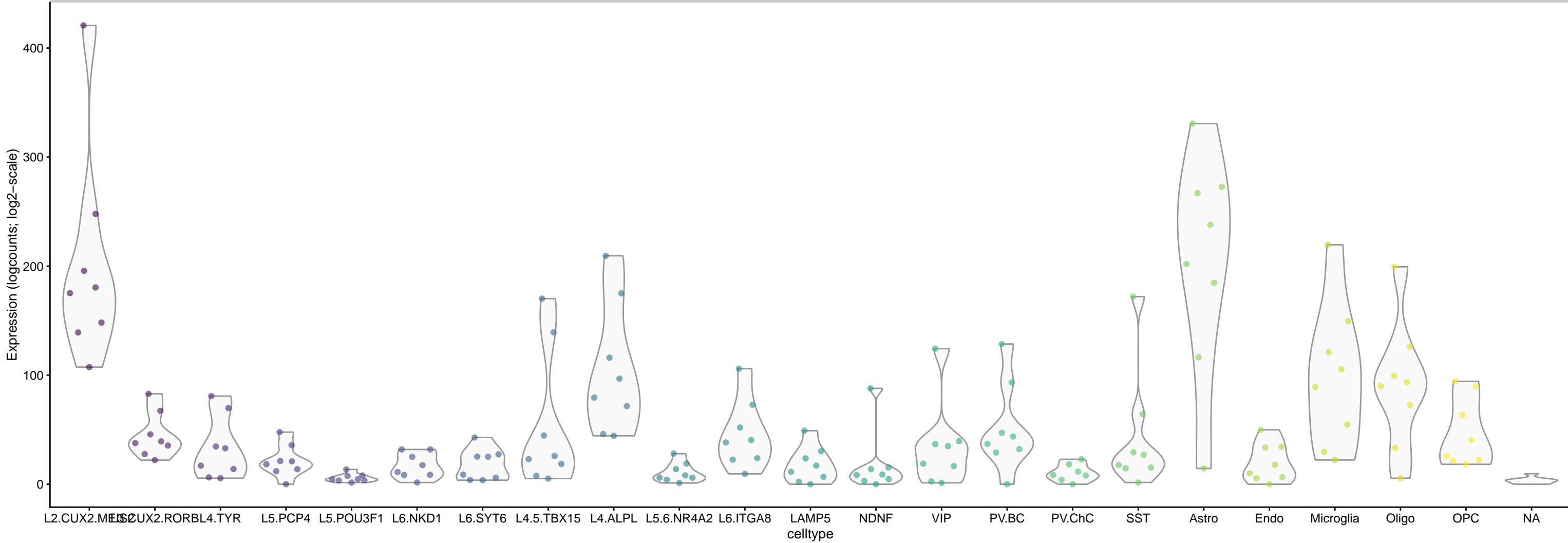


celltype: VIP, gene: ZCCHC24, peak:VIP\_1489\_ZCCHC24



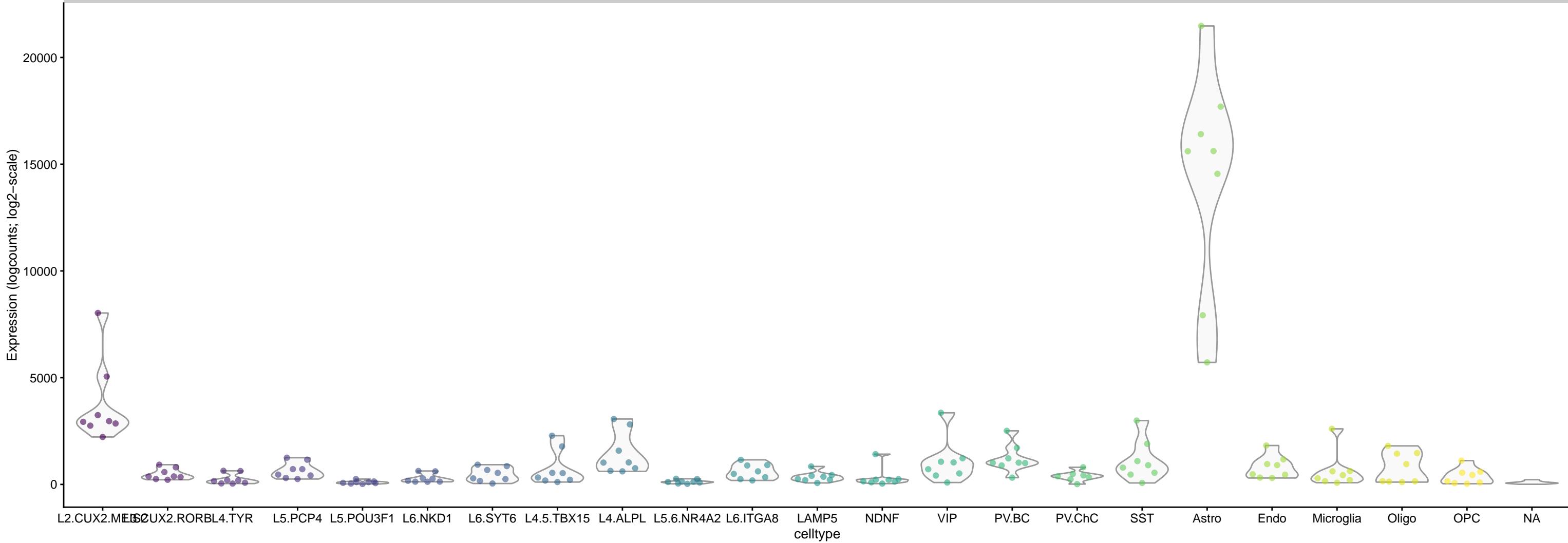
celltype: VIP, gene: RRNAD1, peak:VIP\_1492\_RRNAD1

