Graphs for Amita's paper - with data from U Laval

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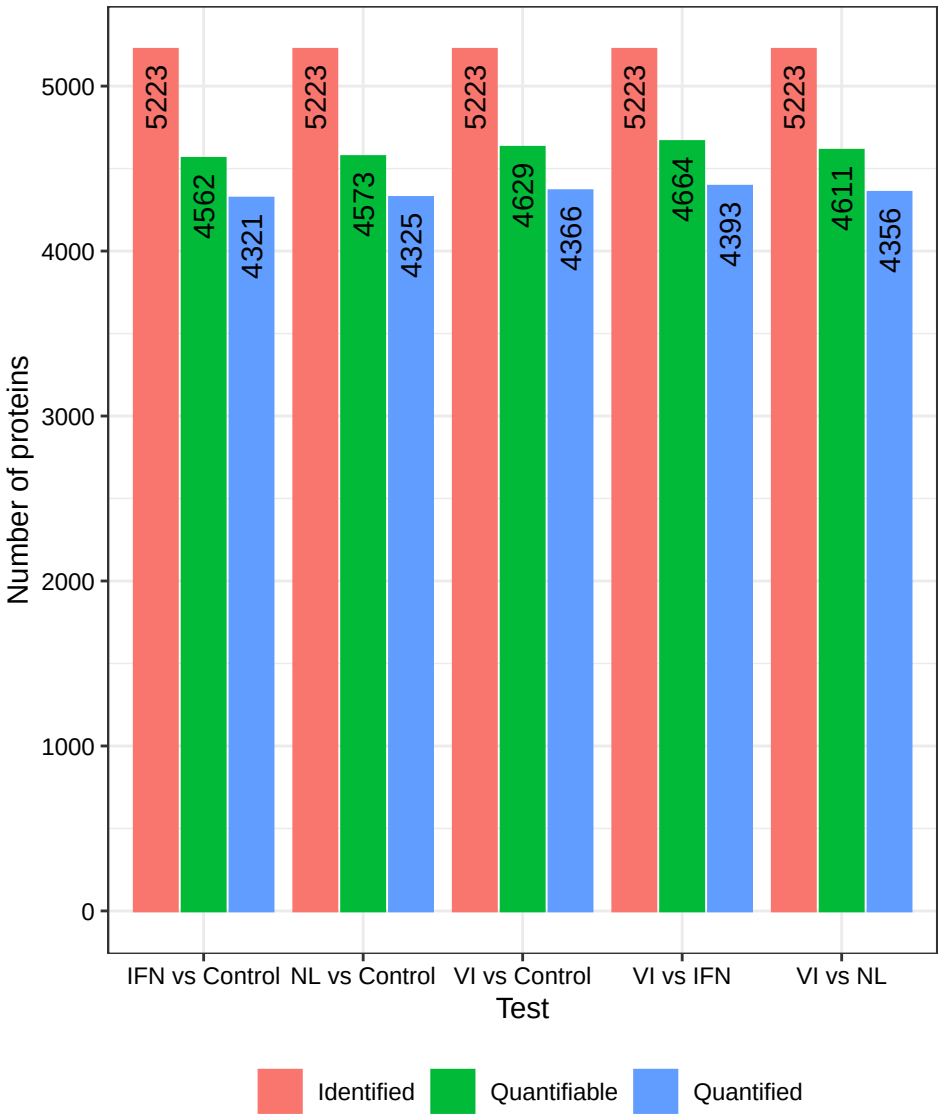
