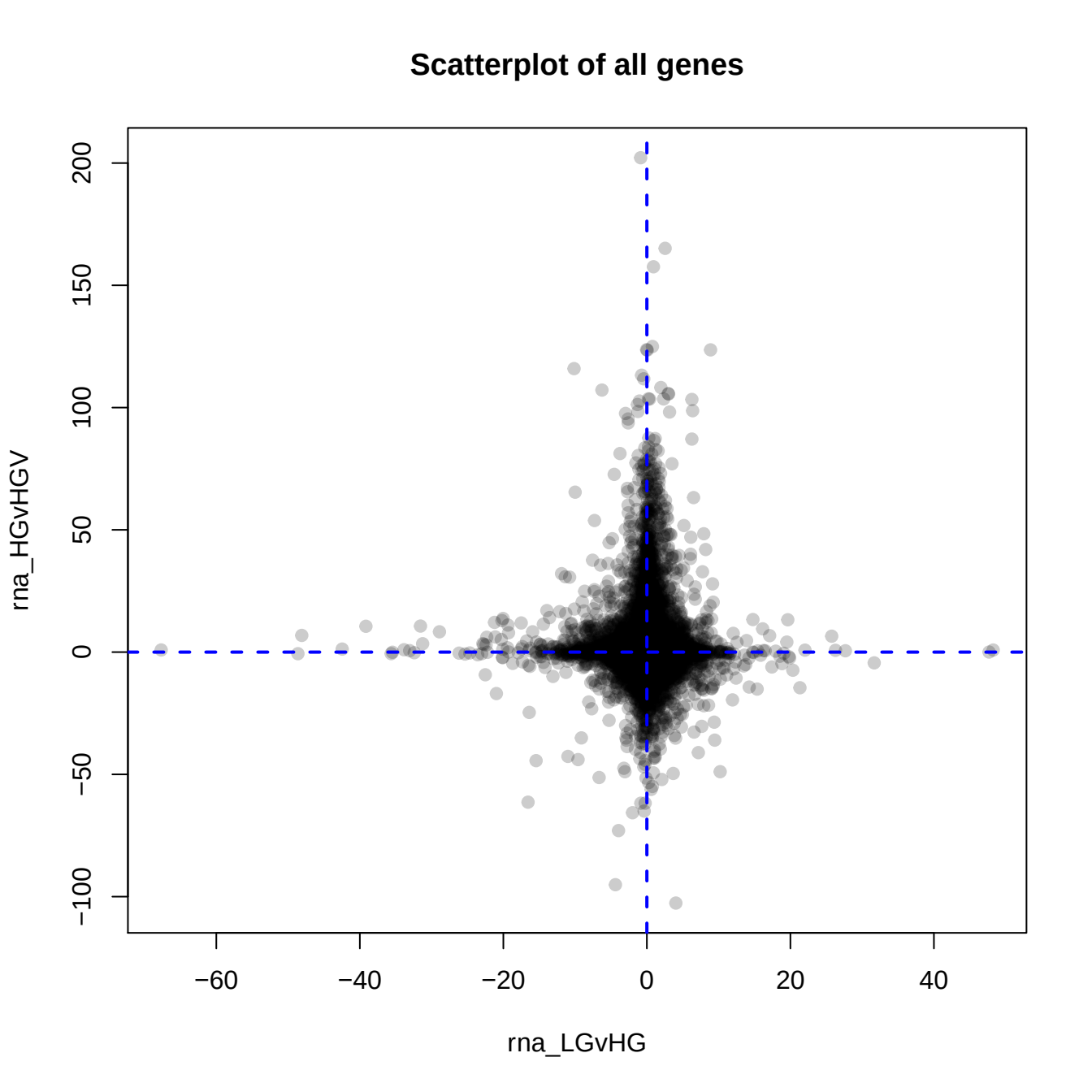
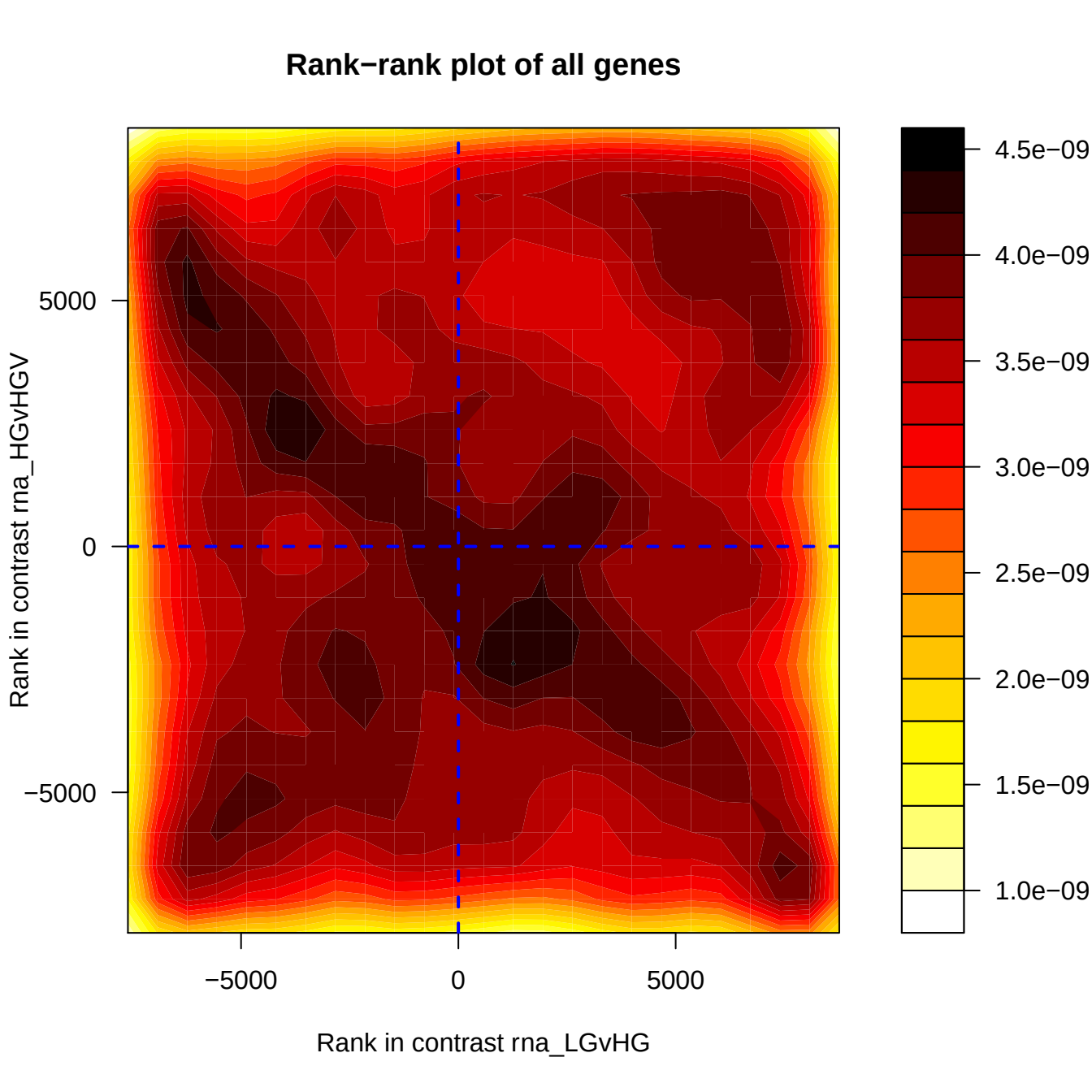
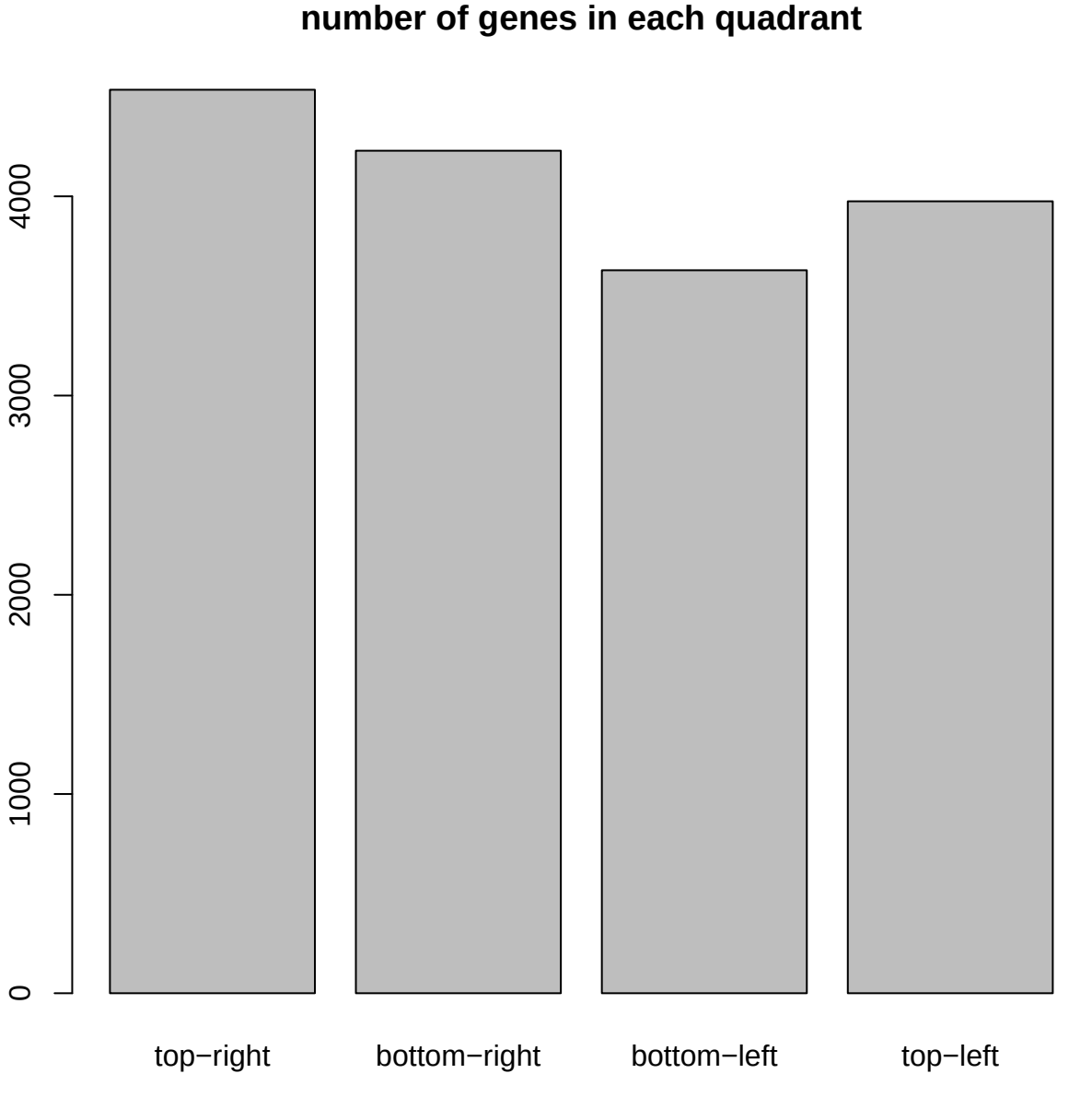
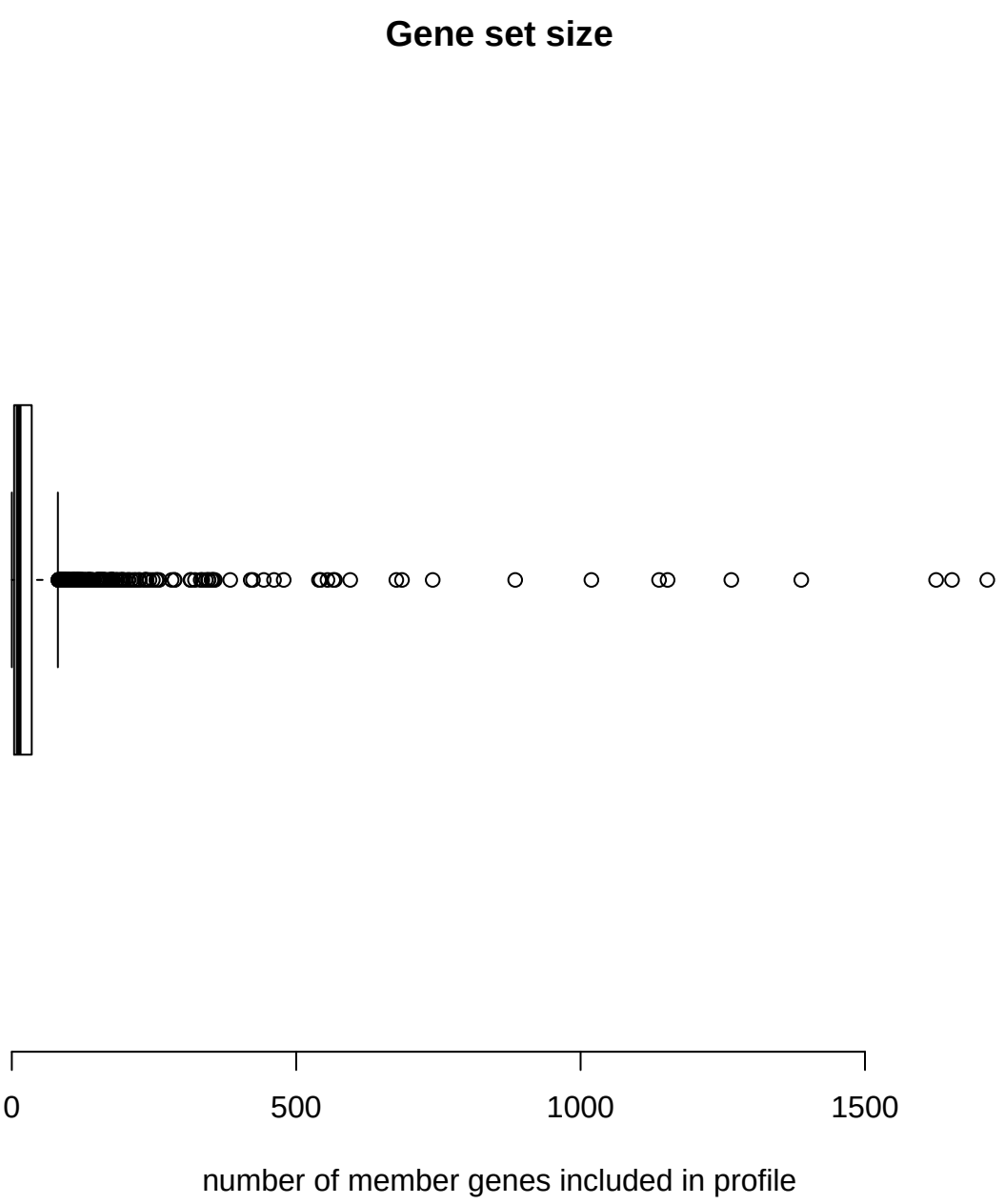
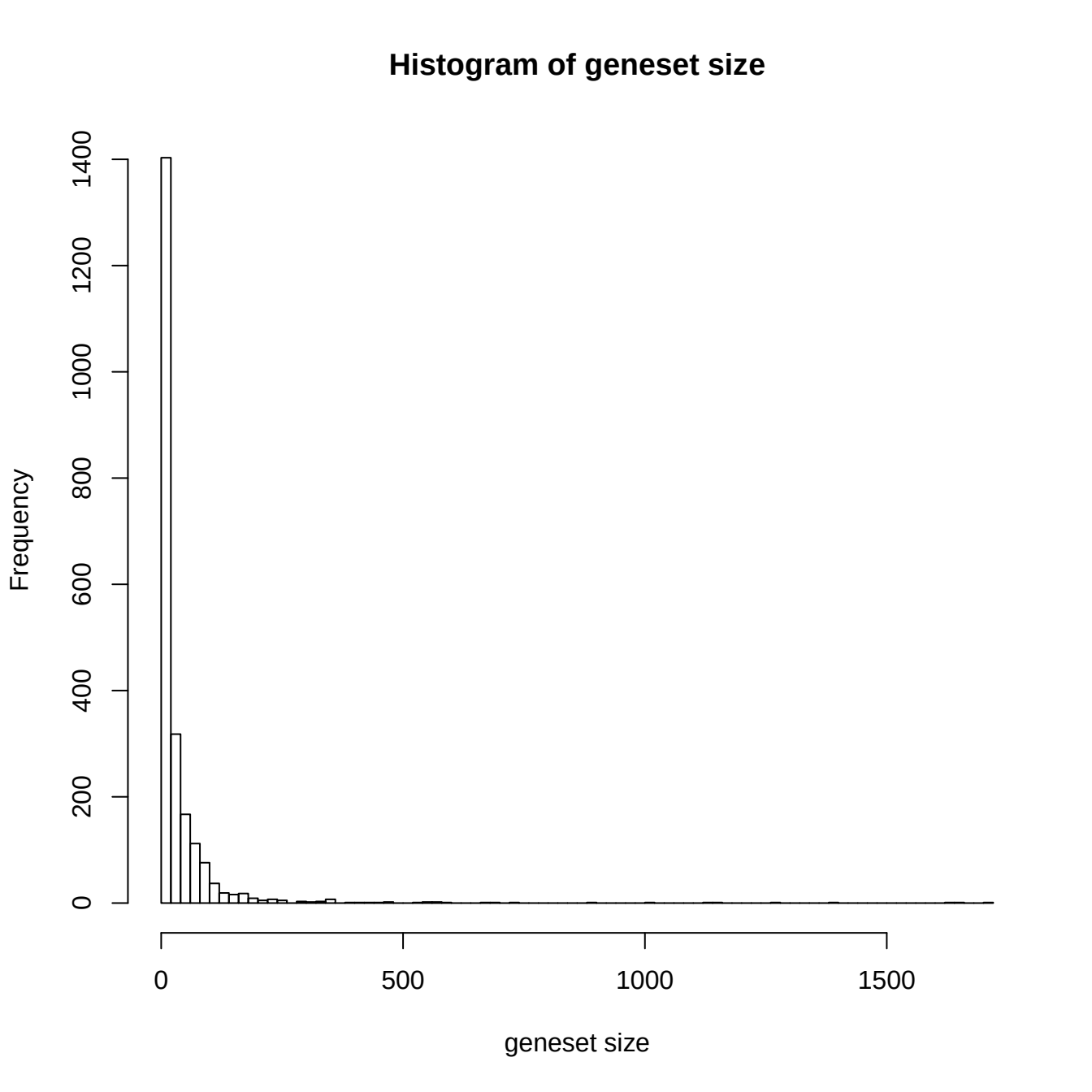
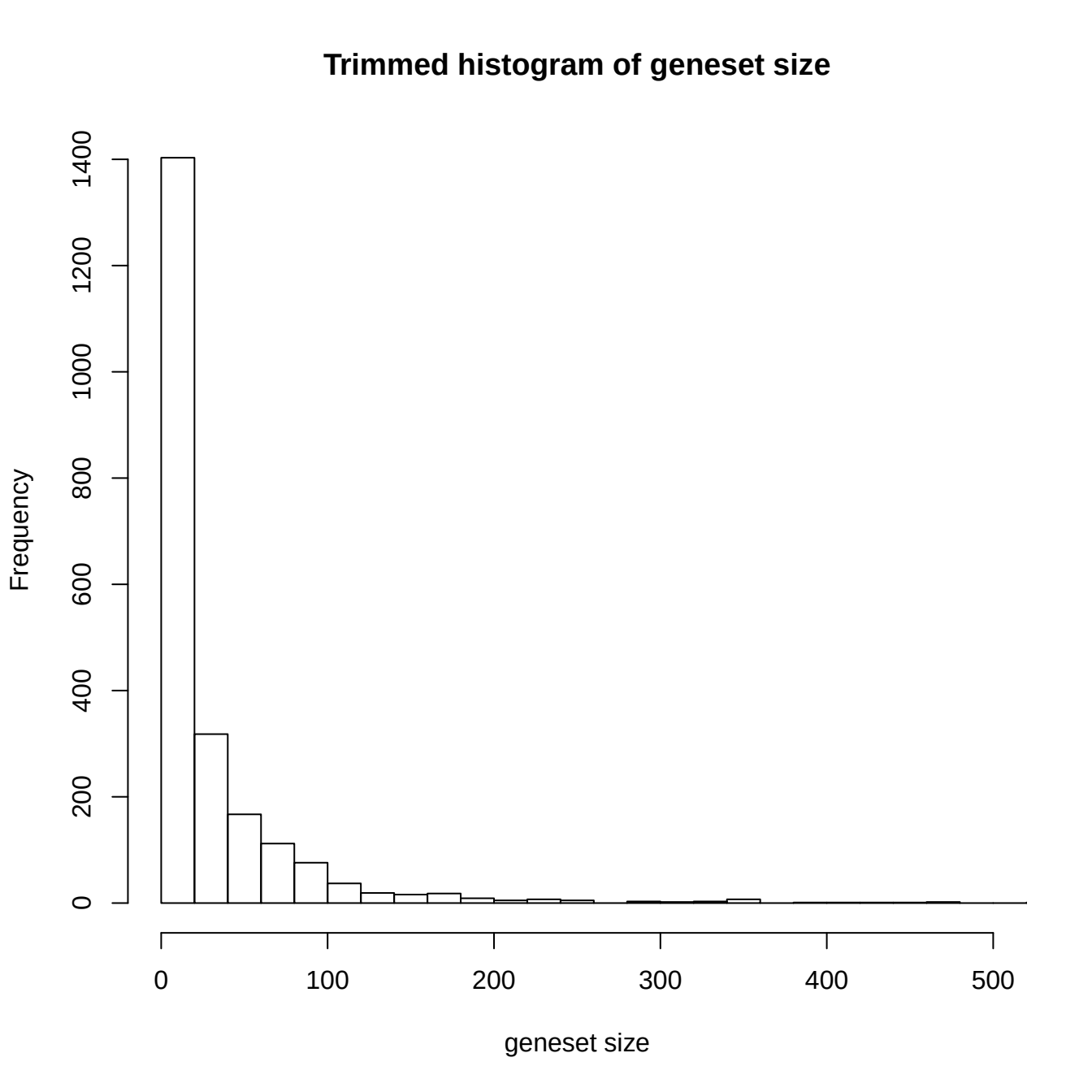