RRNAD1

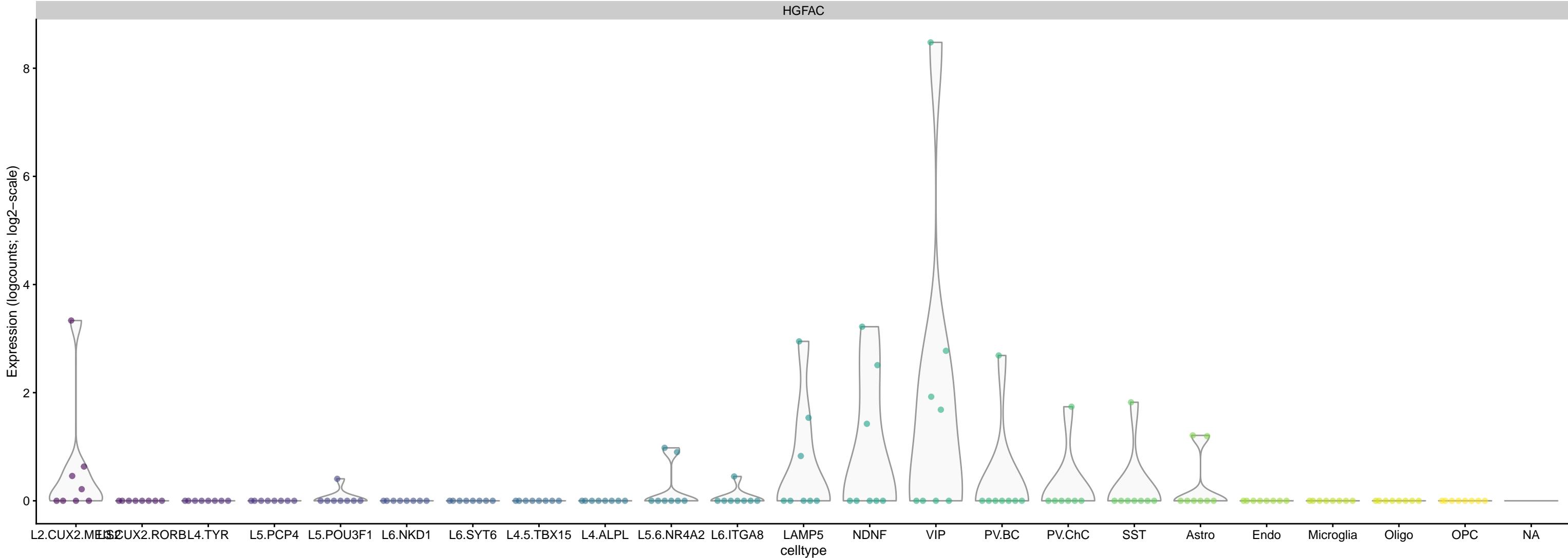


celltype: VIP, gene: ABLIM1, peak:VIP\_1516\_ABLIM1

ABLIM1

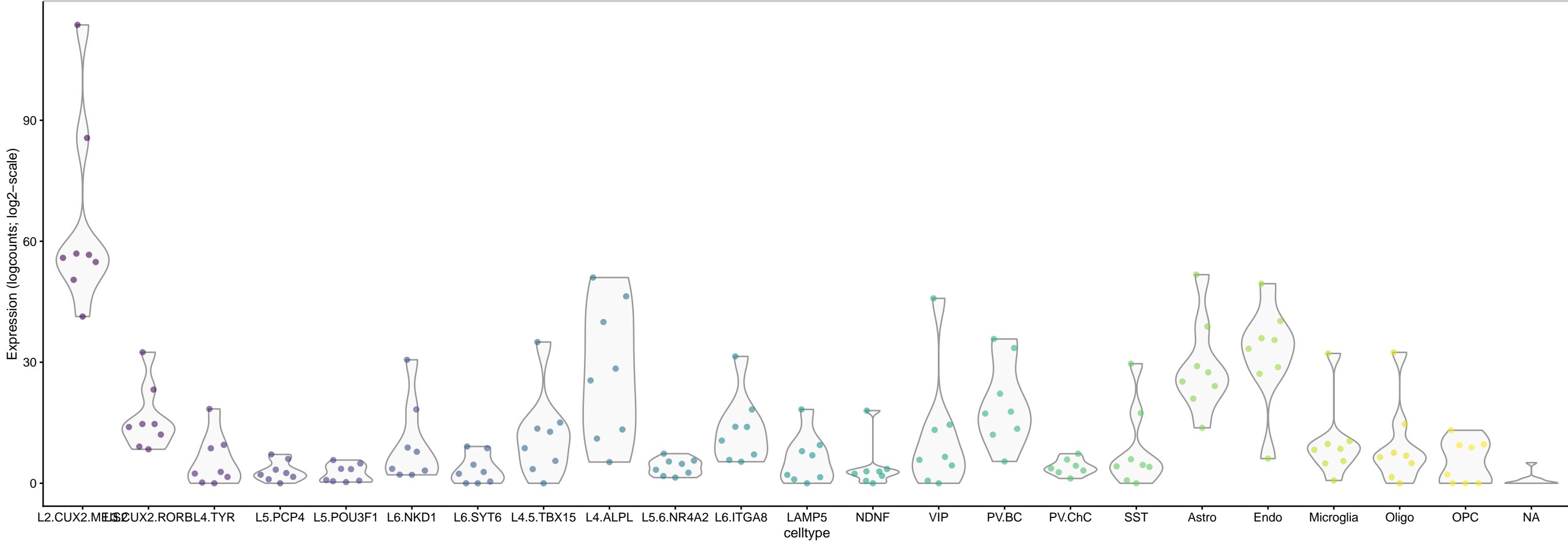