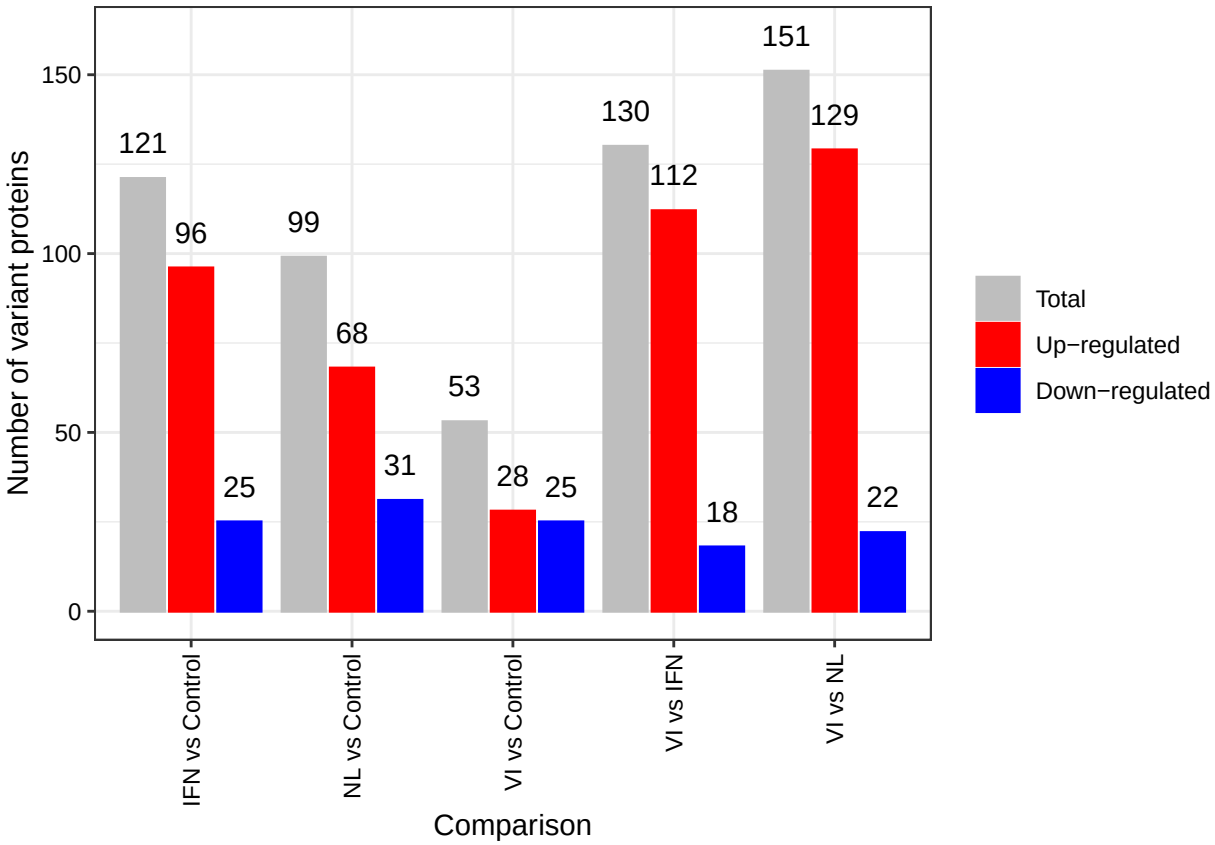
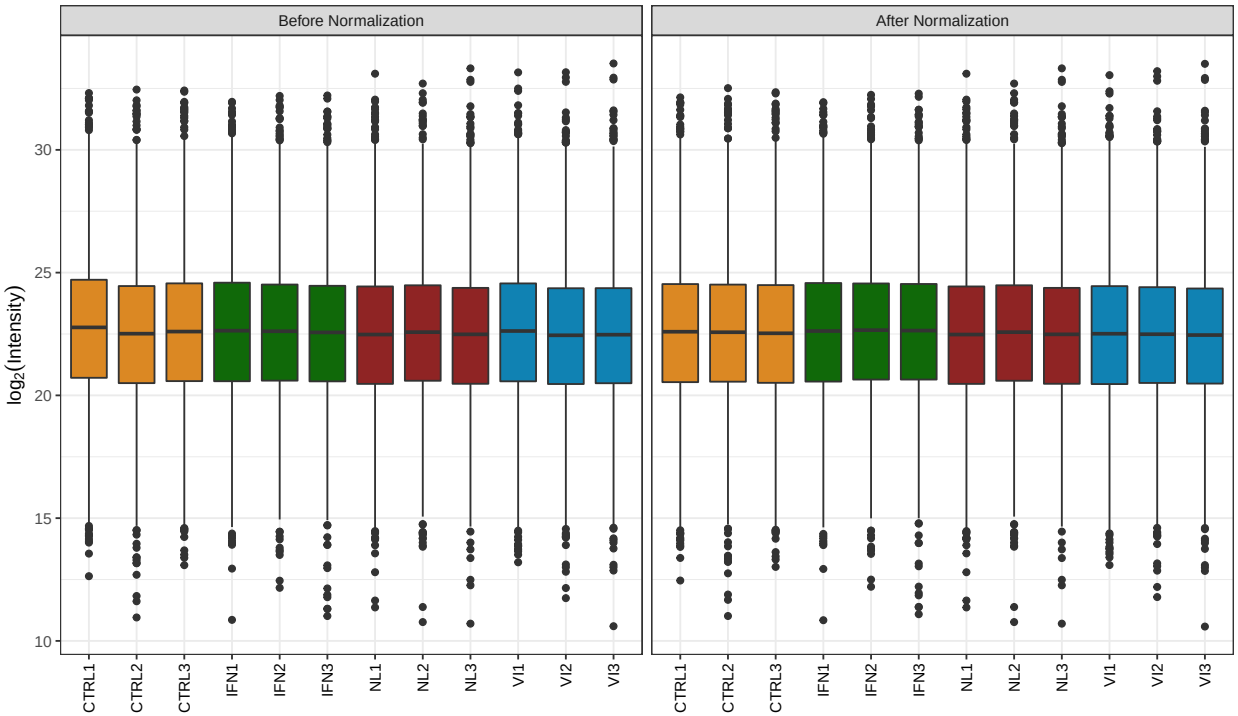
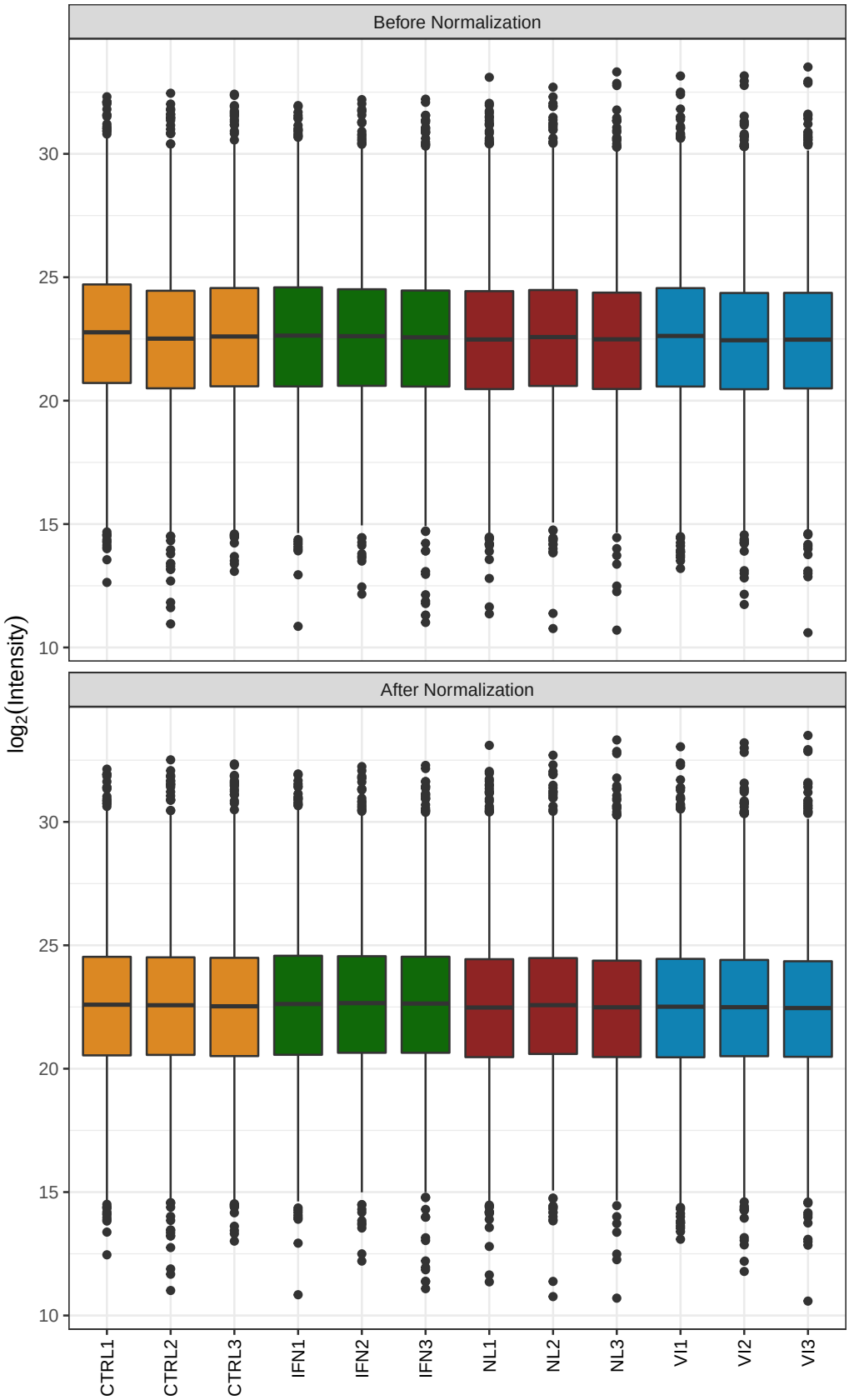