Scatterplot of all genes
rna_HGvHGV
200
150
100
50
0
−50
−100
−60
−40
−20
0
20
40
rna_LGvHG

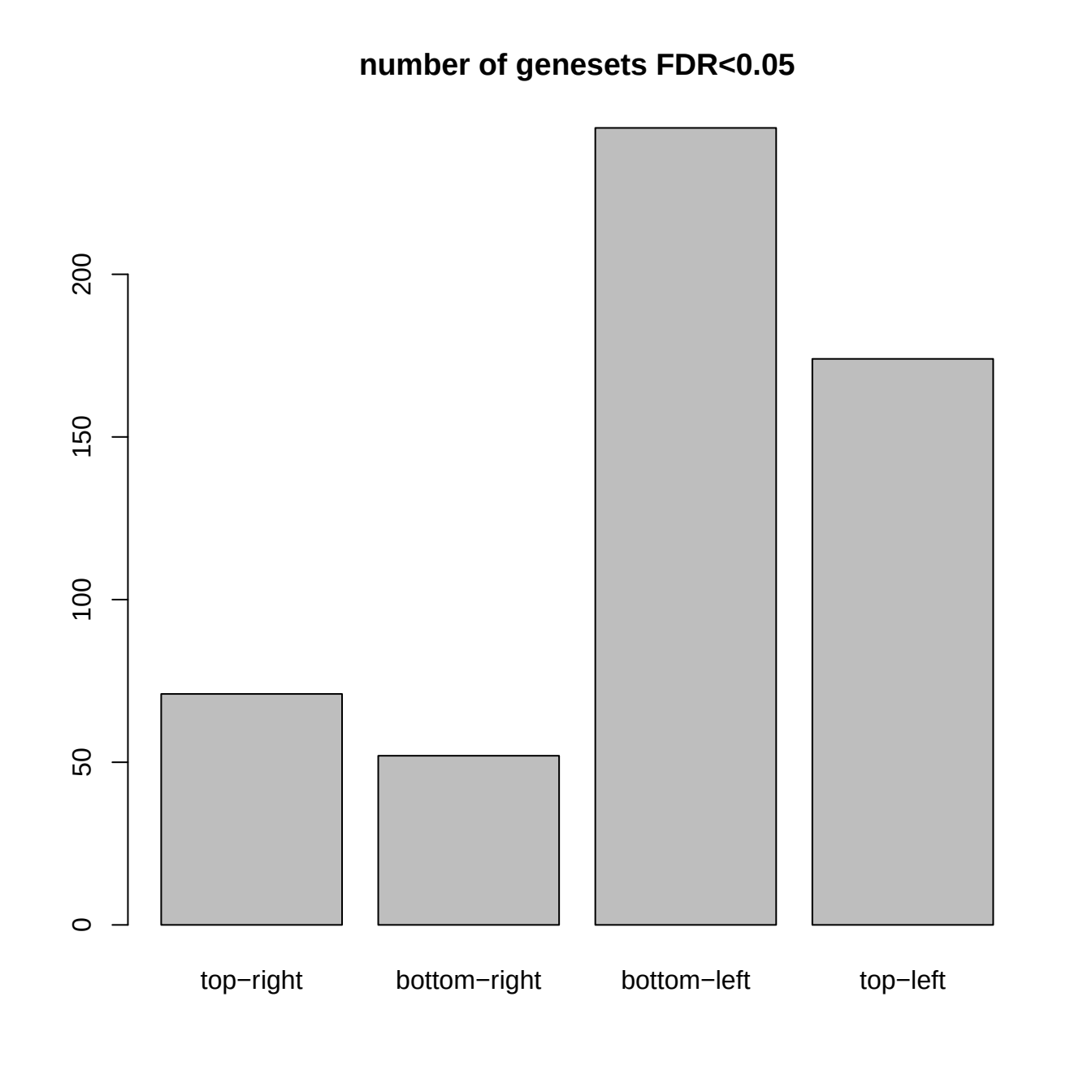

Rank−rank plot of all genes
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
4.5e−09
4.0e−09
3.5e−09
3.0e−09
2.5e−09
2.0e−09
1.5e−09
1.0e−09

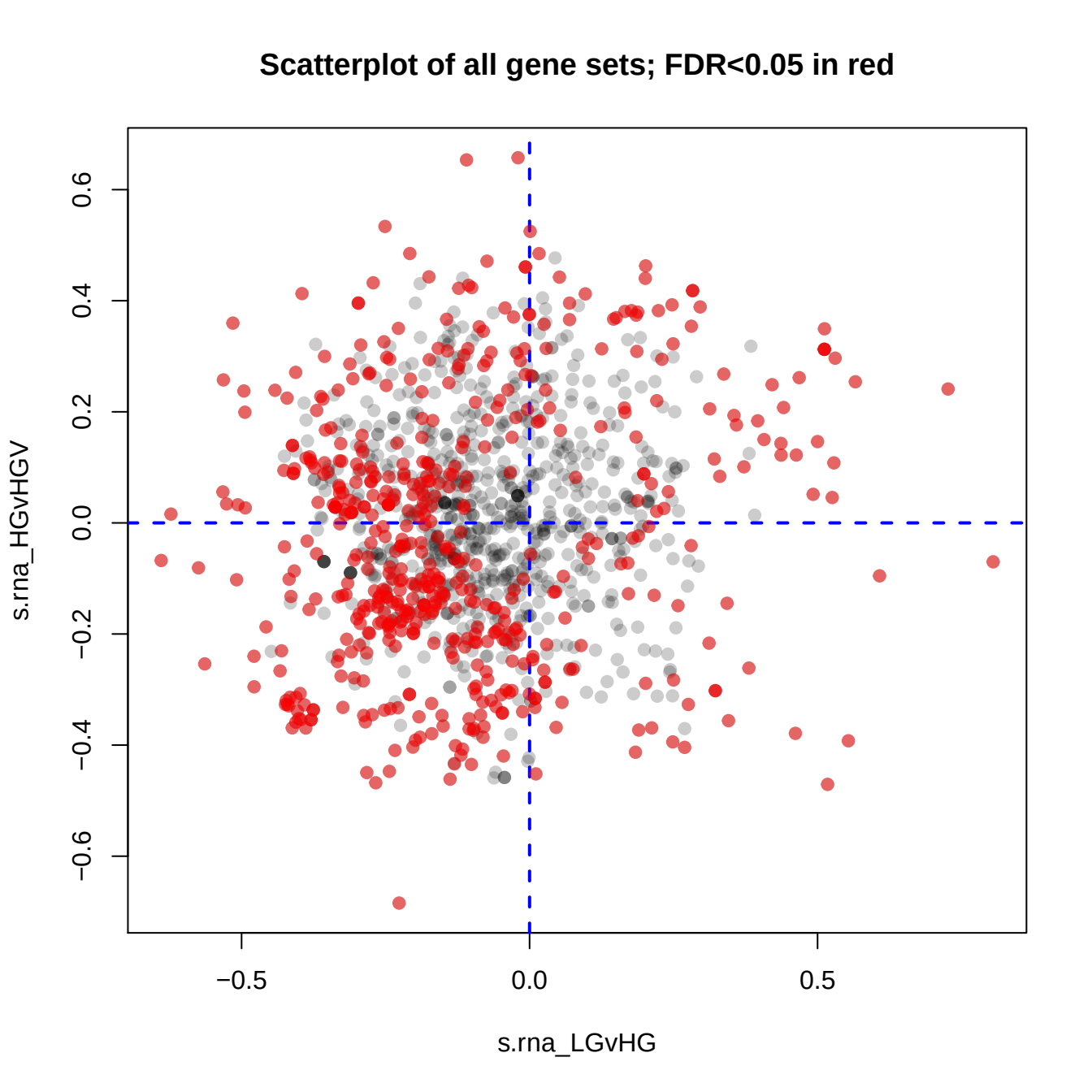

number of genes in each quadrant
0
1000
2000
3000
4000
top−right
bottom−right
bottom−left
top−left

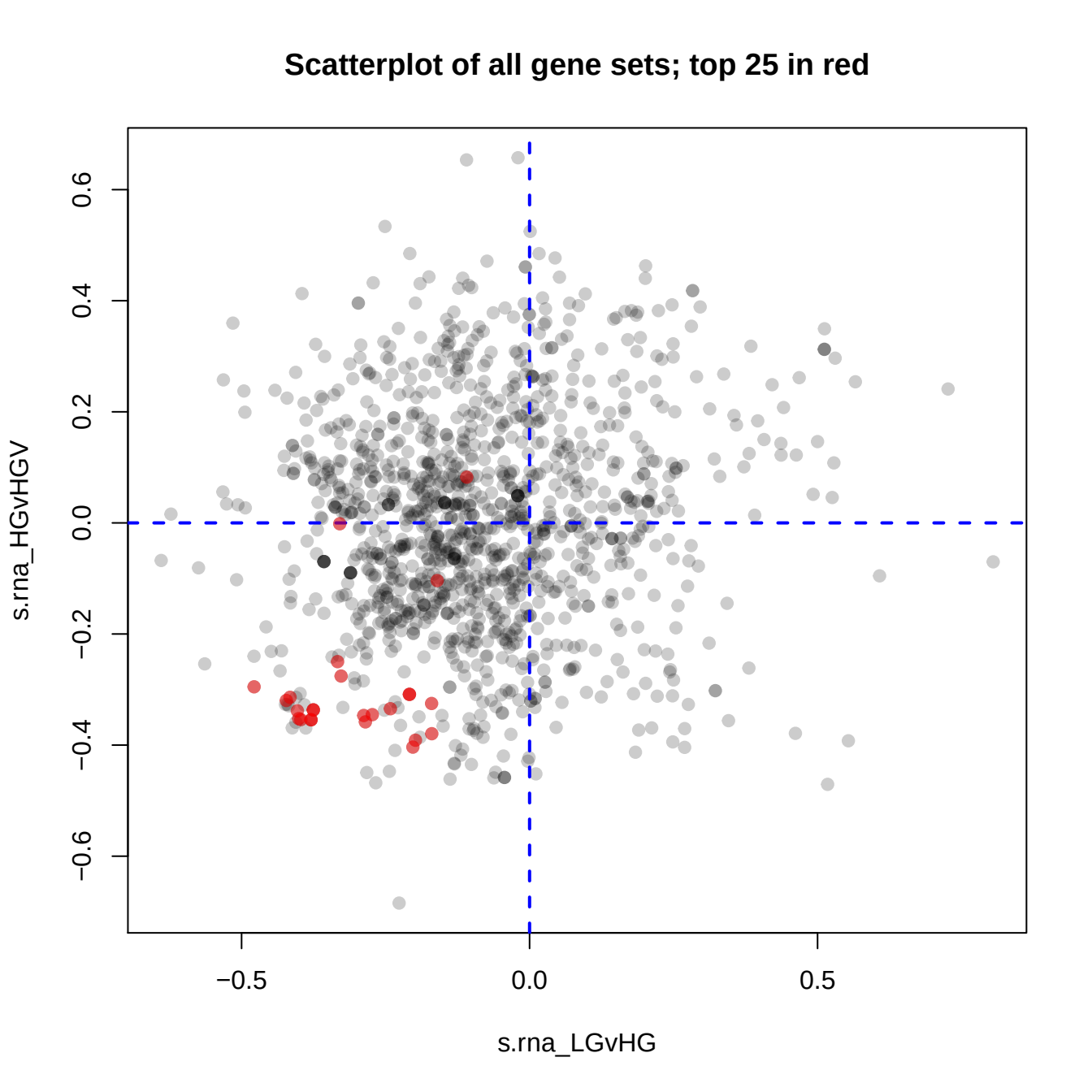

Gene set size
0
500
1000
1500
number of member genes included in profile

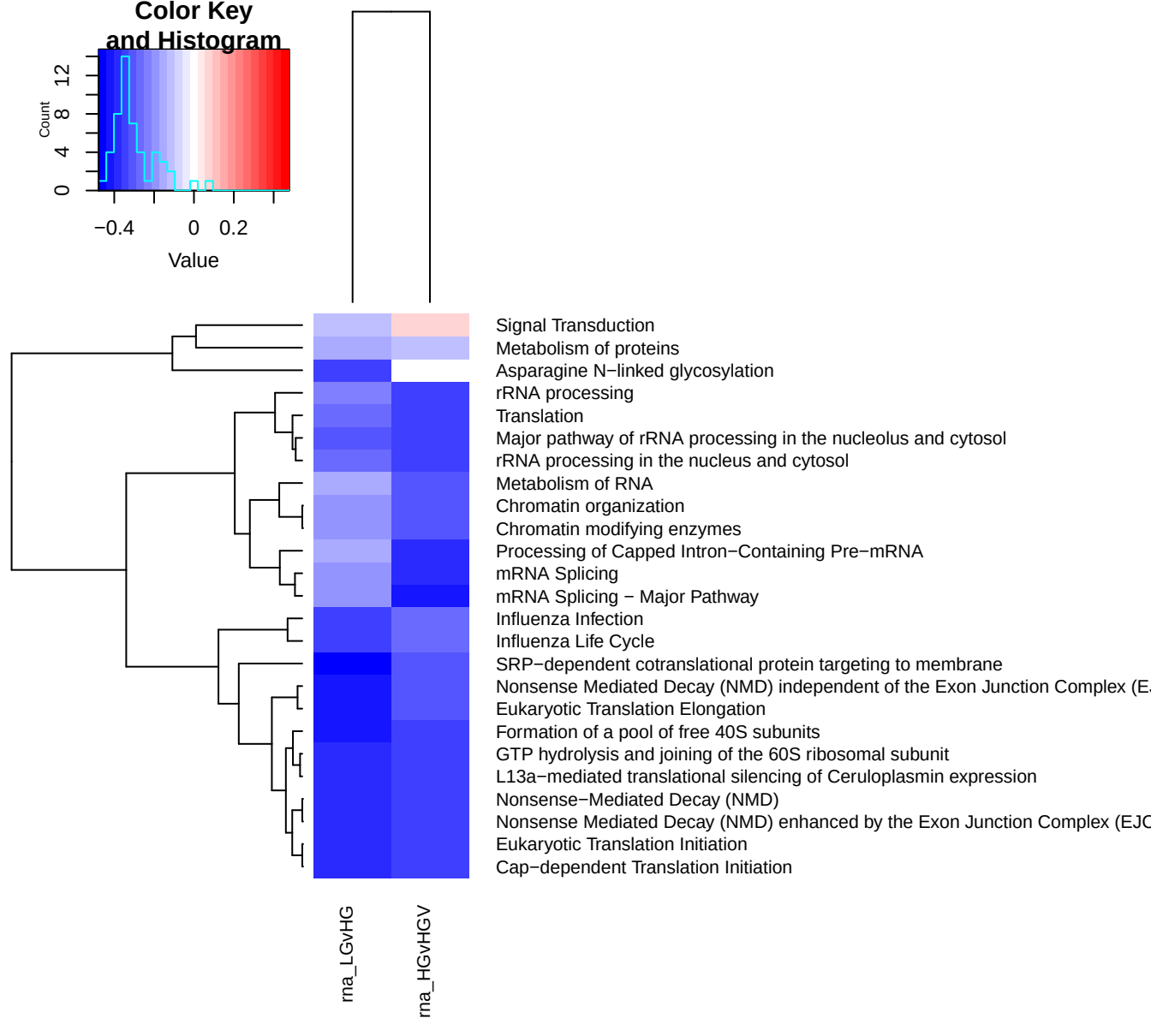

Histogram of geneset size
Frequency
0
200
400
600
800
1000
1200
1400
0
500
1000
1500
geneset size