celltype: VIP, gene: HGFAC, peak:VIP\_1517\_HGFAC



celltype: VIP, gene: CD320, peak:VIP\_1530\_CD320

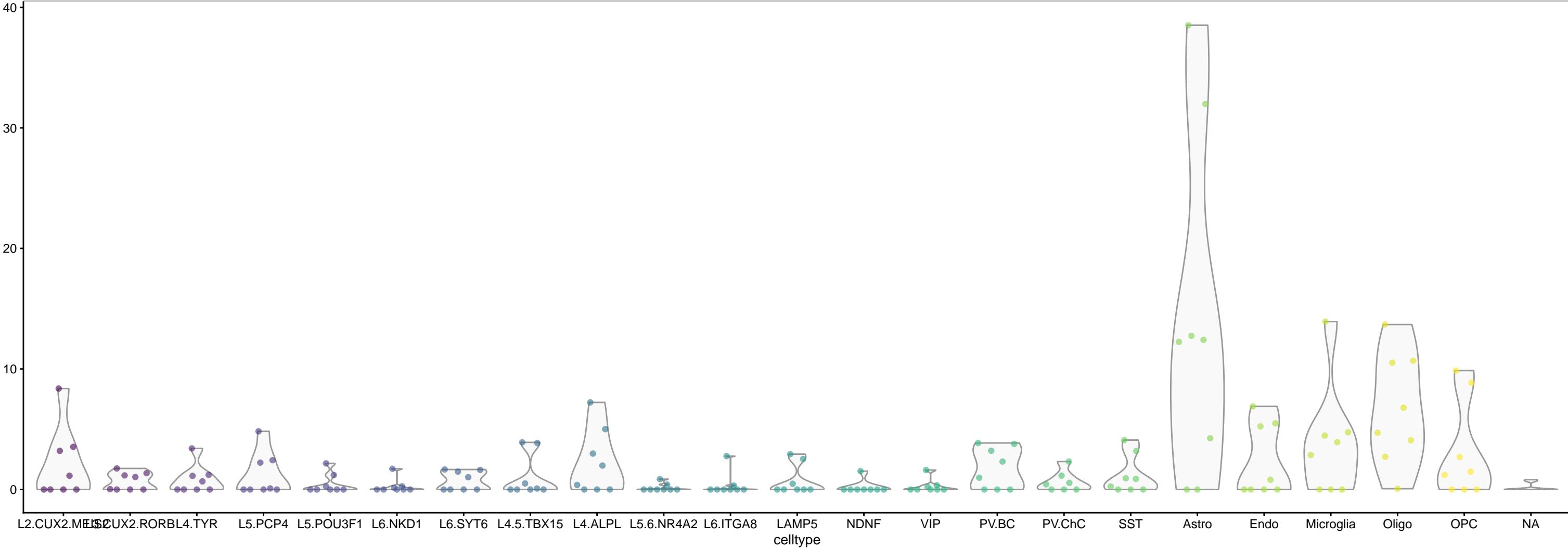
CD320



celltype: VIP, gene: SYCE3, peak:VIP\_1533\_SYCE3

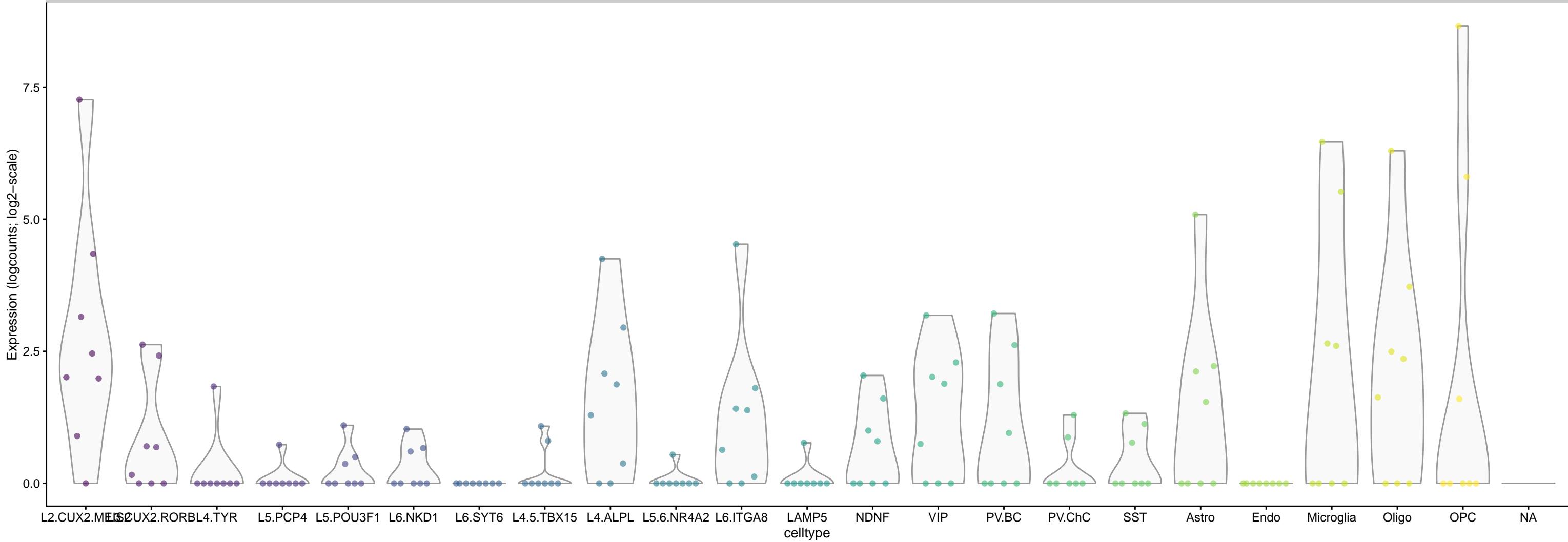
SYCE3