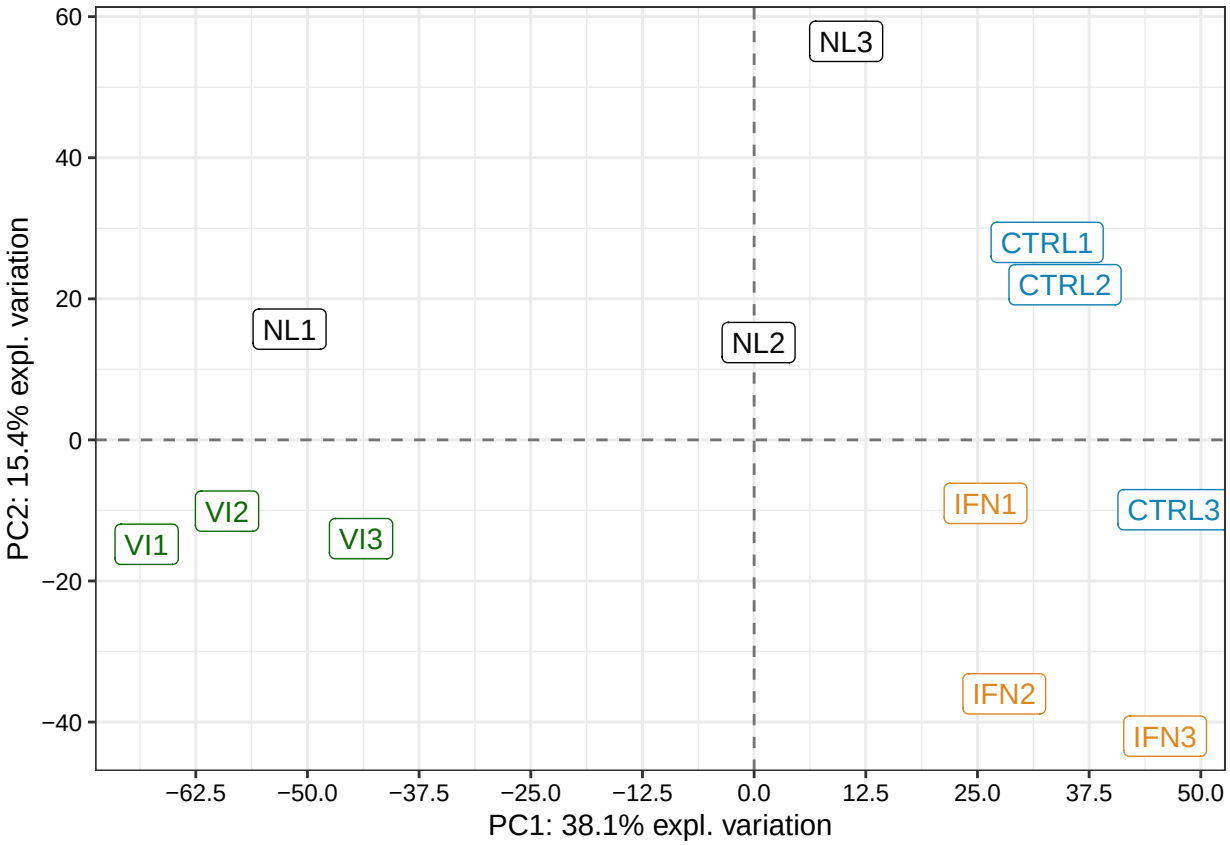


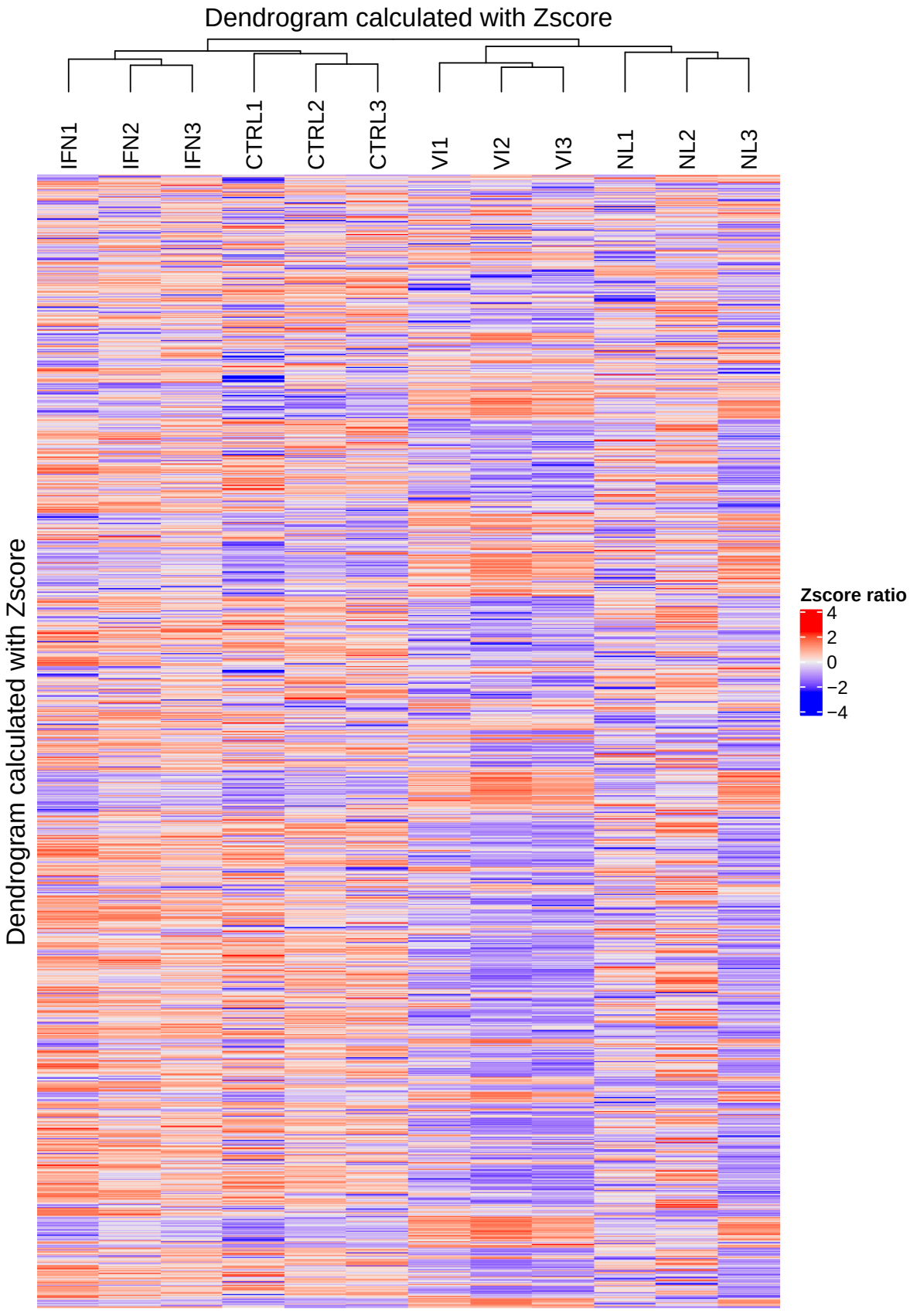
To do the boxplot of the data before normalization, I got the normalization factors from page 3 of the report as I do not have the actual data before normalization. However, as