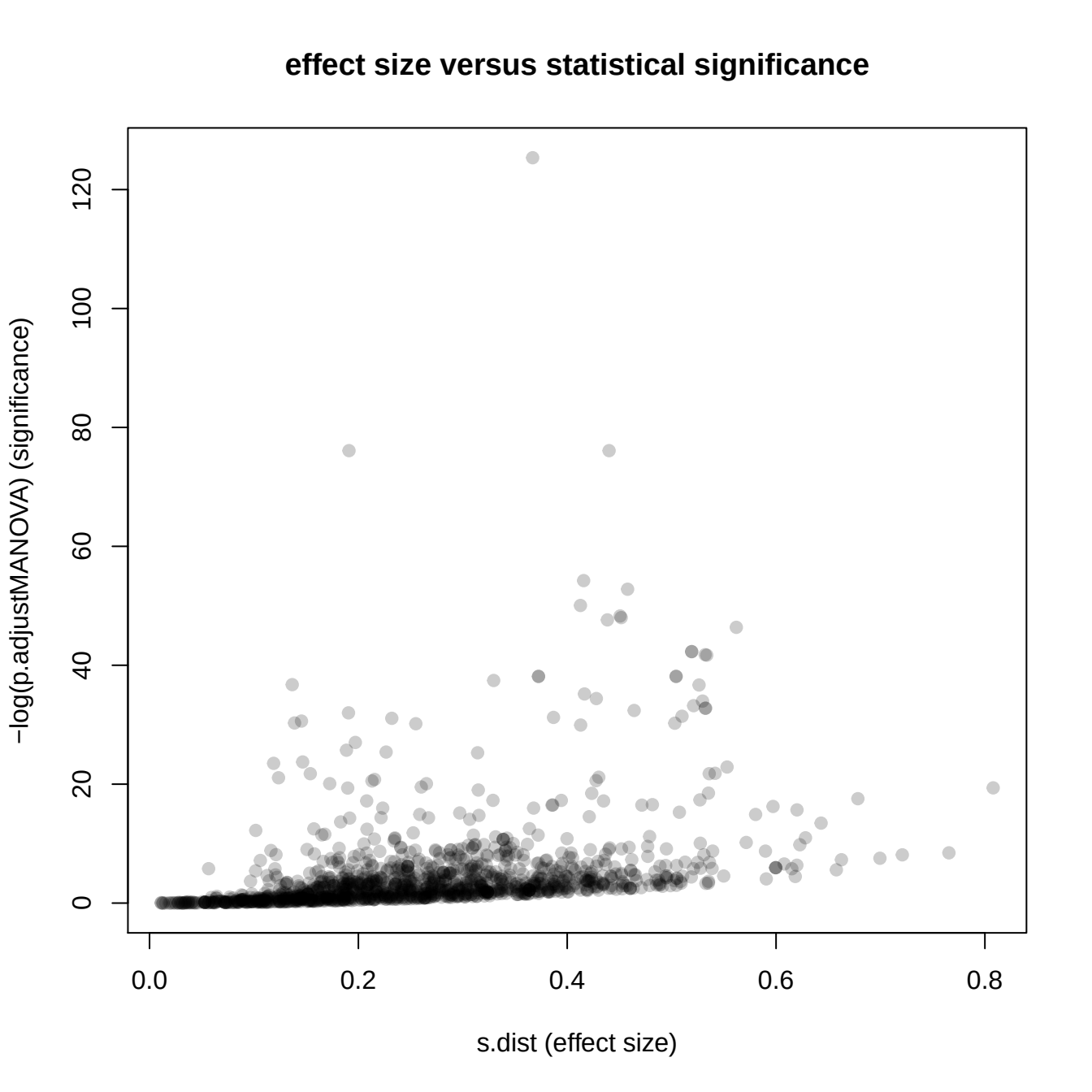

Trimmed histogram of geneset size
Frequency
0
200
400
600
800
1000
1200
1400
0
100
200
300
400
500
geneset size

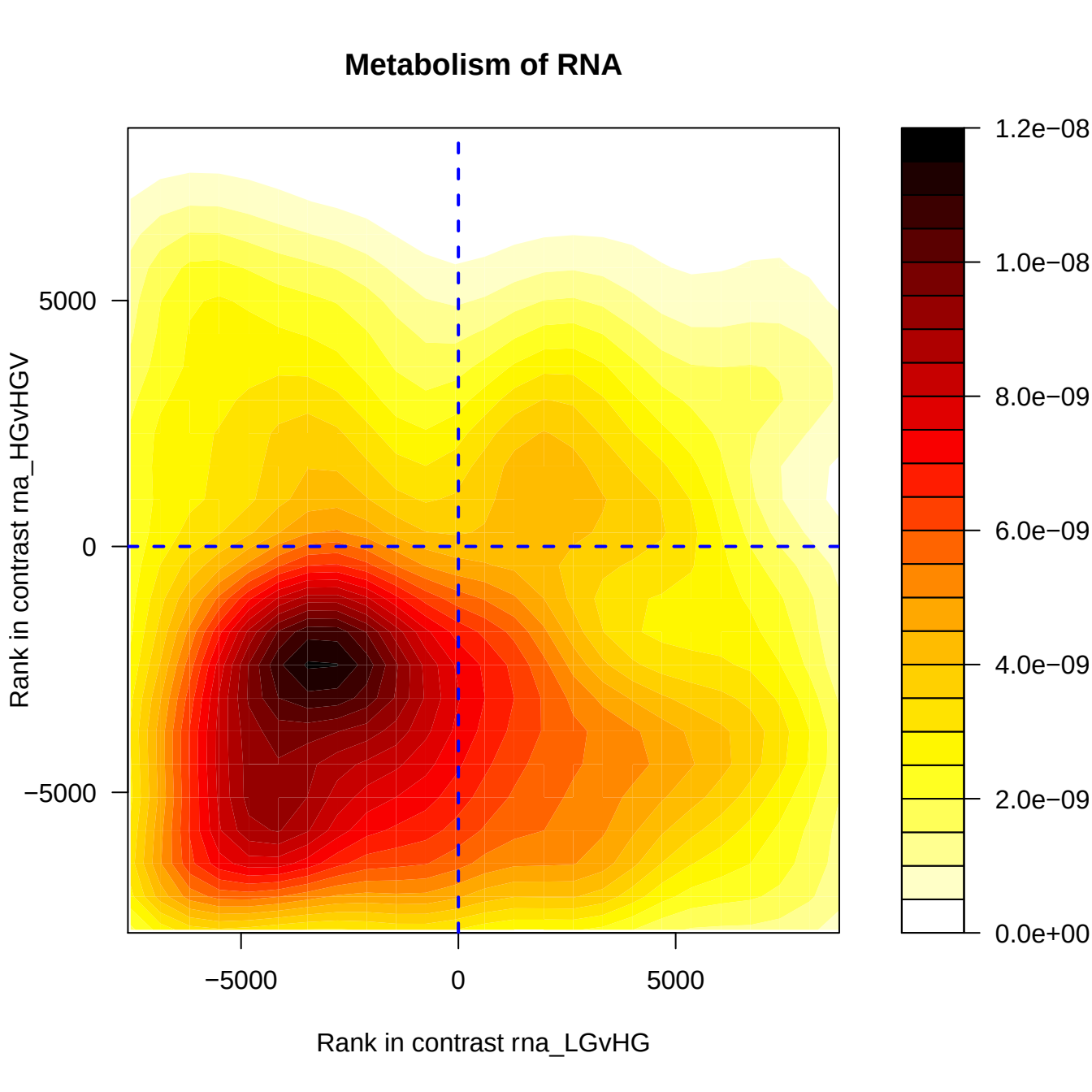

number of genesets FDR<0.05
0
50
100
150
200
top−right
bottom−right
bottom−left
top−left

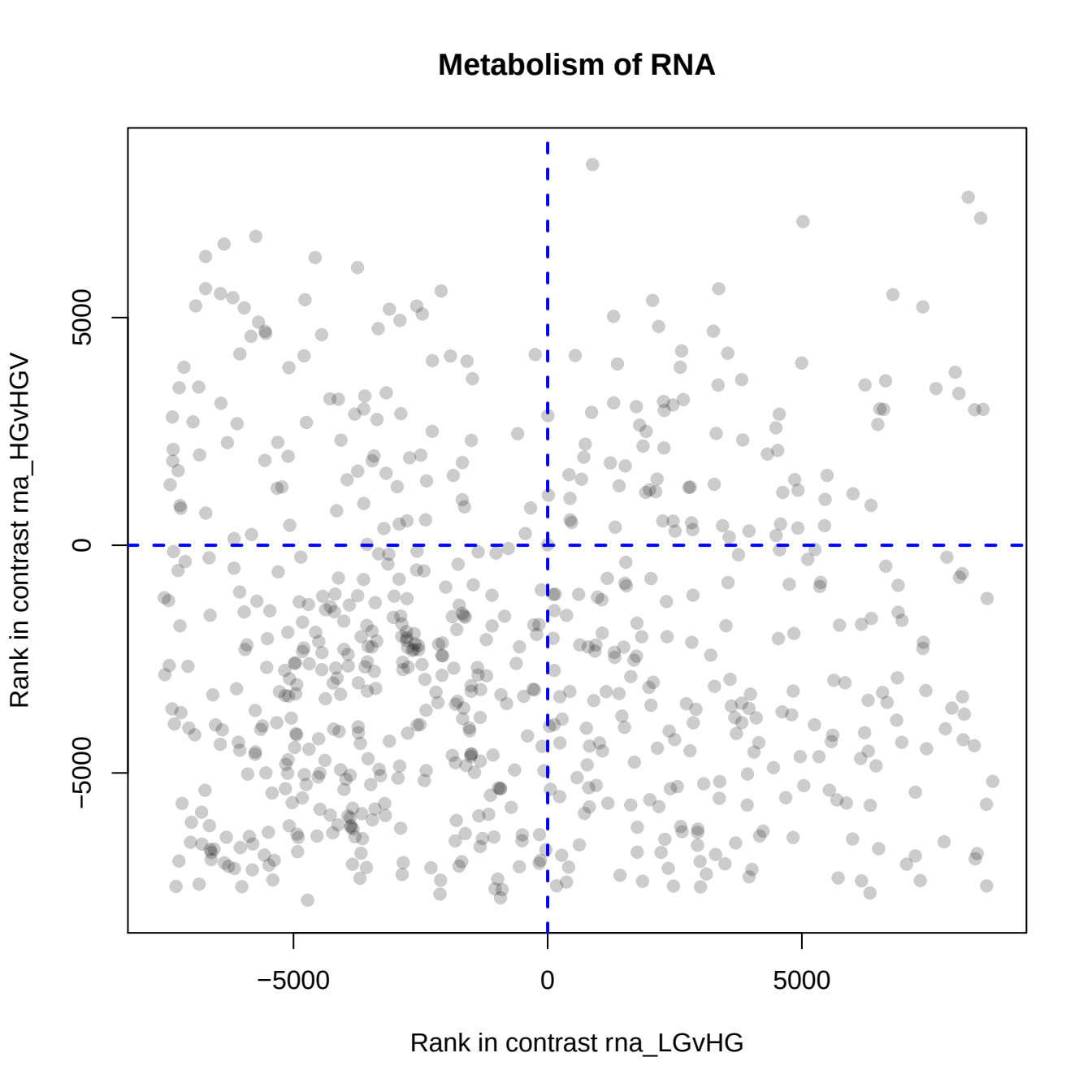

Scatterplot of all gene sets; FDR<0.05 in red
s.rna_HGvHGV
s.rna_LGvHG
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
−0.5
0.0
0.5

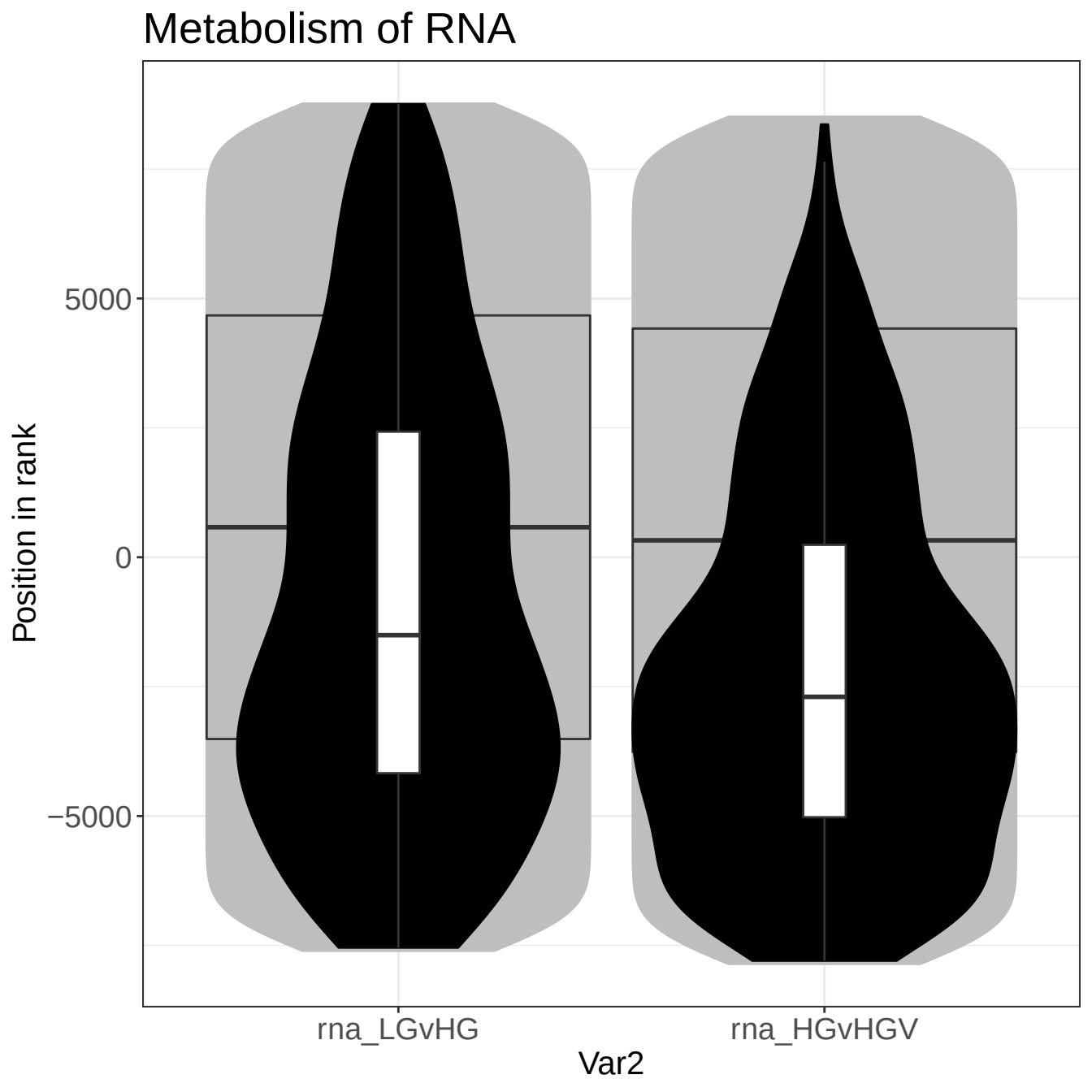

Scatterplot of all gene sets; top 25 in red
s.rna_HGvHGV
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
−0.5
0.0
0.5
s.rna_LGvHG

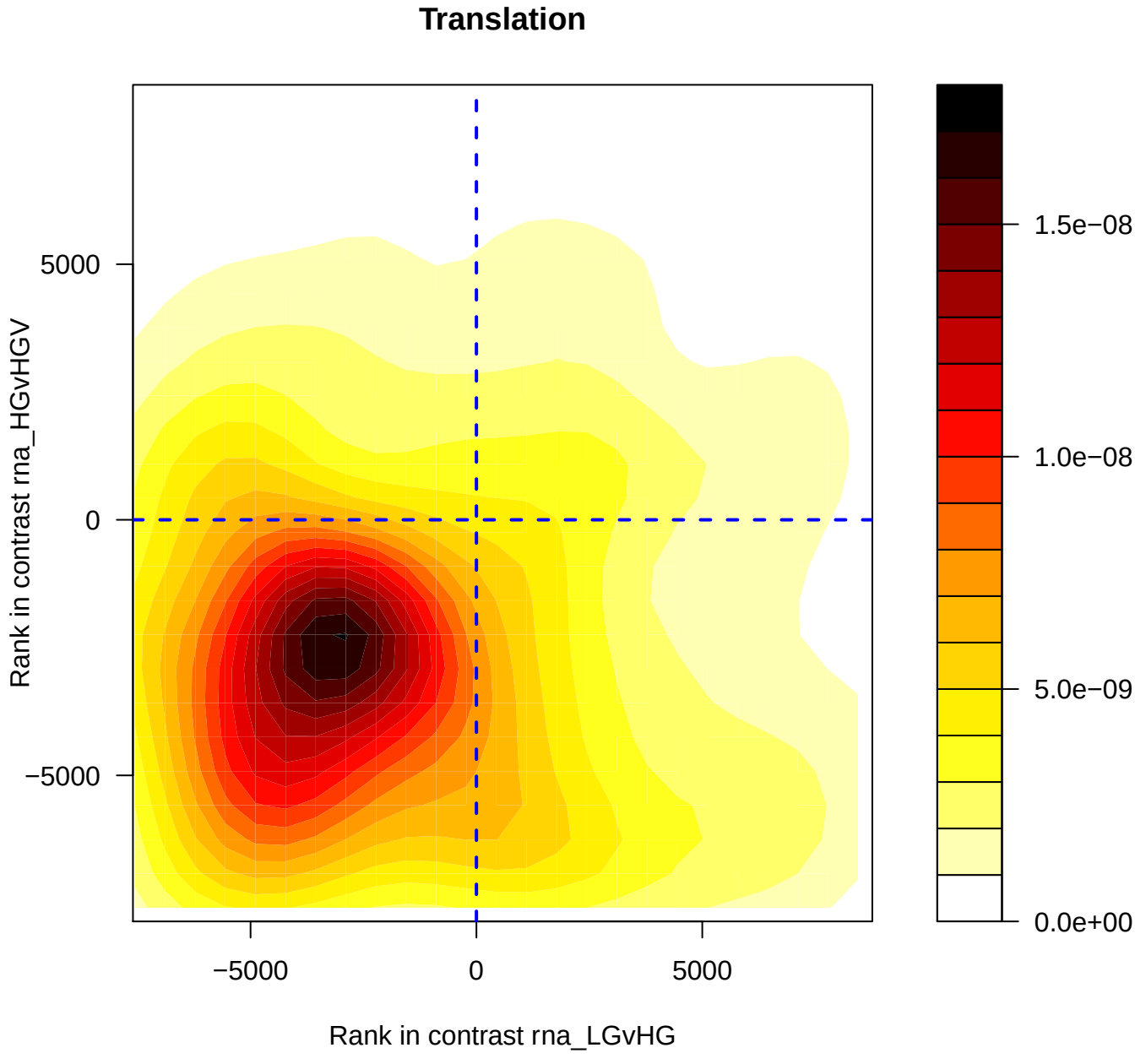

Color Key and Histogram
Count
0
4
8
12
−0.4
0
0.2
Value
Signal Transduction
Metabolism of proteins
Asparagine N−linked glycosylation
rRNA processing
Translation
Major pathway of rRNA processing in the nucleolus and cytosol
rRNA processing in the nucleus and cytosol
Metabolism of RNA
Chromatin organization
Chromatin modifying enzymes
Processing of Capped Intron−Containing Pre−mRNA
mRNA Splicing
mRNA Splicing − Major Pathway
Influenza Infection
Influenza Life Cycle
SRP−dependent cotranslational protein targeting to membrane
Nonsense Mediated Decay (NMD) independent of the Exon Junction Complex (E
Eukaryotic Translation Elongation
Formation of a pool of free 40S subunits
GTP hydrolysis and joining of the 60S ribosomal subunit
L13a−mediated translational silencing of Ceruloplasmin expression
Nonsense−Mediated Decay (NMD)
Nonsense Mediated Decay (NMD) enhanced by the Exon Junction Complex (EJC
Eukaryotic Translation Initiation
Cap−dependent Translation Initiation
rna_LGvHG
rna_HGvHGV