Expression (logcounts; log<sub>2</sub>-scale)



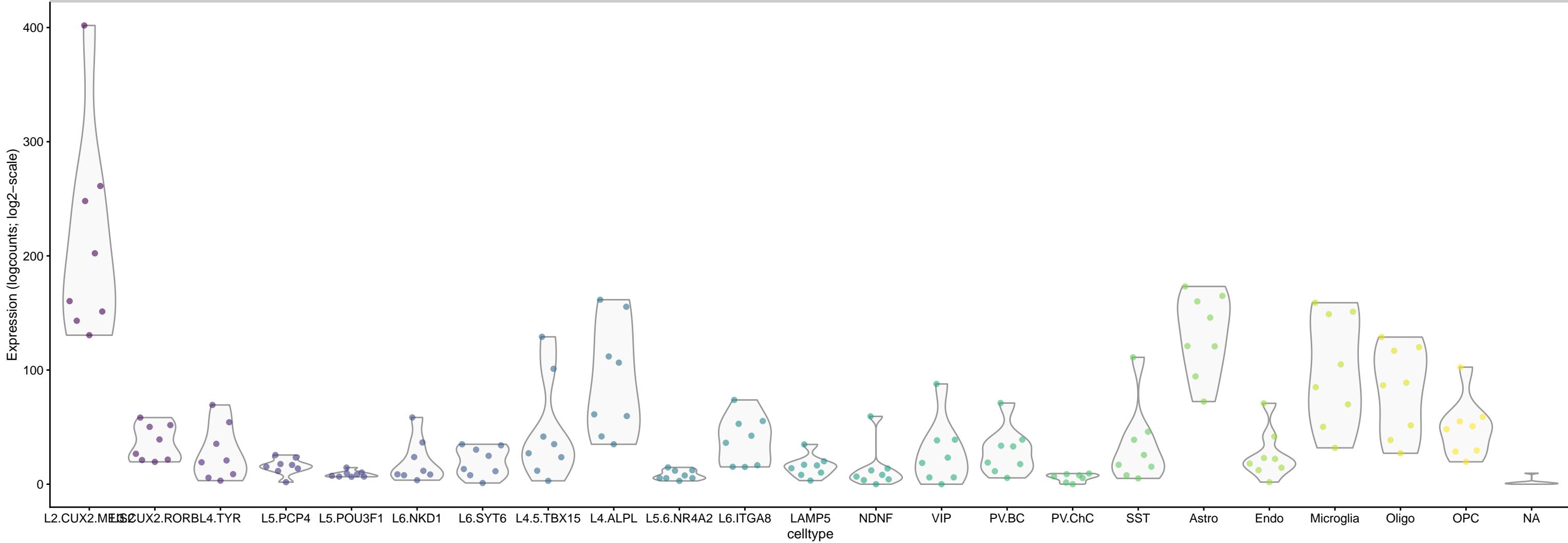
celltype: VIP, gene: LINC02274, peak:VIP\_1544\_LINC02274