the data was re-analysed, maybe those are not the right normalization factors.

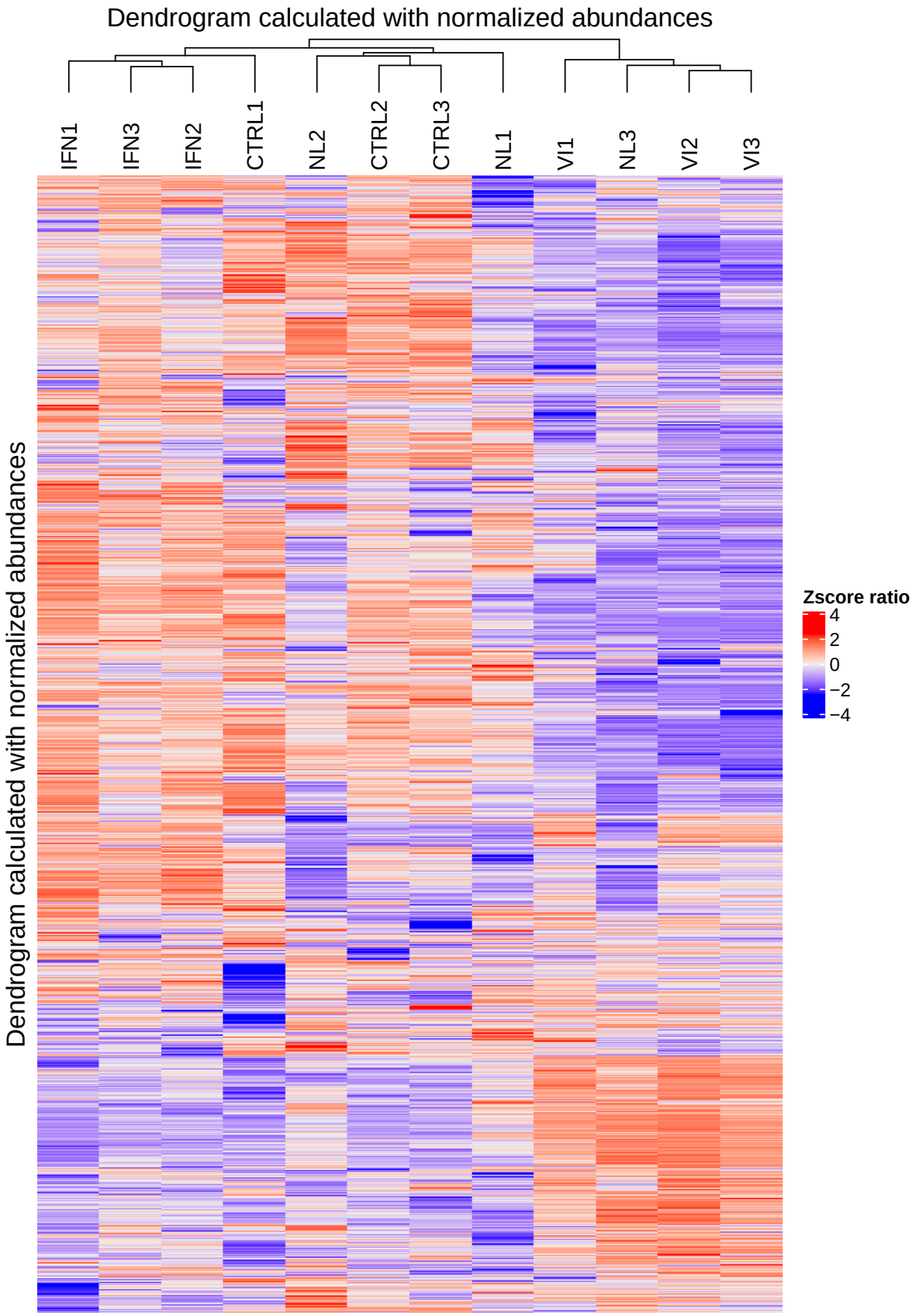
Sample	Normalization factors
CTRL1	1.13
CTRL2	0.96
CTRL3	1.05
IFN1	1.01
IFN2	0.97
IFN3	0.95
VI1	1.08
VI2	0.97
VI3	1.01
NL1	1
NL2	1
NL3	1