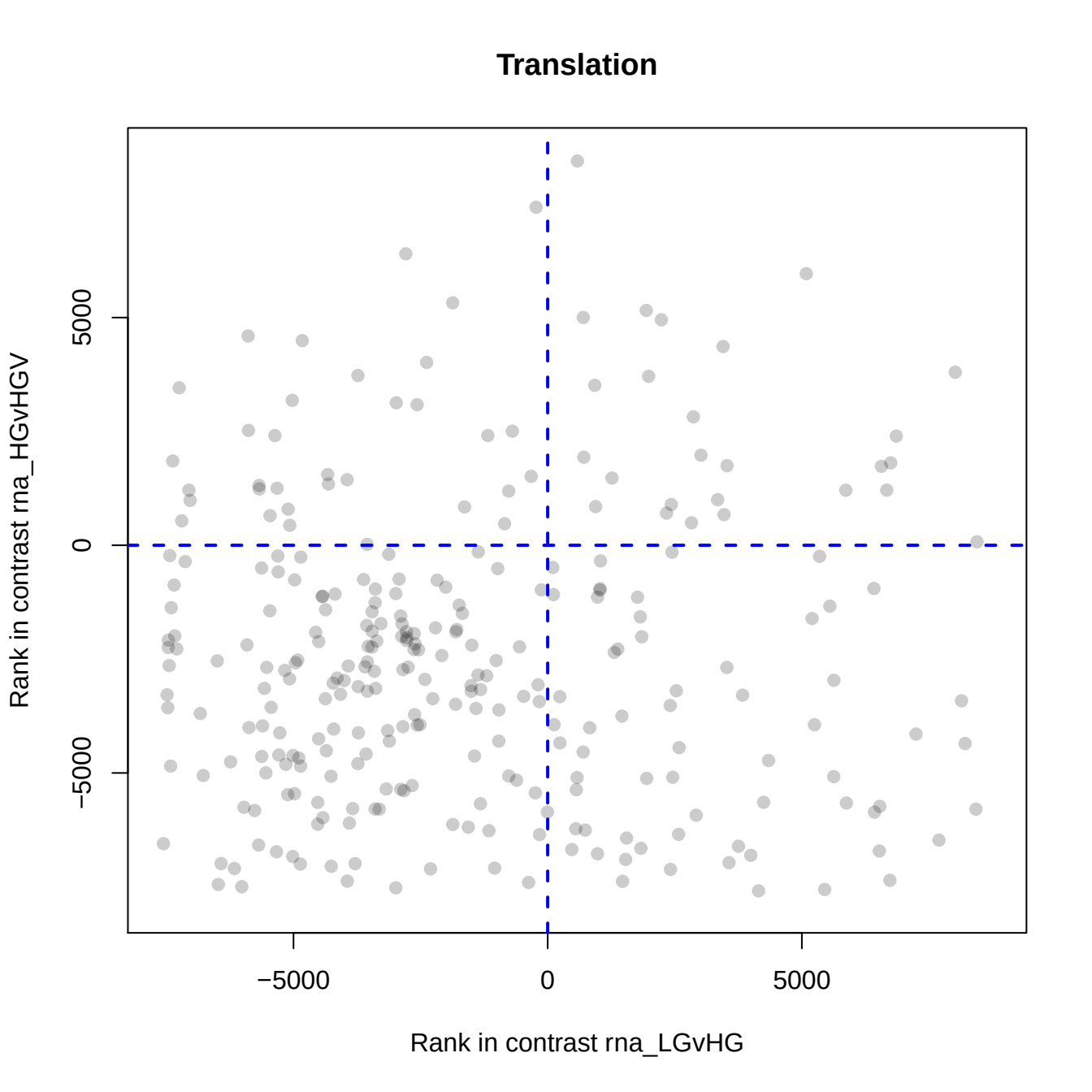

effect size versus statistical significance
−log(p.adjustMANOVA) (significance)
0
20
40
60
80
100
120
0.0
0.2
0.4
0.6
0.8
s.dist (effect size)

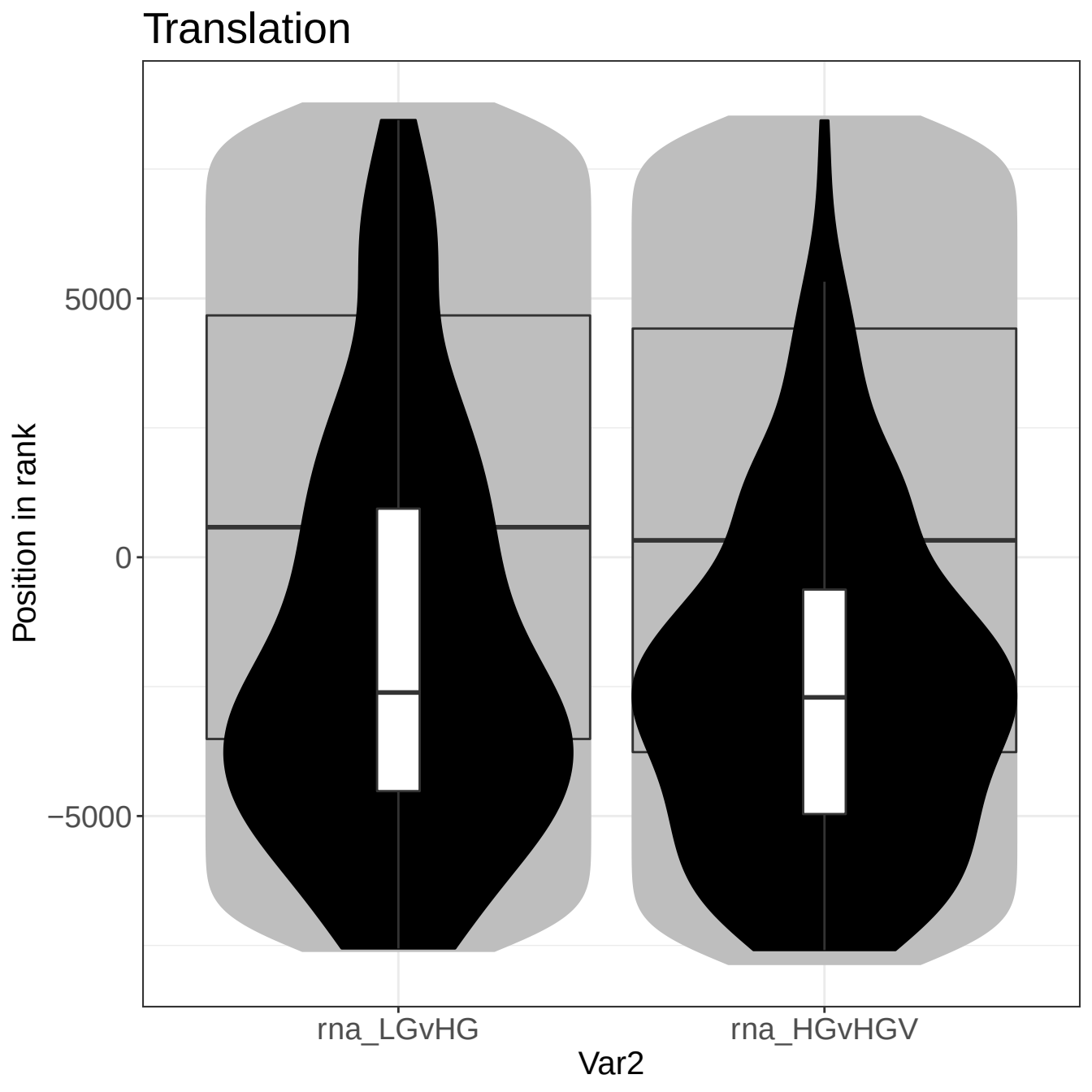

Metabolism of RNA
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
1.2e−08
1.0e−08
8.0e−09
6.0e−09
4.0e−09
2.0e−09
0.0e+00

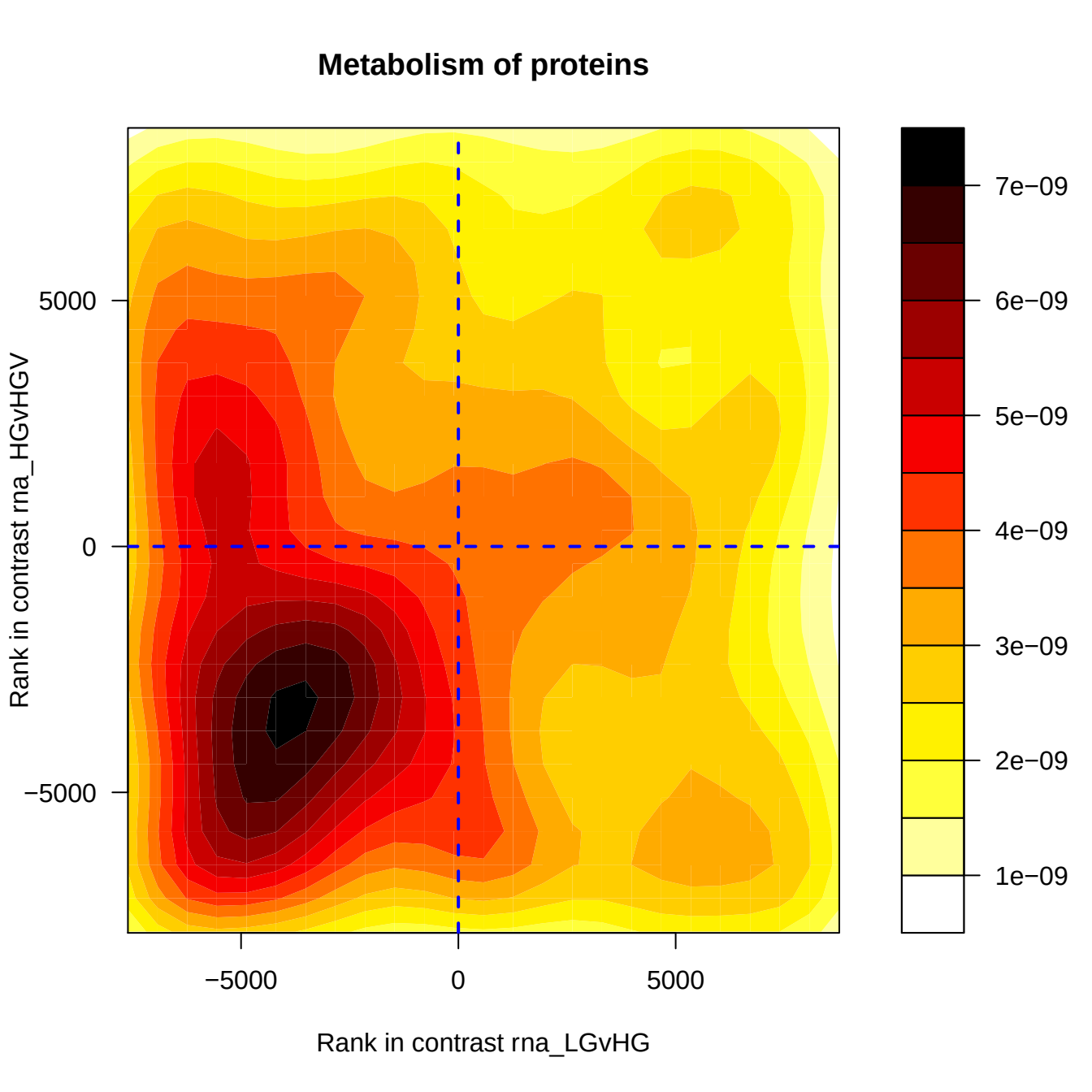

Metabolism of RNA
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

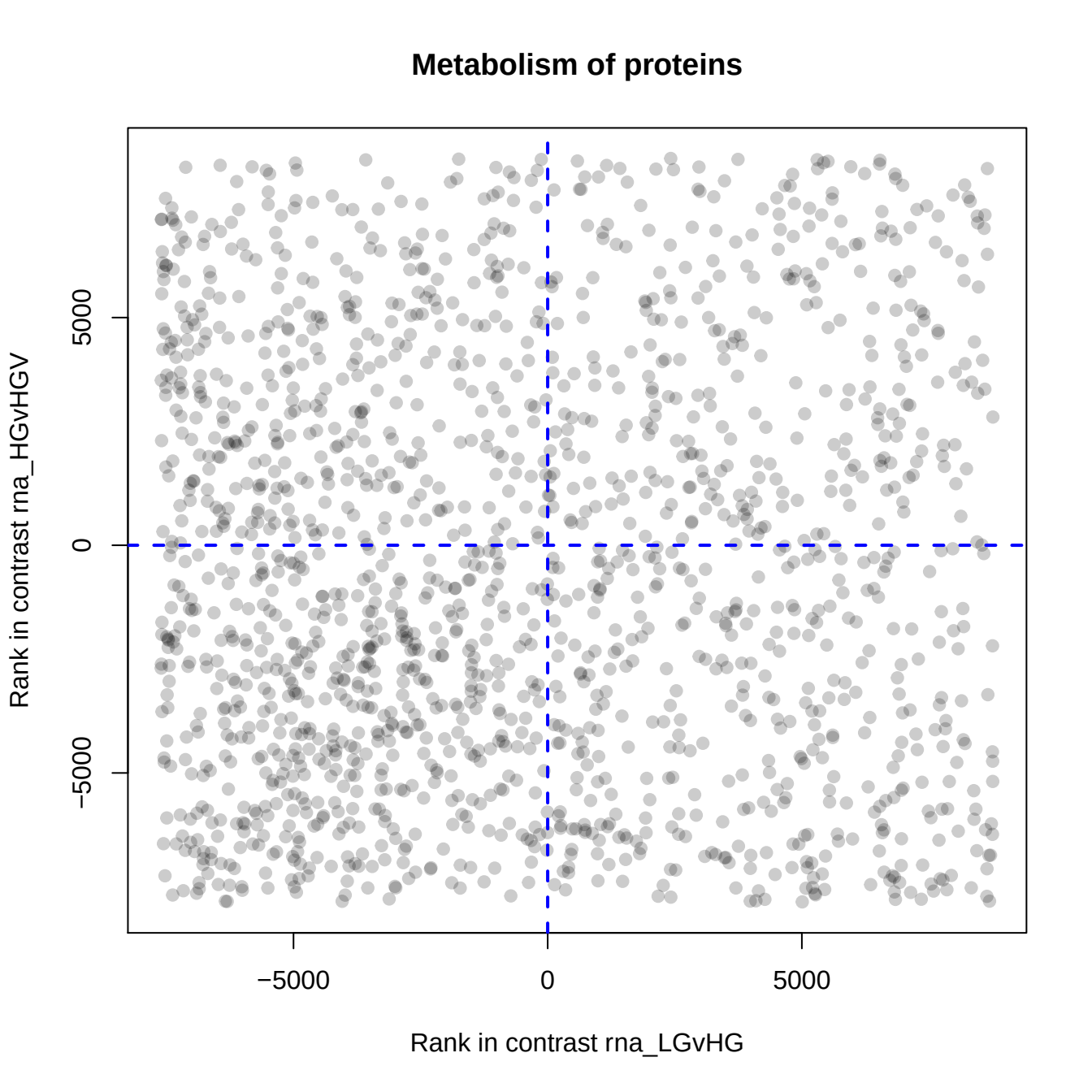

Metabolism of RNA
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

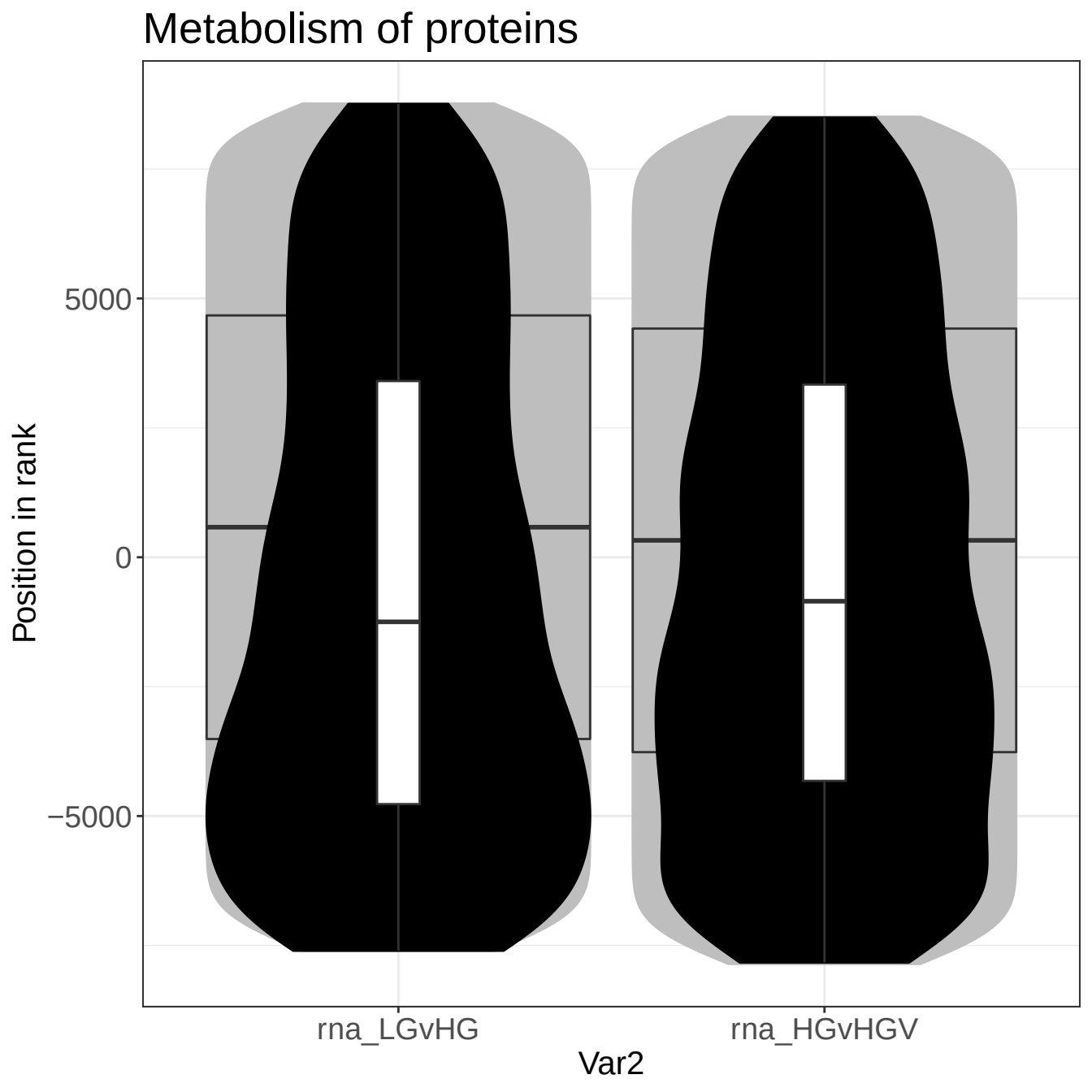

Translation
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
1.5e−08
1.0e−08
5.0e−09
0.0e+00