LINC02274



celltype: VIP, gene: CEP41, peak:VIP\_1557\_CEP41

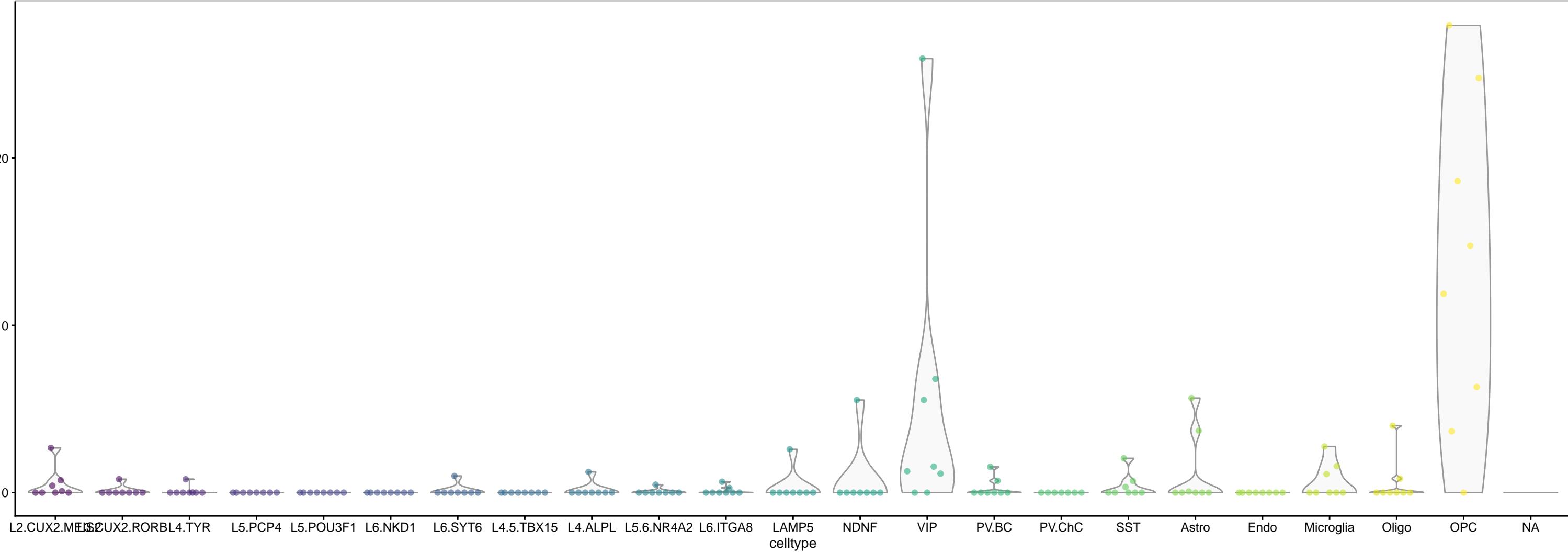
CEP41



celltype: VIP, gene: AQP5, peak:VIP\_1611\_AQP2,AQP5,AQP6,LINC023962

AQP5

Expression (logcounts; log<sub>2</sub>-scale)



celltype: VIP, gene: AQP6, peak:VIP\_1611\_AQP2,AQP5,AQP6,LINC023963

AQP6