Before Normalization
After Normalization
log2(Intensity)
30
25
20
15
10
CTRL1
CTRL2
CTRL3
IFN1
IFN2
IFN3
NL1
NL2
NL3
VI1
VI2
VI3

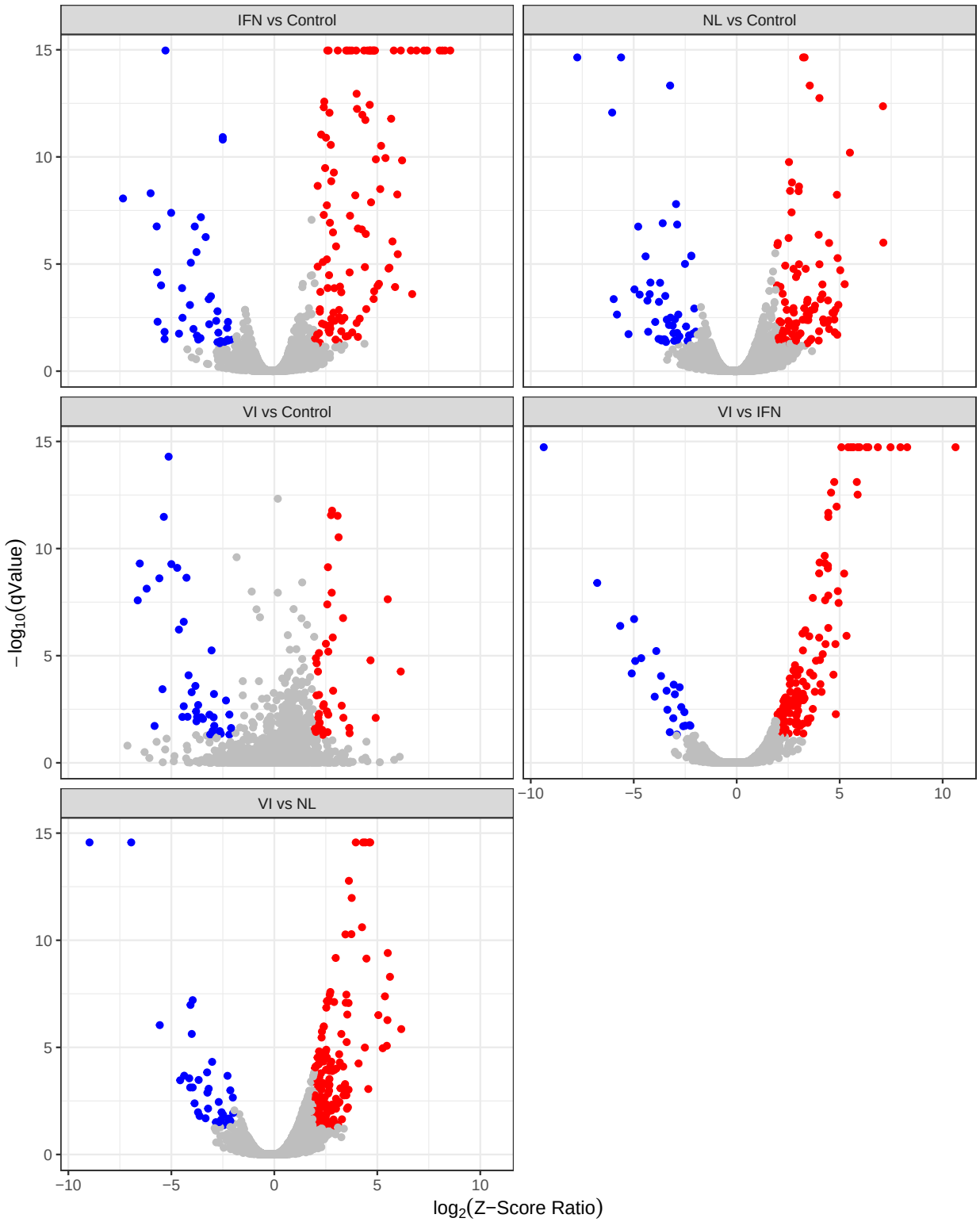

Before Normalization
After Normalization
log2(Intensity)
30
25
20
15
10
CTRL1
CTRL2
CTRL3
IFN1
IFN2
IFN3
NL1
NL2
NL3
VI1
VI2
VI3