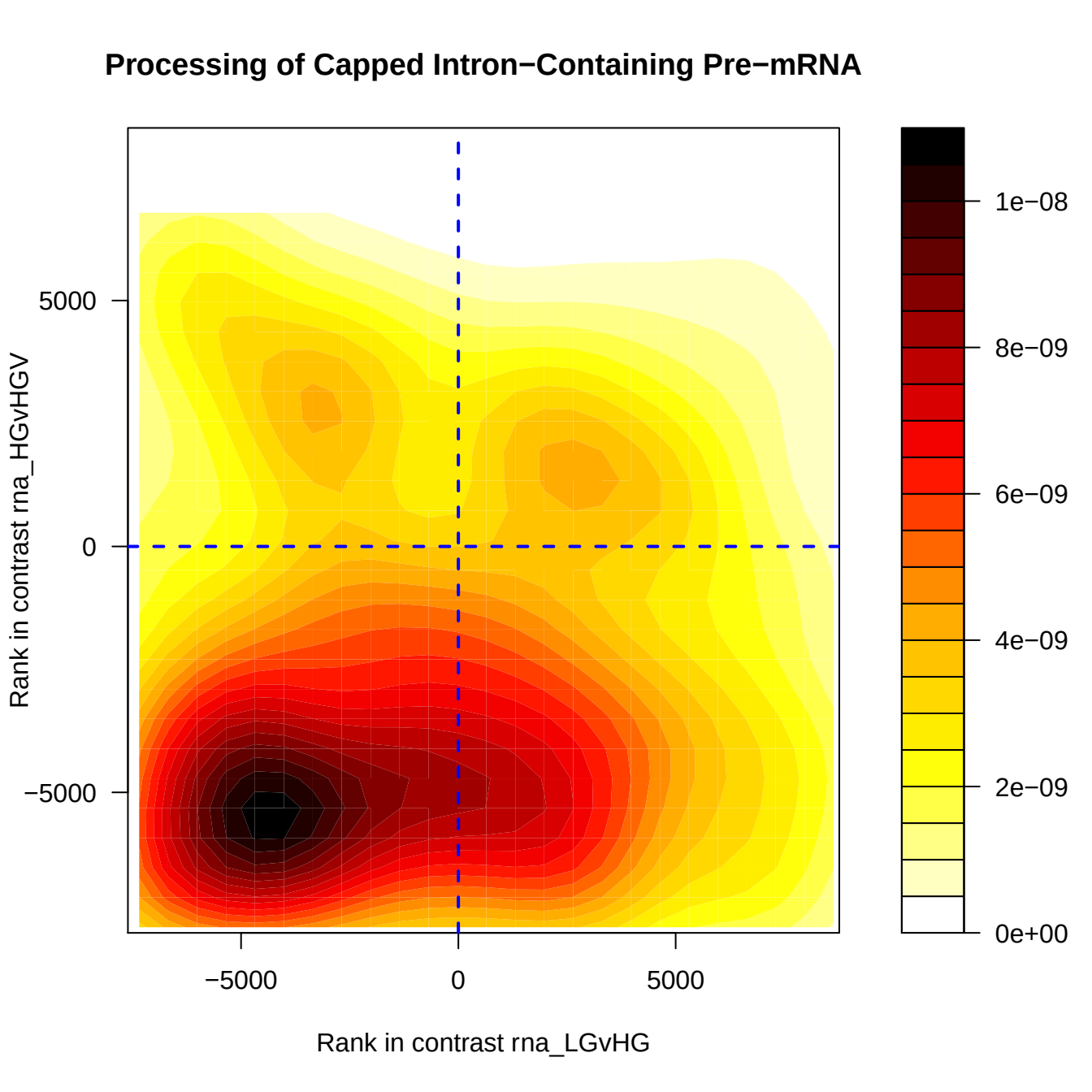

Translation
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

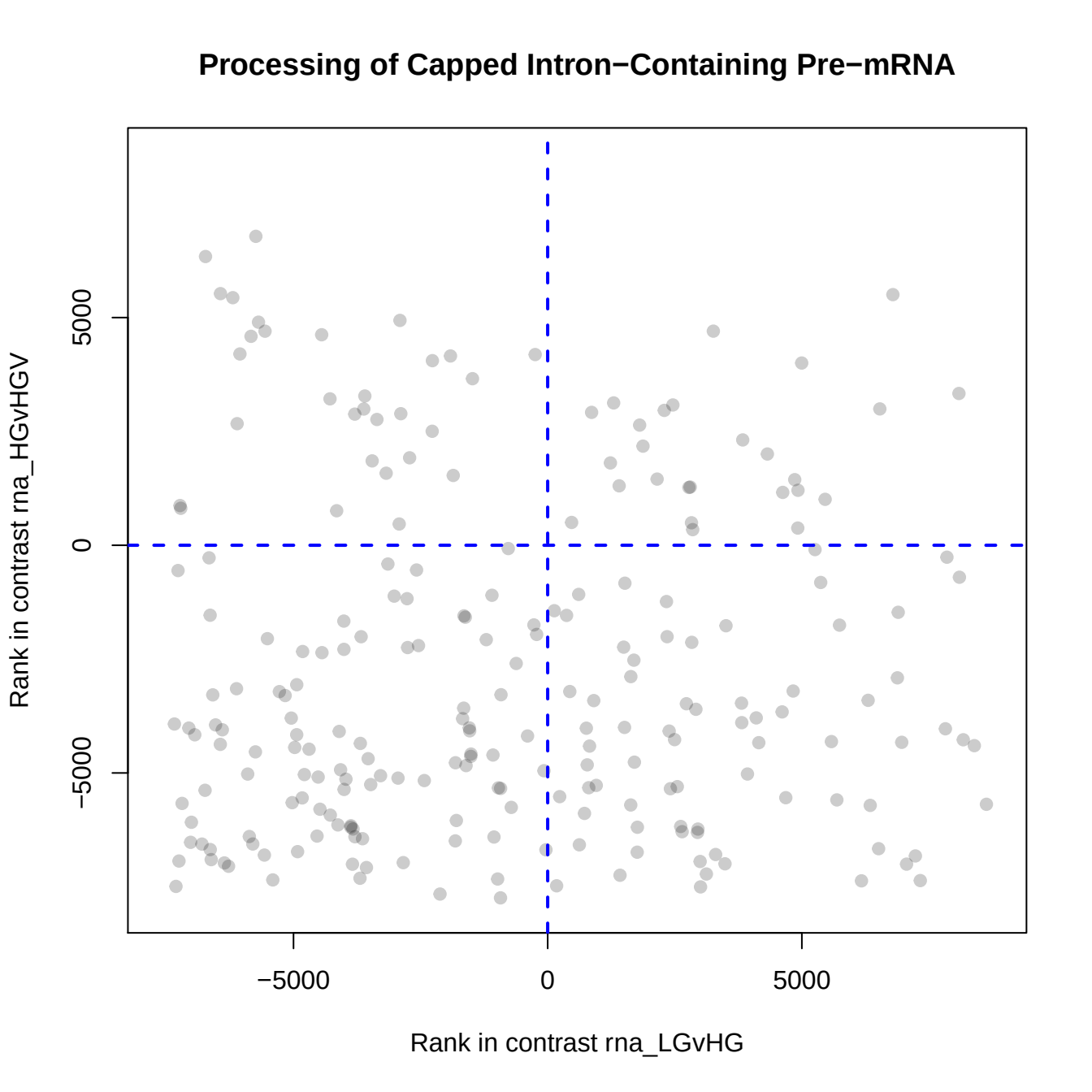

Translation
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

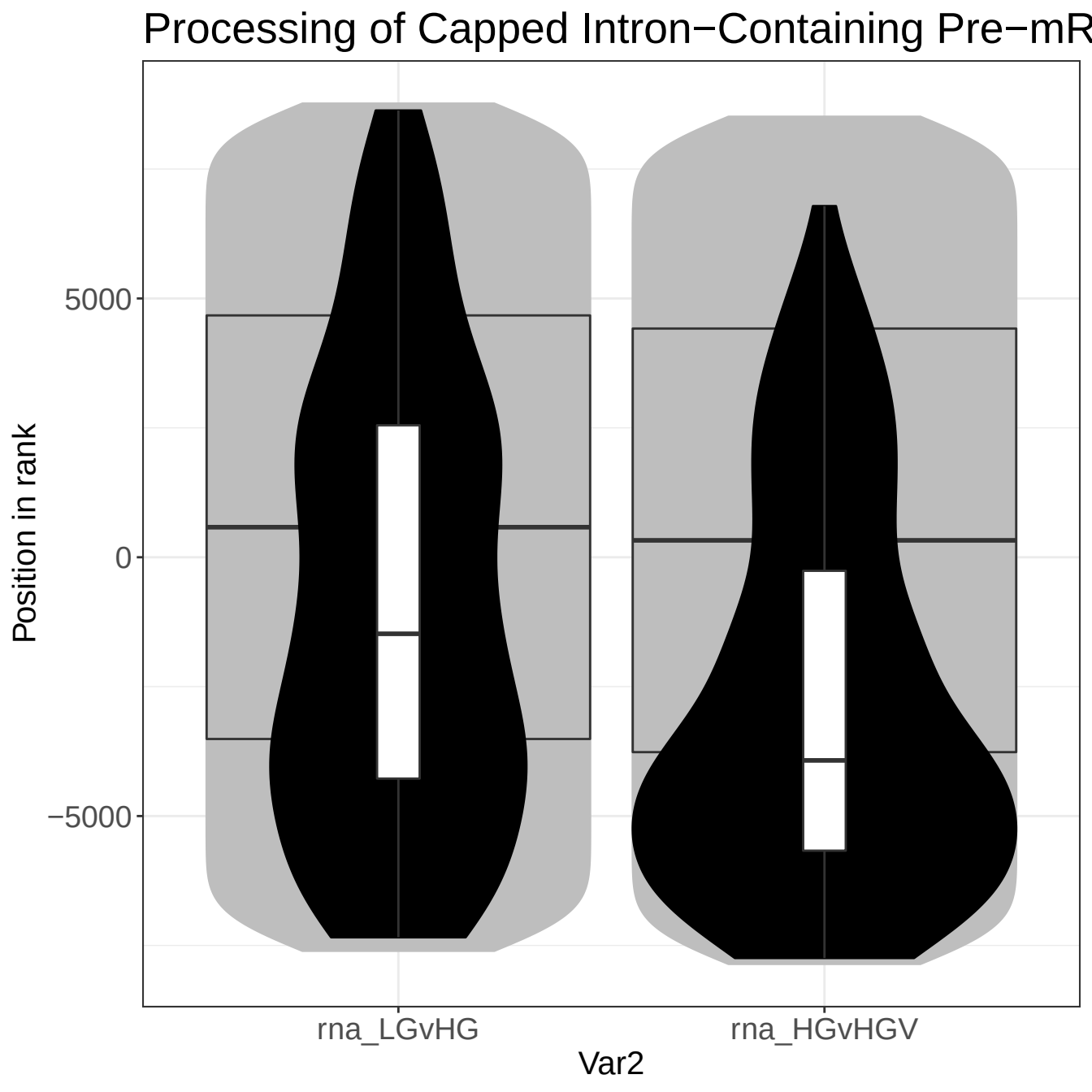

Metabolism of proteins
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
7e−09
6e−09
5e−09
4e−09
3e−09
2e−09
1e−09