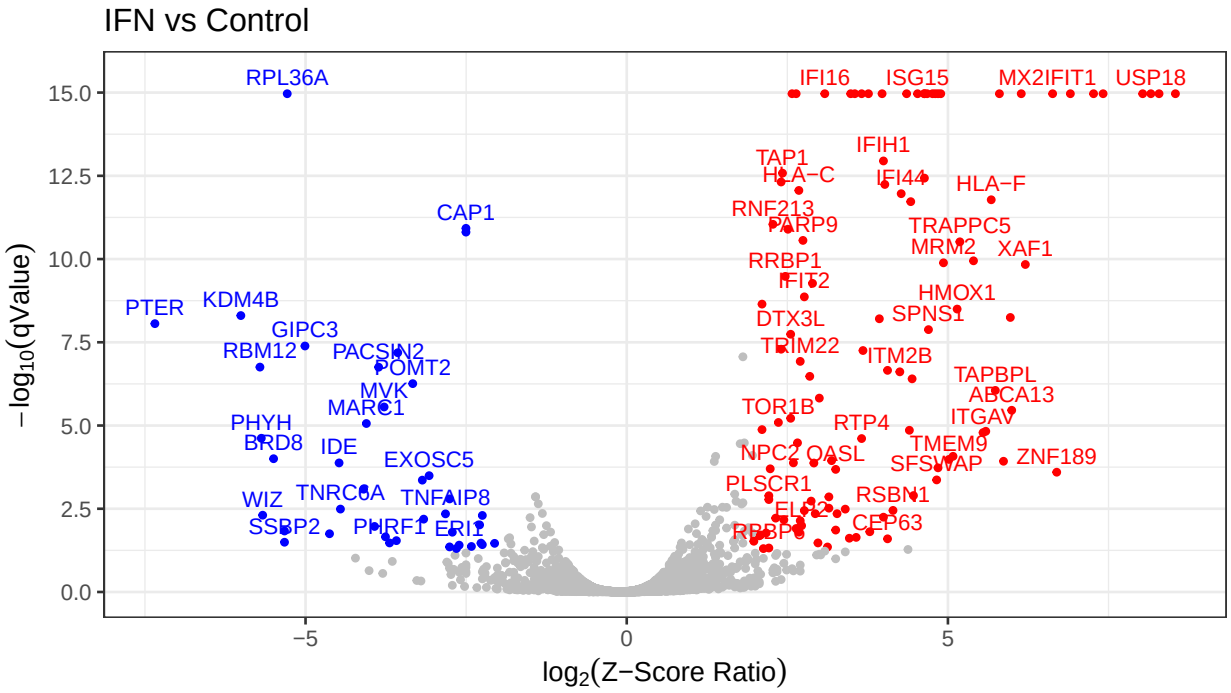

NL3
CTRL1
CTRL2
NL1
NL2
IFN1
CTRL3
VI2
VI1
VI3
IFN2
IFN3
60
40
20
0
−20
−40
−62.5
−50.0
−37.5
−25.0
−12.5
0.0
12.5
25.0
37.5
50.0
PC2: 15.4% expl. variation
PC1: 38.1% expl. variation

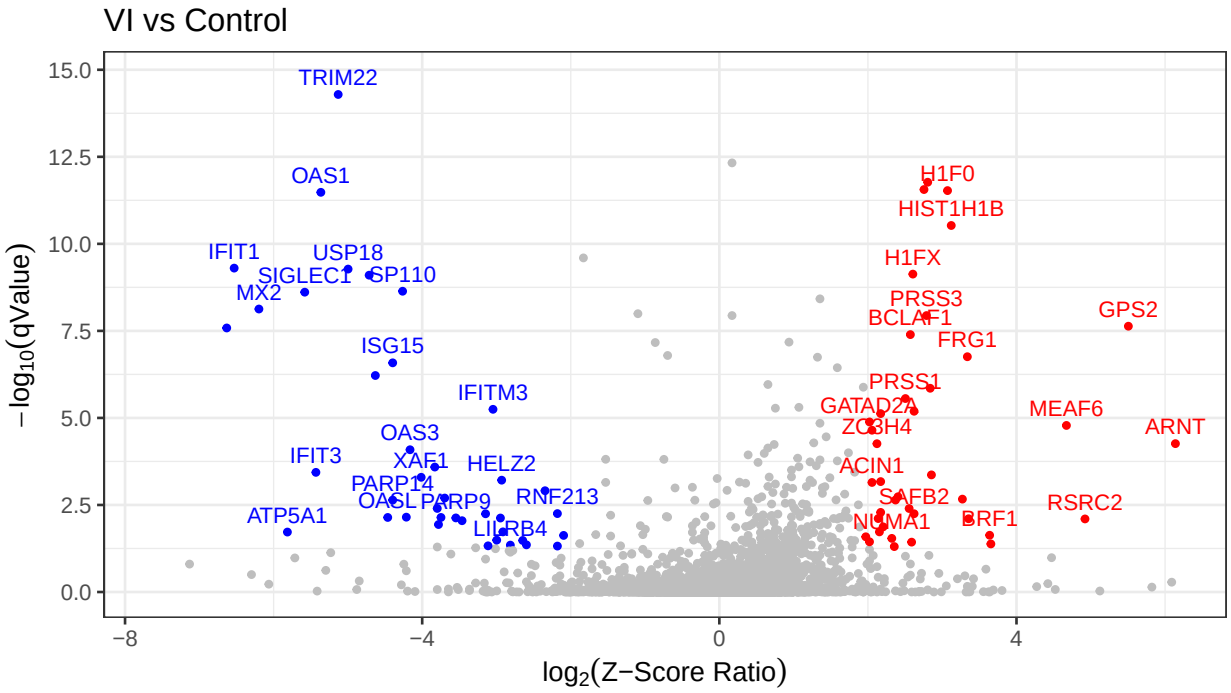

Dendrogram calculated with Zscore
IFN1
IFN2
IFN3
CTRL1
CTRL2
CTRL3
VI1
VI2
VI3
NL1
NL2
NL3
Dendrogram calculated with Zscore
Zscore ratio
4
2
0
−2
−4

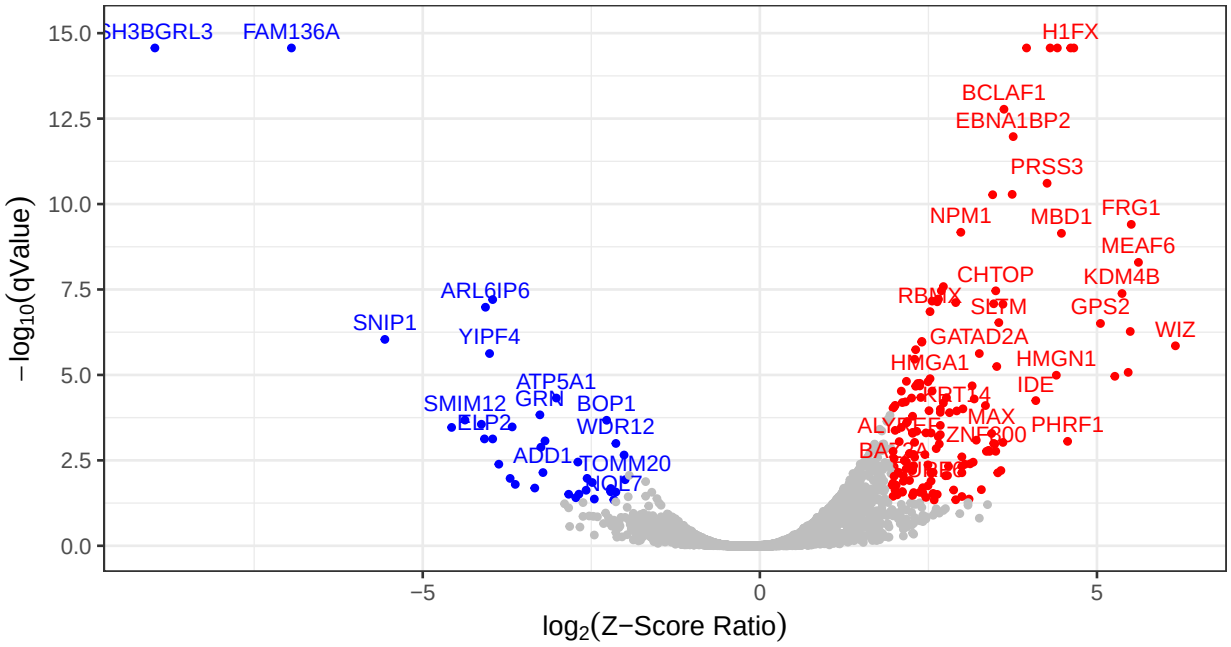

Dendrogram calculated with normalized abundances
IFN1
IFN3
IFN2
CTRL1
NL2
CTRL2
CTRL3
NL1
VI1
NL3
VI2
VI3
Dendrogram calculated with normalized abundances
Zscore ratio
4
2
0
−2
−4