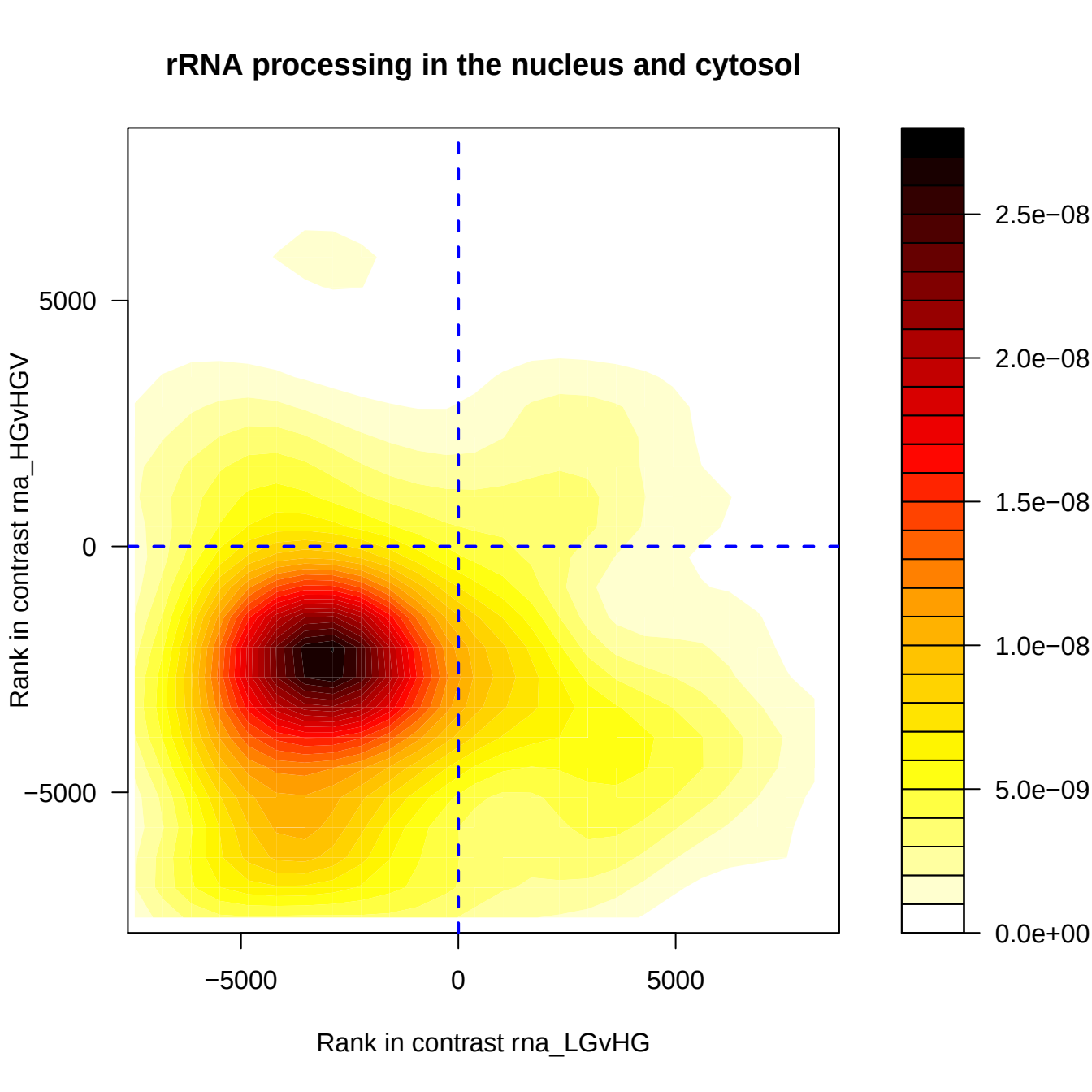

Metabolism of proteins
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

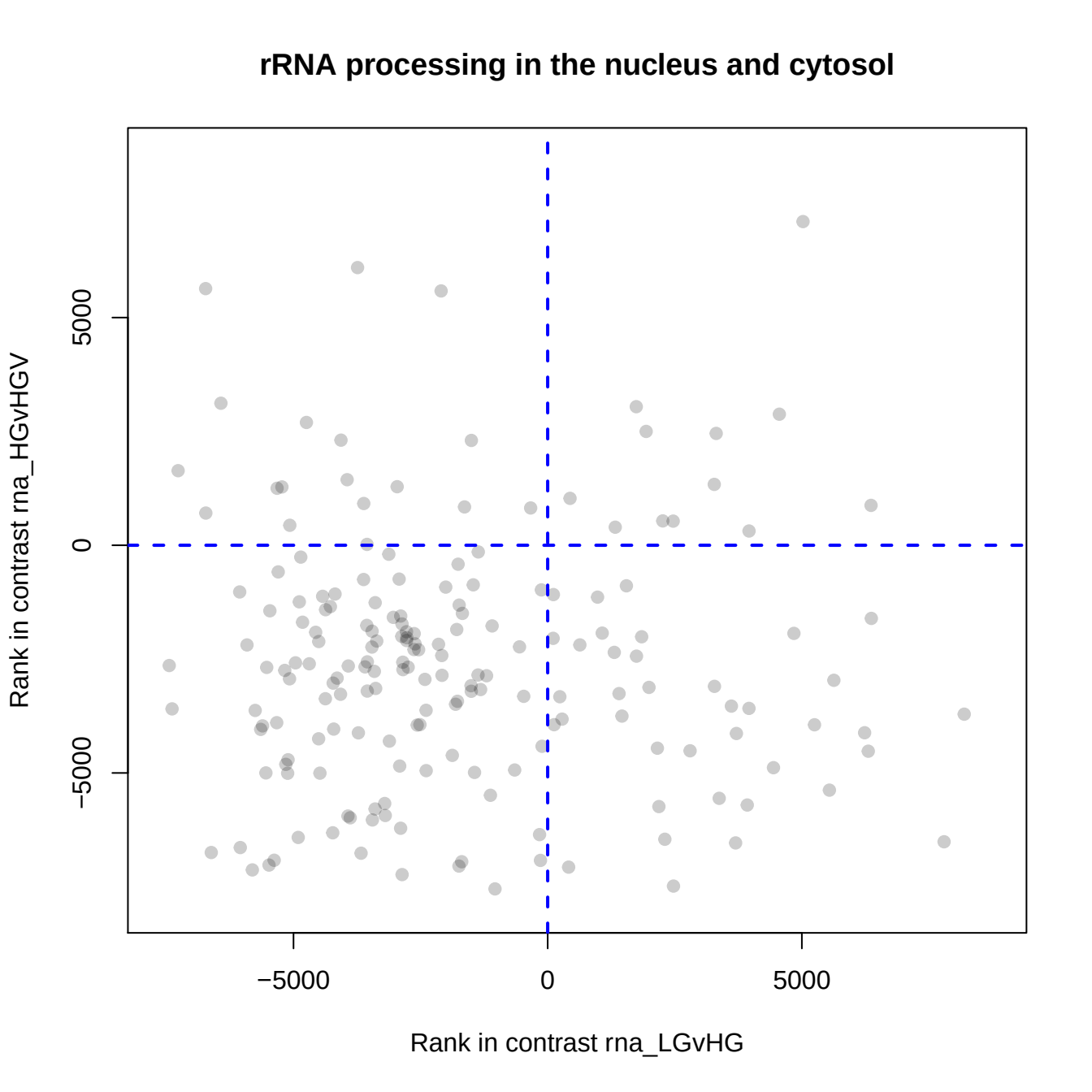

Metabolism of proteins
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

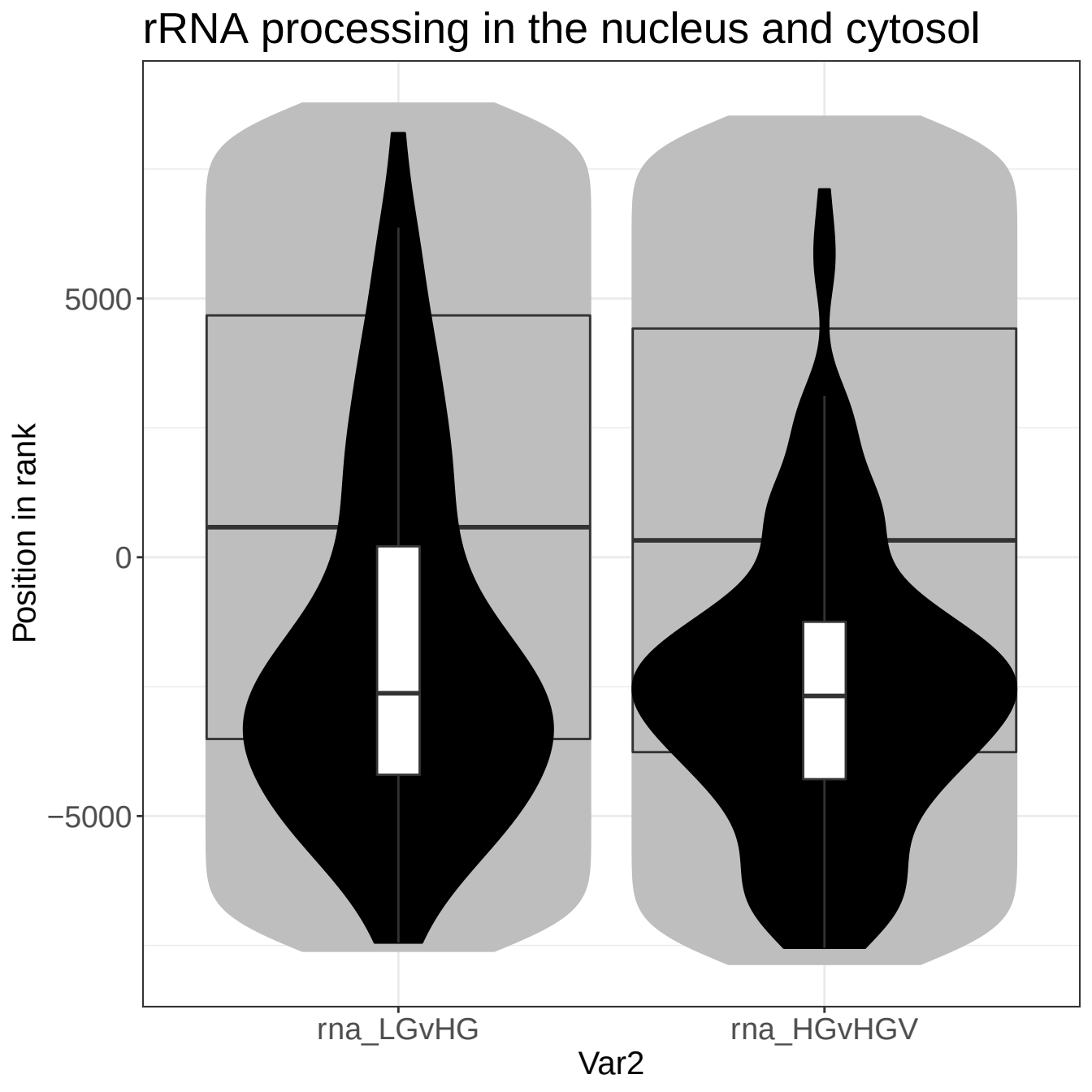

Processing of Capped Intron−Containing Pre−mRNA
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
1e−08
8e−09
6e−09
4e−09
2e−09
0e+00

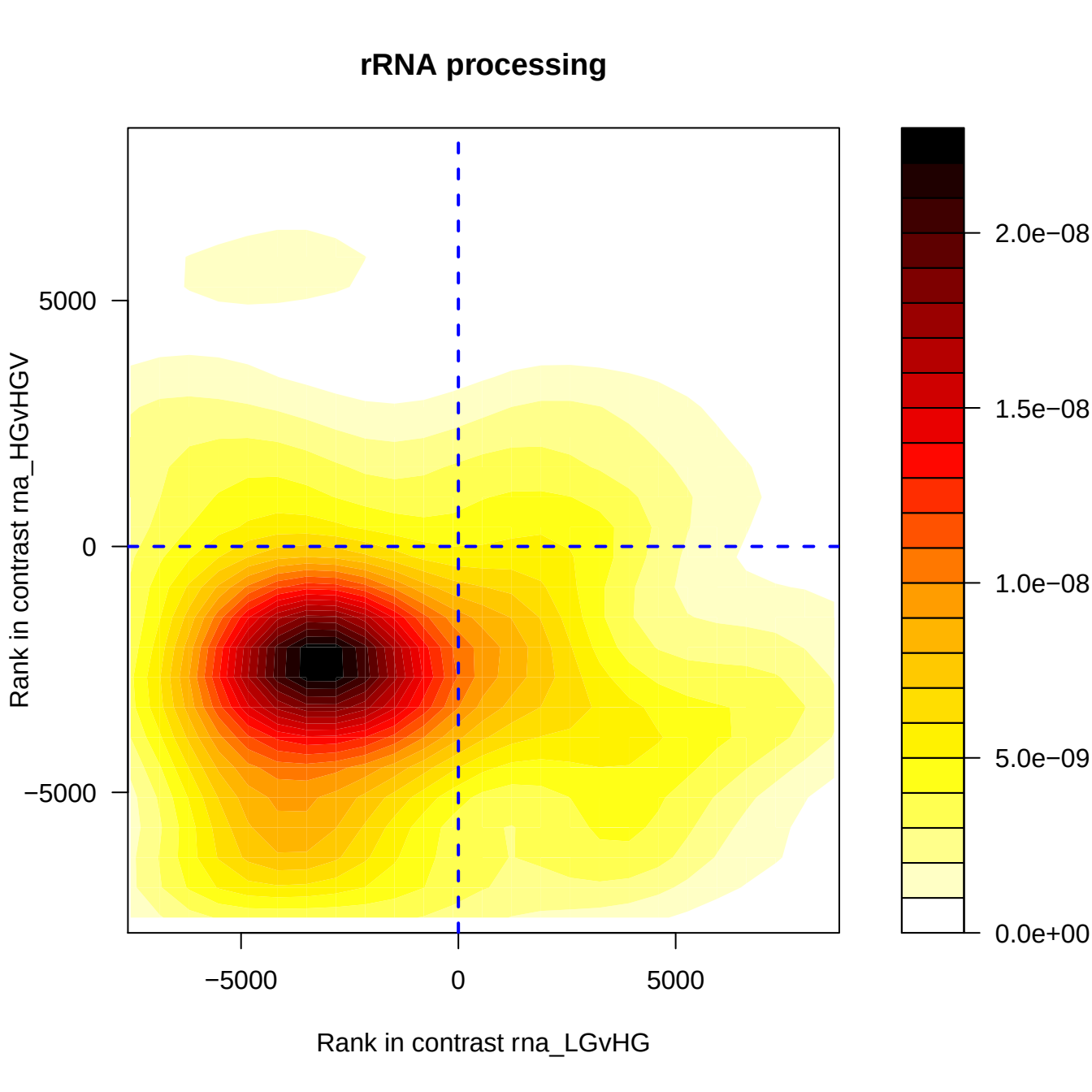

Processing of Capped Intron−Containing Pre−mRNA
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

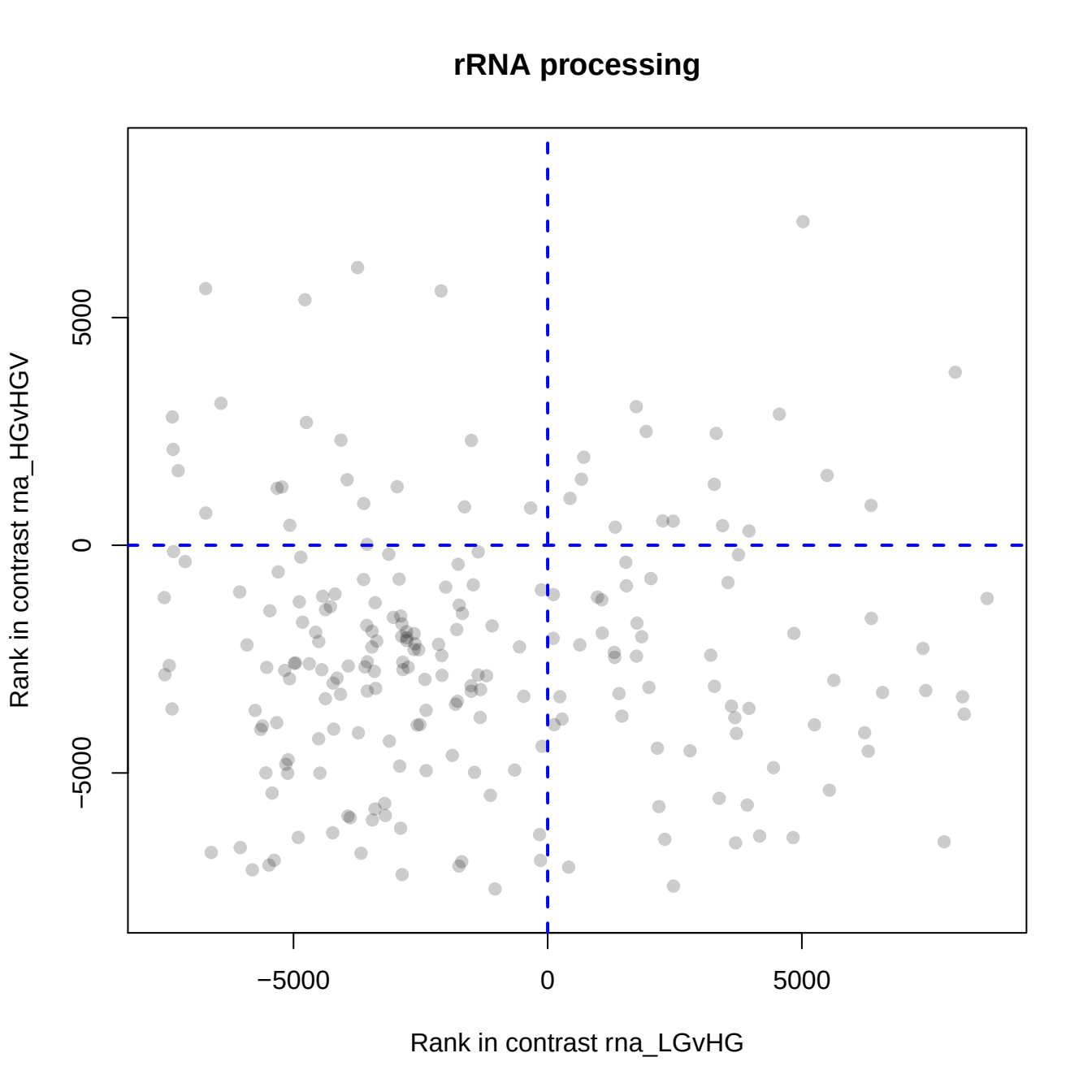

Processing of Capped Intron−Containing Pre−mR
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

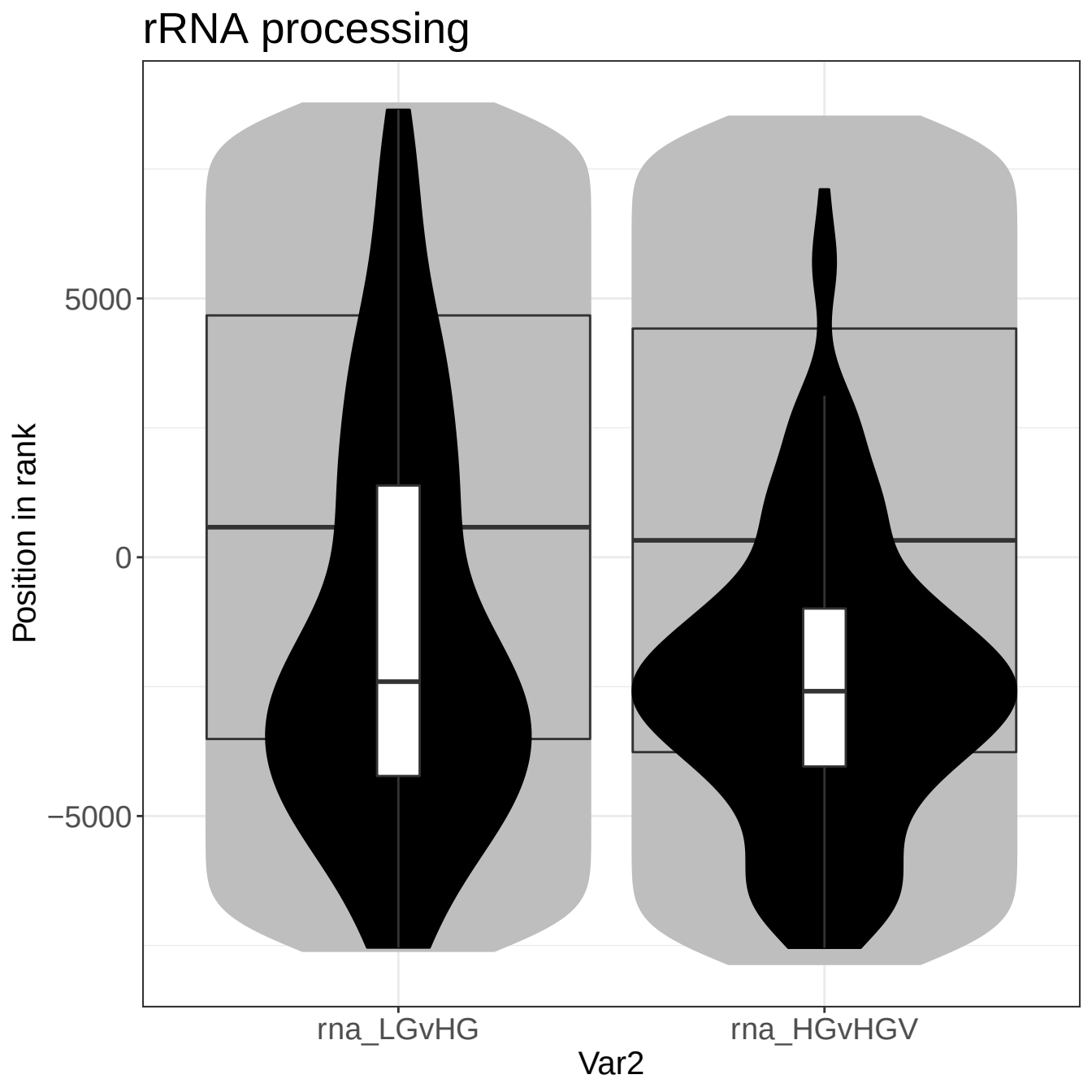

rRNA processing in the nucleus and cytosol
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
2.5e−08
2.0e−08
1.5e−08
1.0e−08
5.0e−09
0.0e+00