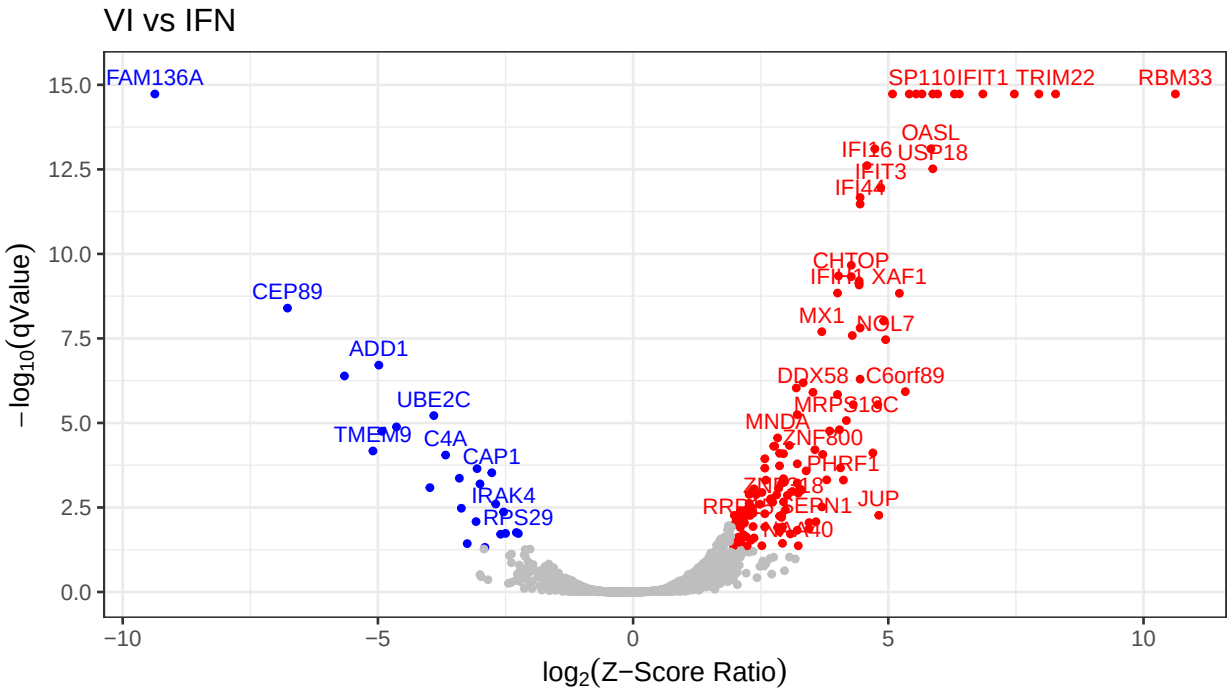
```
volcanos
```

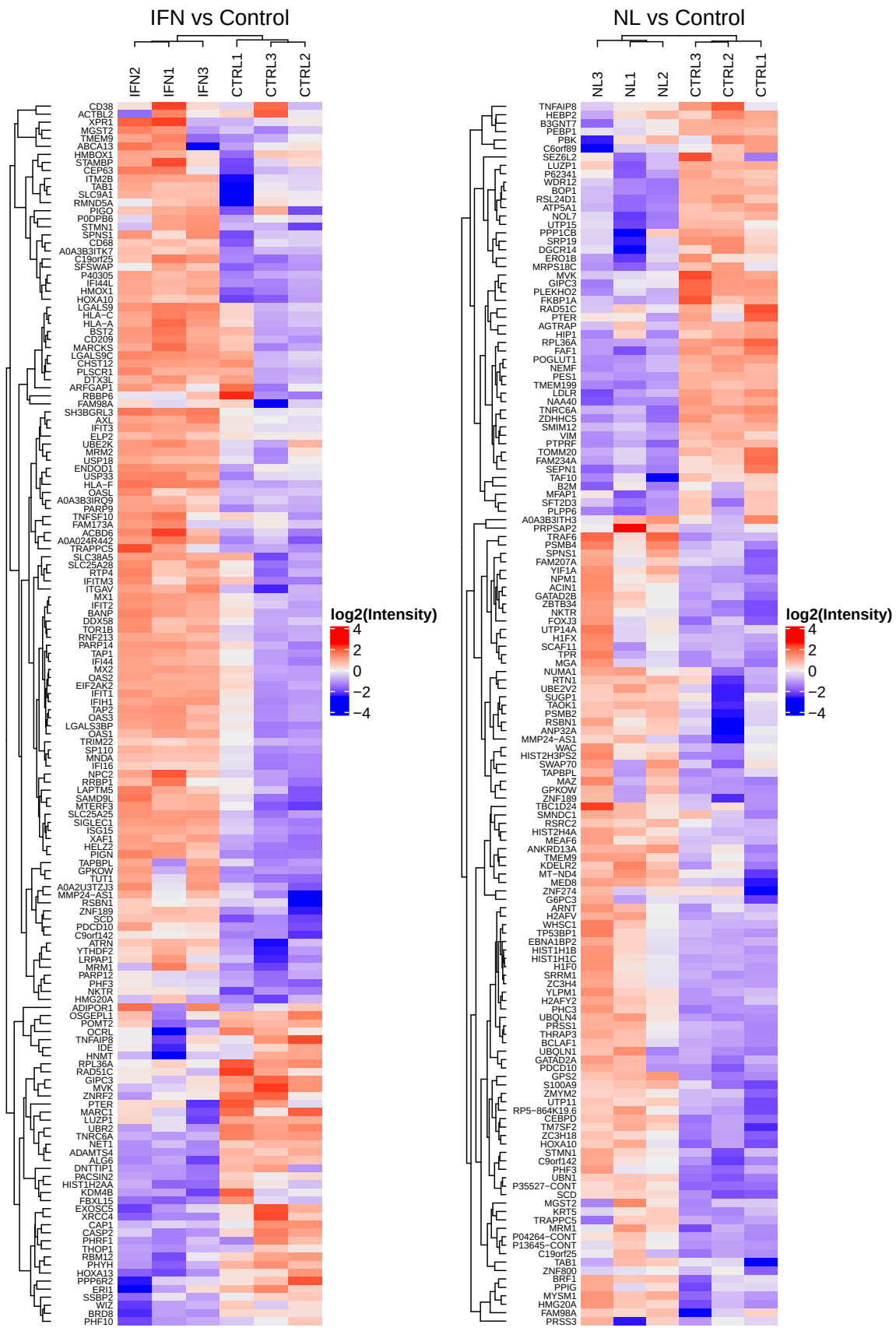

IFN vs Control
NL vs Control
VI vs Control
VI vs IFN
VI vs NL
15
10
5
0
−10
−5
0
5
10
−log10(qValue)
log2(Z−Score Ratio)


IFN vs Control
RPL36A
IFI16
ISG15
MX2IFIT1
USP18
IFIH1
TAP1
HLA−C
IFI44
HLA−F
CAP1
RNF213
PARP9
TRAPPC5
MRM2
XAF1
RRBP1
FIT2
HMOX1
PTER
KDM4B
DTX3L
SPNS1
GIPC3
RBM12
PACSIN2
TRIM22
ITM2B
POMT2
TAPBPL
MVK
ABCA13
MARC1
TOR1B
RTP4
ITGAV
PHYH
BRD8
IDE
EXOSC5
NPC2
OASL
TMEM9
SFSWAP
ZNF189
PLSCR1
WIZ
TNRC6A
TNFAIP8
RSBN1
SSBP2
PHRF1
ERI1
CEP63
RBBP6
−log10(qValue)
log2(Z−Score Ratio)
NL vs Control
NOL7
ATP5A1
HIST1H1C
BOP1
THRAP3
MGST2
FAF1
GPS2
C9orf142
NPM1
H1F0
SCD
WDR12
PRSS1
RPL36A
TOMM20
ACIN1
TRAF6
ARNT
PTPRF
EBNA1BP2
HOXA10
RSBN1
H1FX
ZDHHC5
TPR
CEBPD
C6orf89
TAF10
SUGP1
B2M
ZC3H18
LUZP1
TMEM9
MRPS18C
GATAD2A
ERO1B
UTP15
ZNF189
NAA40
SCAF11
ZNF800
−log10(qValue)
log2(Z−Score Ratio)


VI vs Control
TRIM22
OAS1
IFIT1
USP18
SIGLEC1
CP110
MX2
ISG15
IFITM3
OAS3
IFIT3
XAF1
HELZ2
PARP14
OASL
PARP9
RNF213
ATP5A1
LILRB4
H1F0
HIST1H1B
H1FX
PRSS3
BCLAF1
FRG1
GPS2
PRSS1
GATAD2A
ZC3H4
MEAF6
ARNT
ACIN1
SAFB2
NUMA1
BRF1
RSRC2
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−8
−4
0
4
−log10(qValue)
log2(Z−Score Ratio)


VI vs NL
SH3BGRL3
FAM136A
ARL6IP6
SNIP1
YIPF4
ATP5A1
SMIM12
GRN
BOP1
ELP2
WDR12
ADD1
TOMM20
NOP7
H1FX
BCLAF1
EBNA1BP2
PRSS3
NPM1
MBD1
FRG1
MEAF6
CHTOP
KDM4B
RBMX
SETM
GPS2
WIZ
GATAD2A
HMGA1
HMGN1
IDE
MAX
PHRF1
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−5
0
5
−log10(qValue)
log2(Z−Score Ratio)


VI vs IFN
FAM136A
SP110
IFIT1
TRIM22
RBM33
OASL
IFI16
USP18
IFIT3
IFI44
CHTOP
IFI44L
XAF1
CEP89
MX1
NCL7
ADD1
DDX58
C6orf89
UBE2C
MRPS18C
MNDA
TMEM9
C4A
ZNF800
CAP1
PHRF1
IRAK4
JUP
RPS29
SERN1
15.0
12.5
10.0
7.5
5.0
2.5
0.0
−10
−5
0
5
10
−log10(qValue)
log2(Z−Score Ratio)


IFN vs Control
IFN2
IFN1
IFN3
CTRL1
CTRL3
CTRL2
log2(Intensity)
4
2
0
−2
−4
NL vs Control
NL3
NL1
NL2
CTRL3
CTRL2
CTRL1
log2(Intensity)
4
2
0
−2
−4