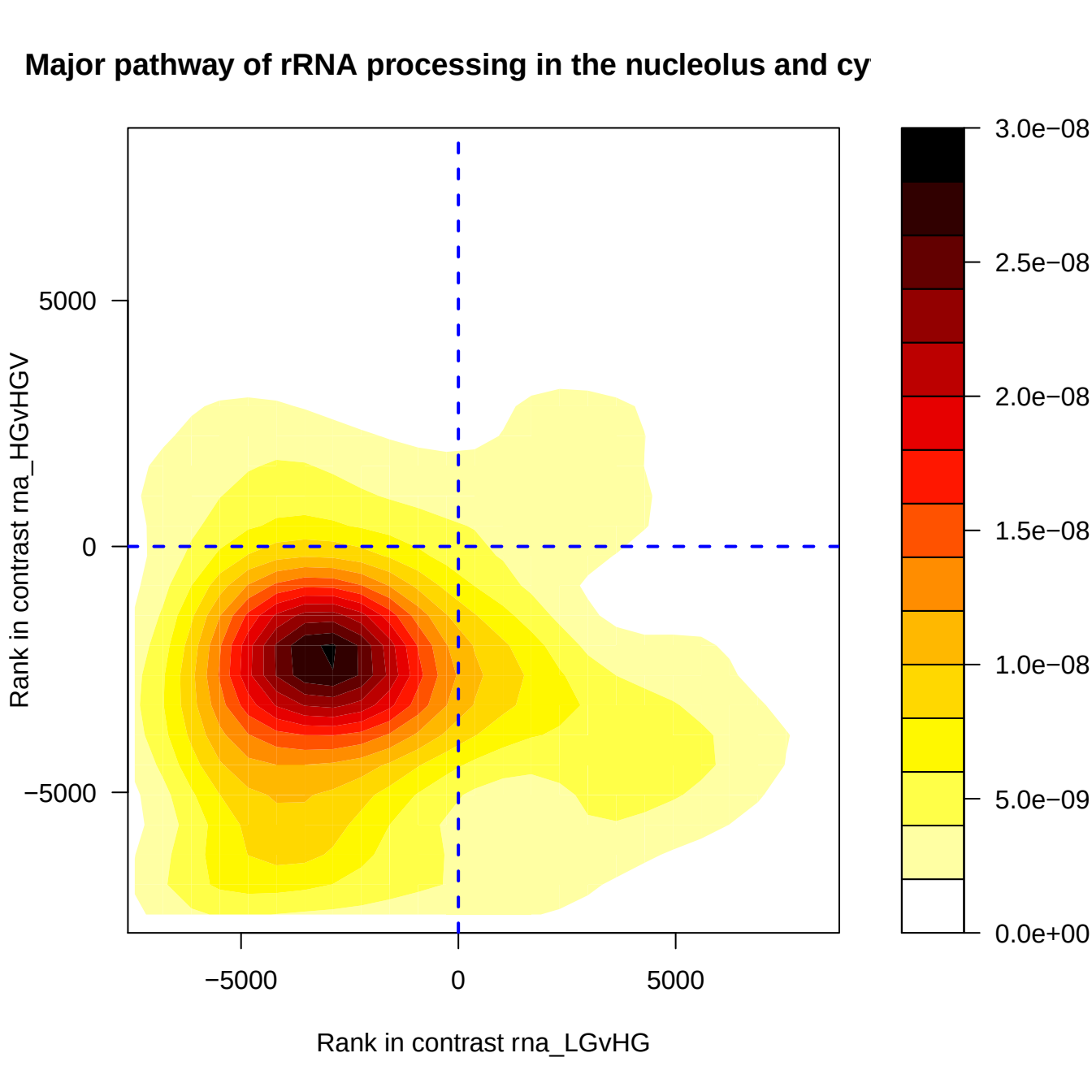

rRNA processing in the nucleus and cytosol
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

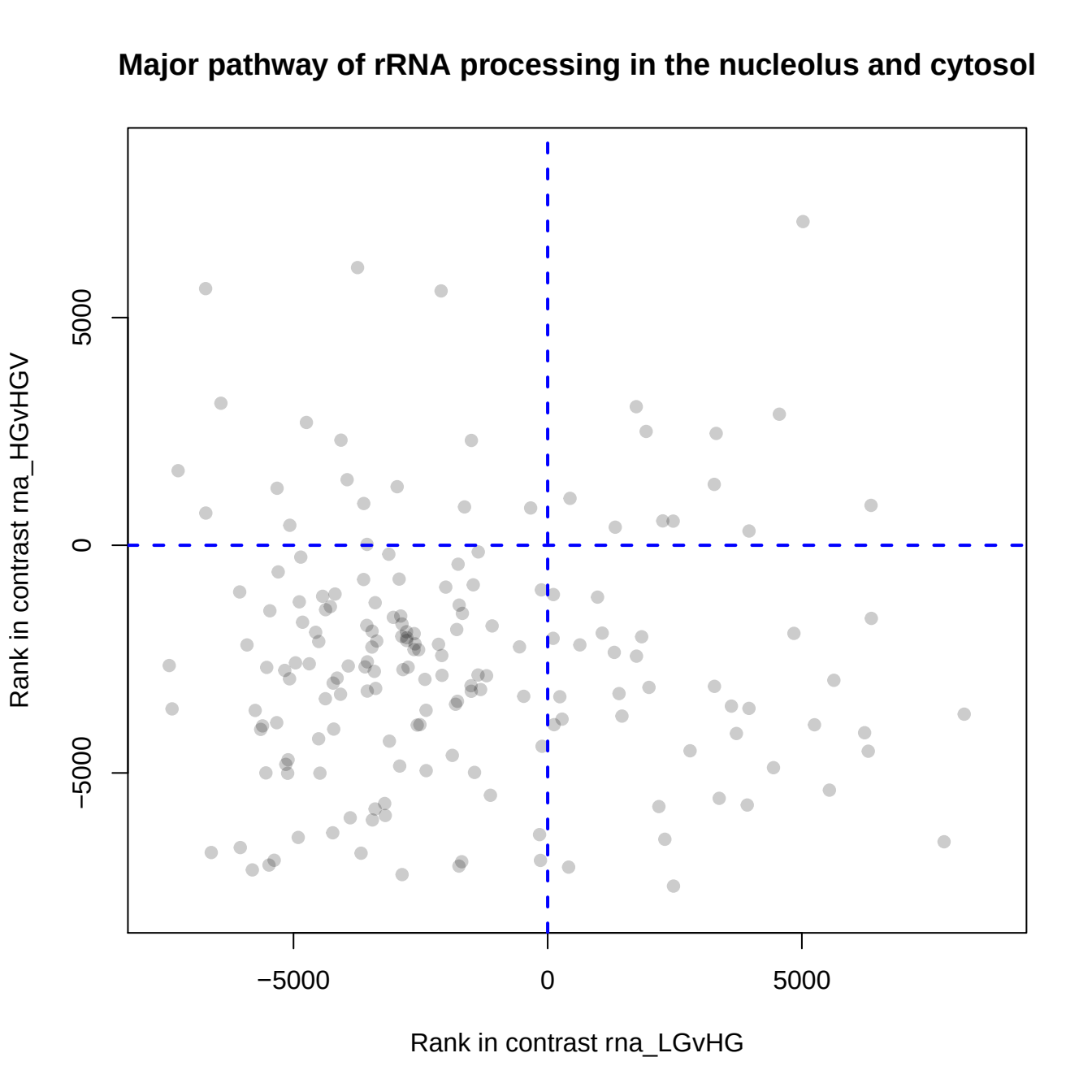

rRNA processing in the nucleus and cytosol
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

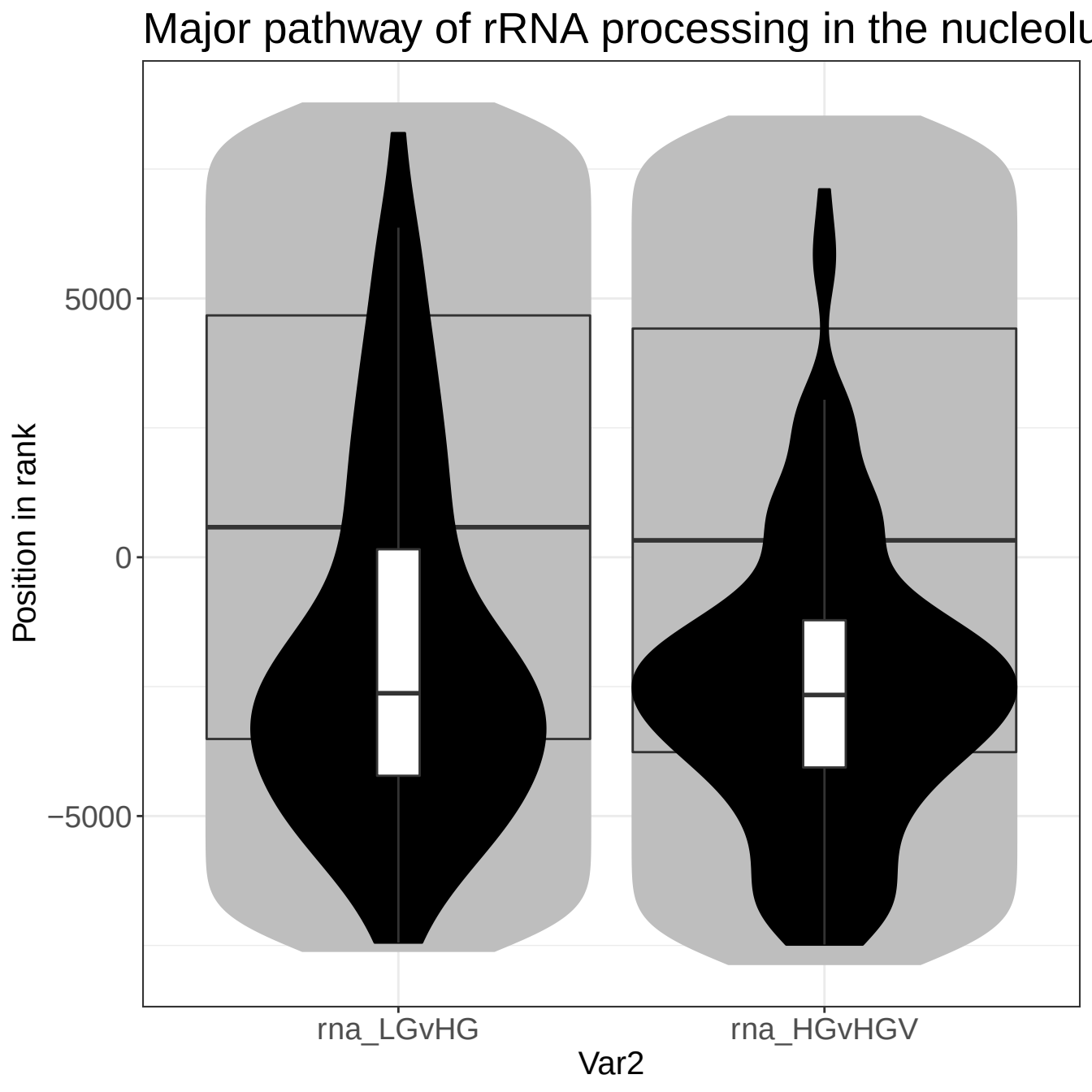

rRNA processing
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
2.0e−08
1.5e−08
1.0e−08
5.0e−09
0.0e+00

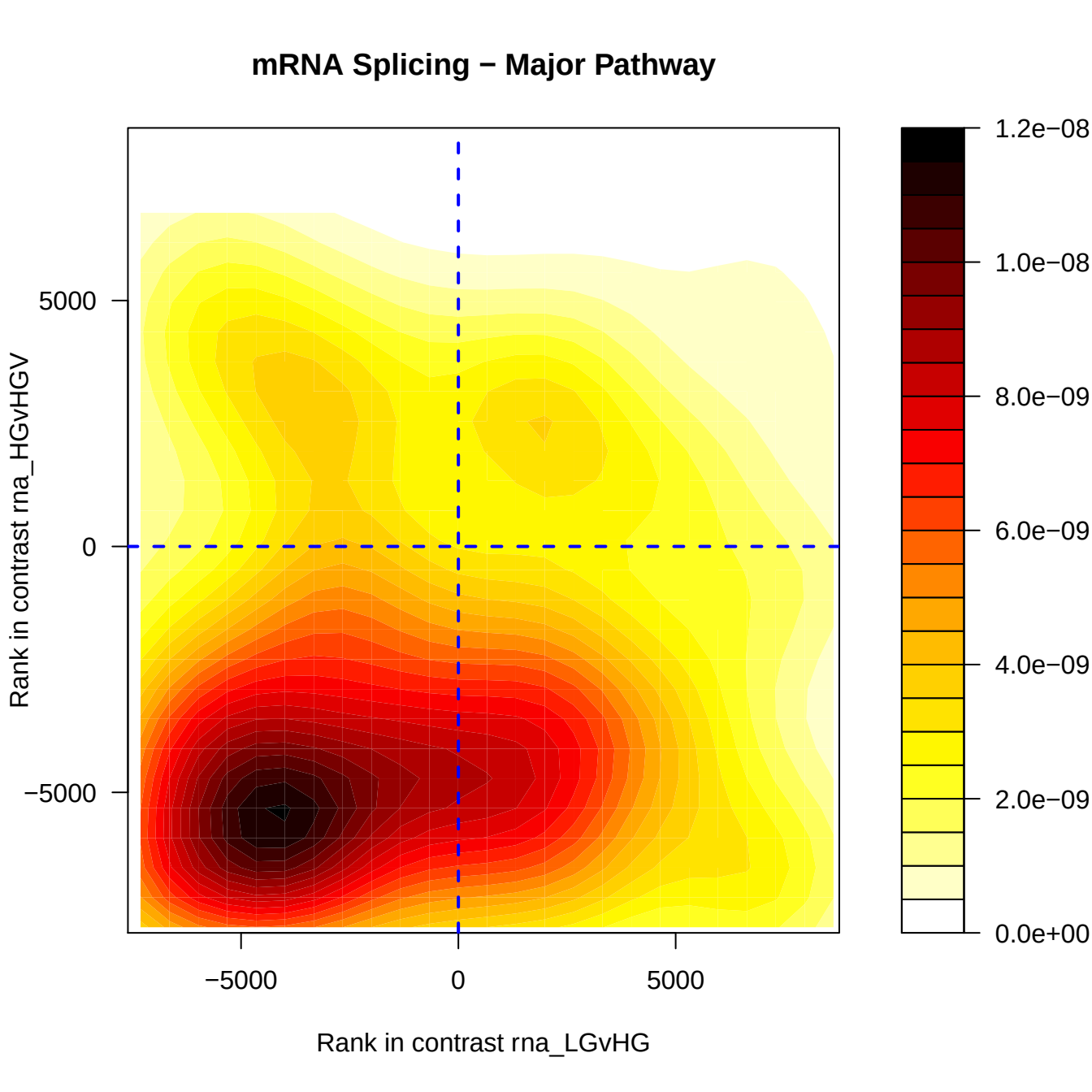

rRNA processing
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

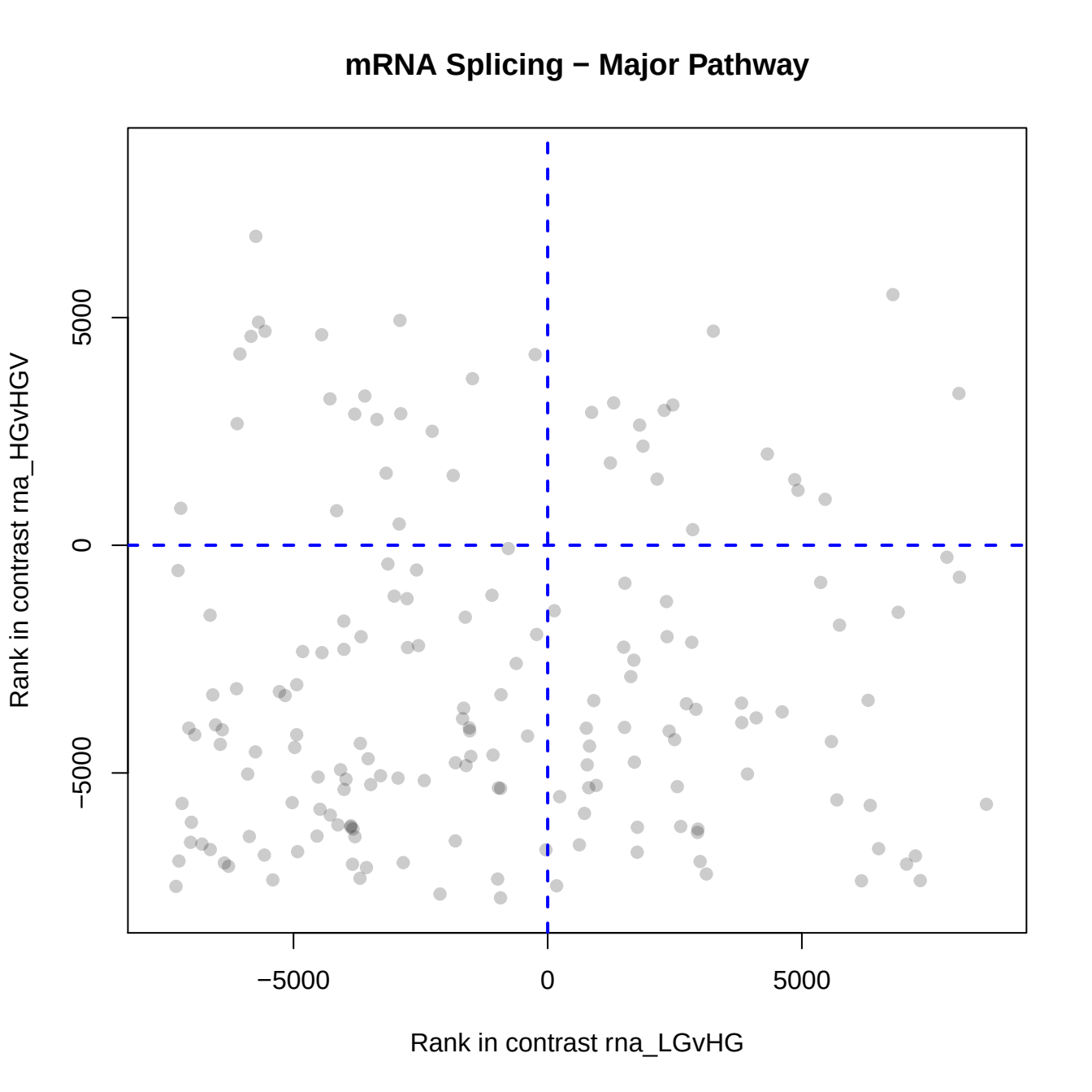

rRNA processing
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

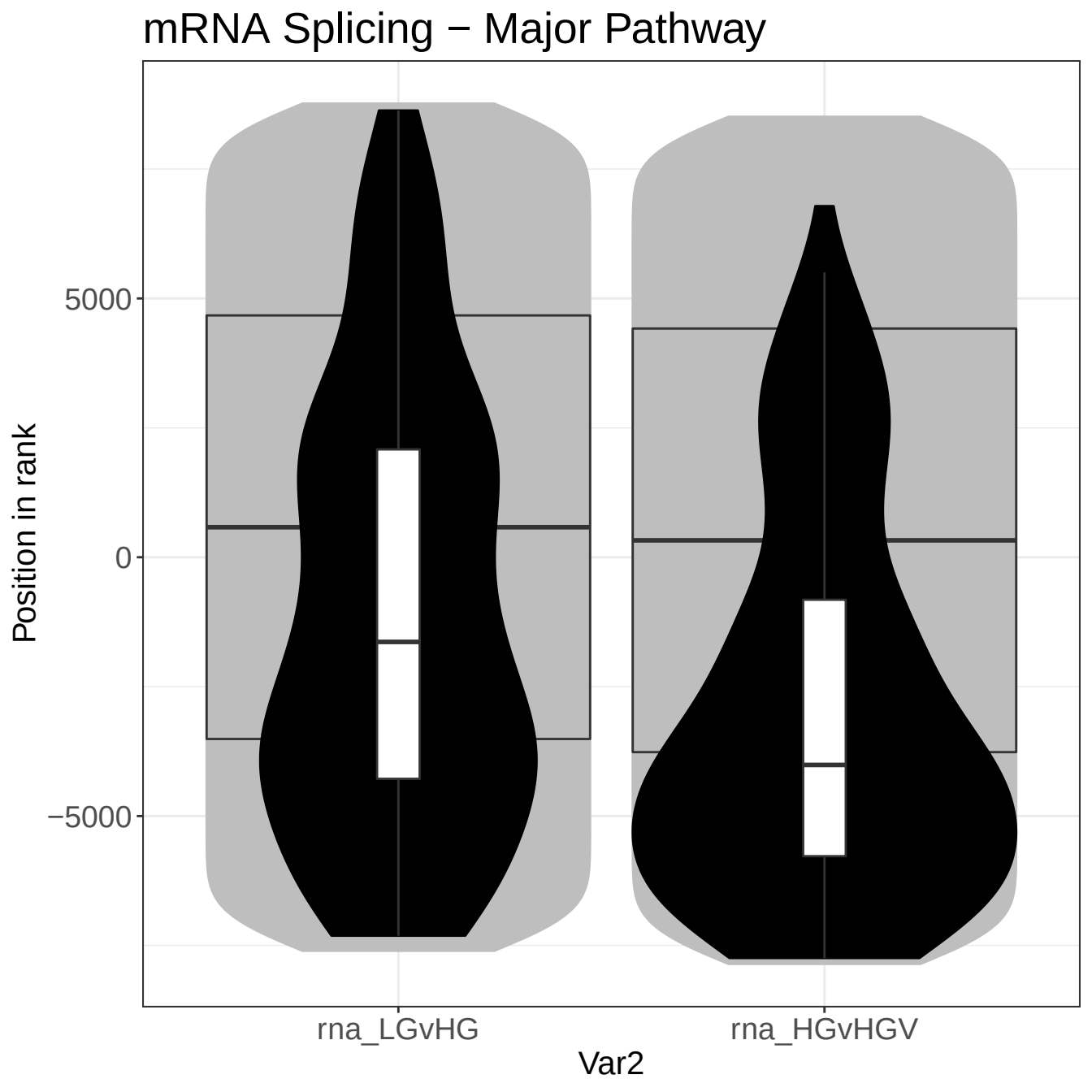

Major pathway of rRNA processing in the nucleolus and cy
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG
3.0e−08
2.5e−08
2.0e−08
1.5e−08
1.0e−08
5.0e−09
0.0e+00

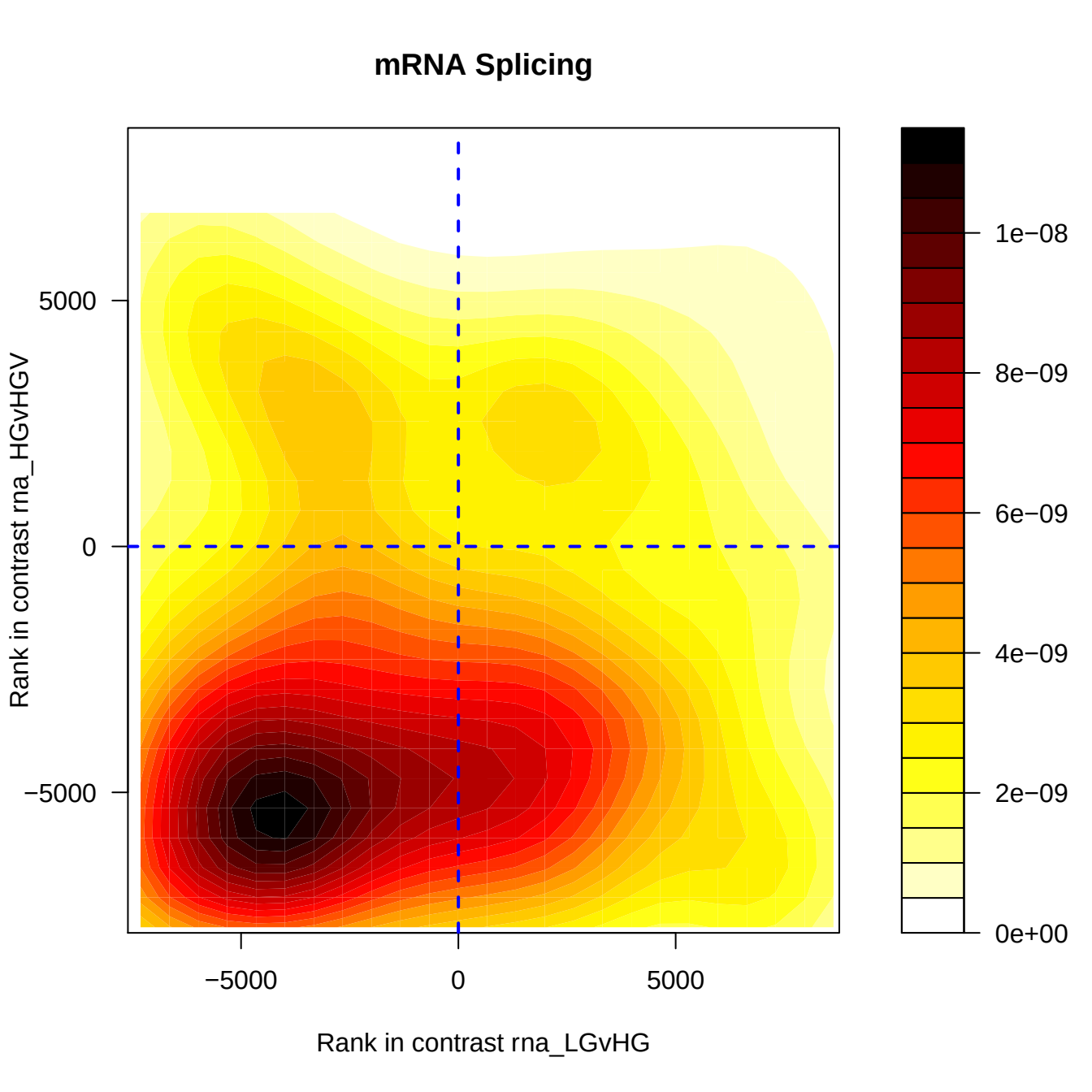

Major pathway of rRNA processing in the nucleolus and cytosol
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

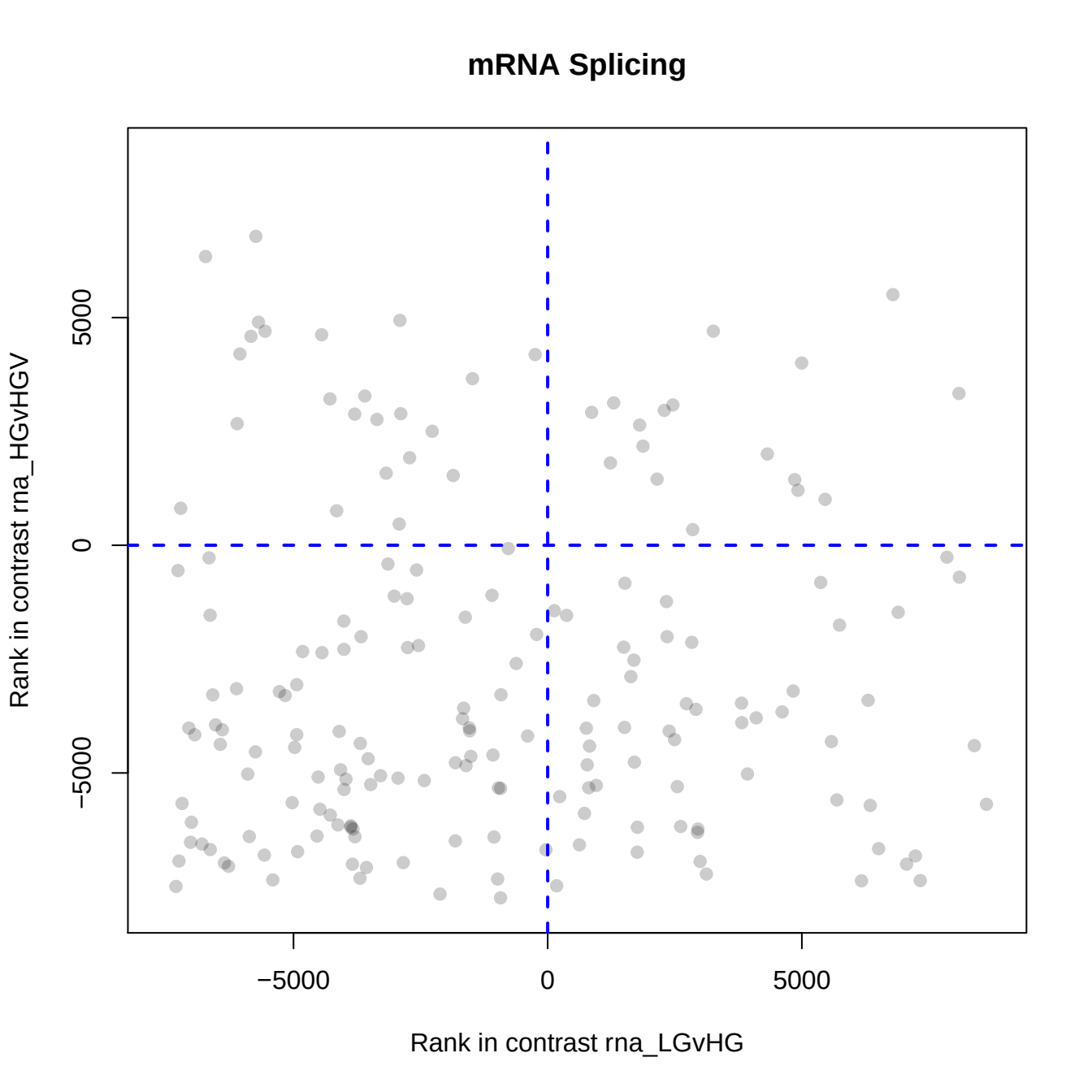

Major pathway of rRNA processing in the nucleolu
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

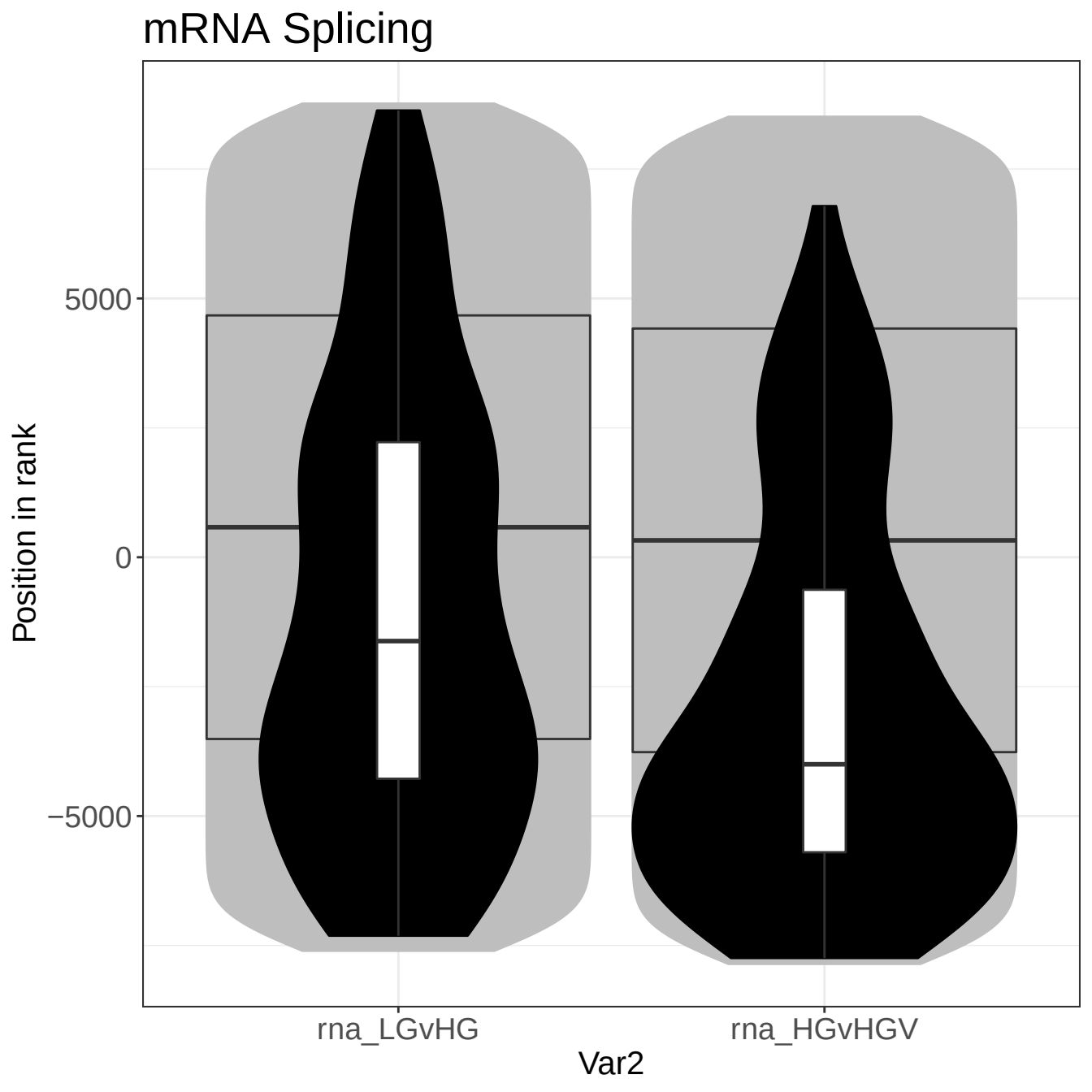

mRNA Splicing − Major Pathway
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
1.2e−08
1.0e−08
8.0e−09
6.0e−09
4.0e−09
2.0e−09
0.0e+00

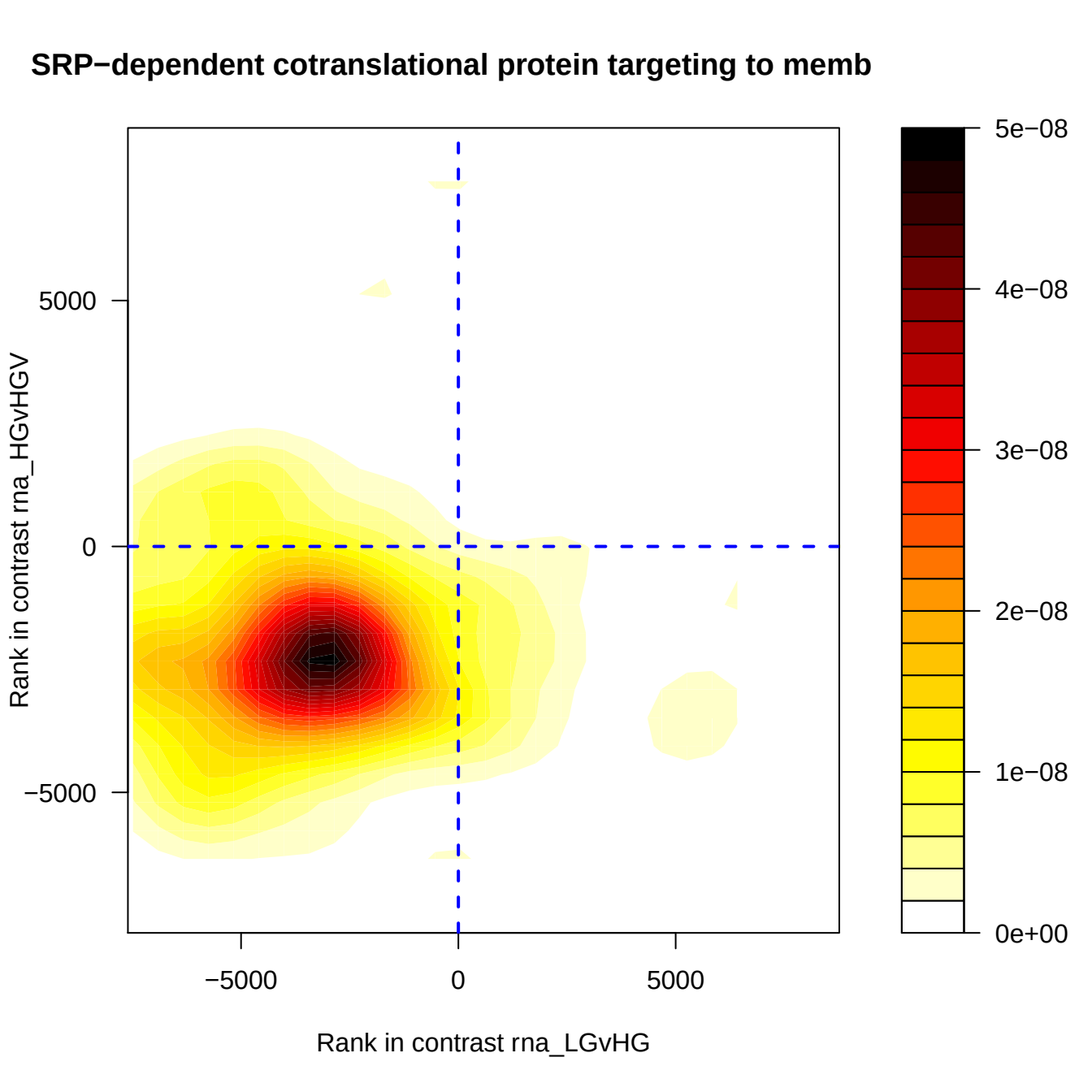

mRNA Splicing − Major Pathway
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

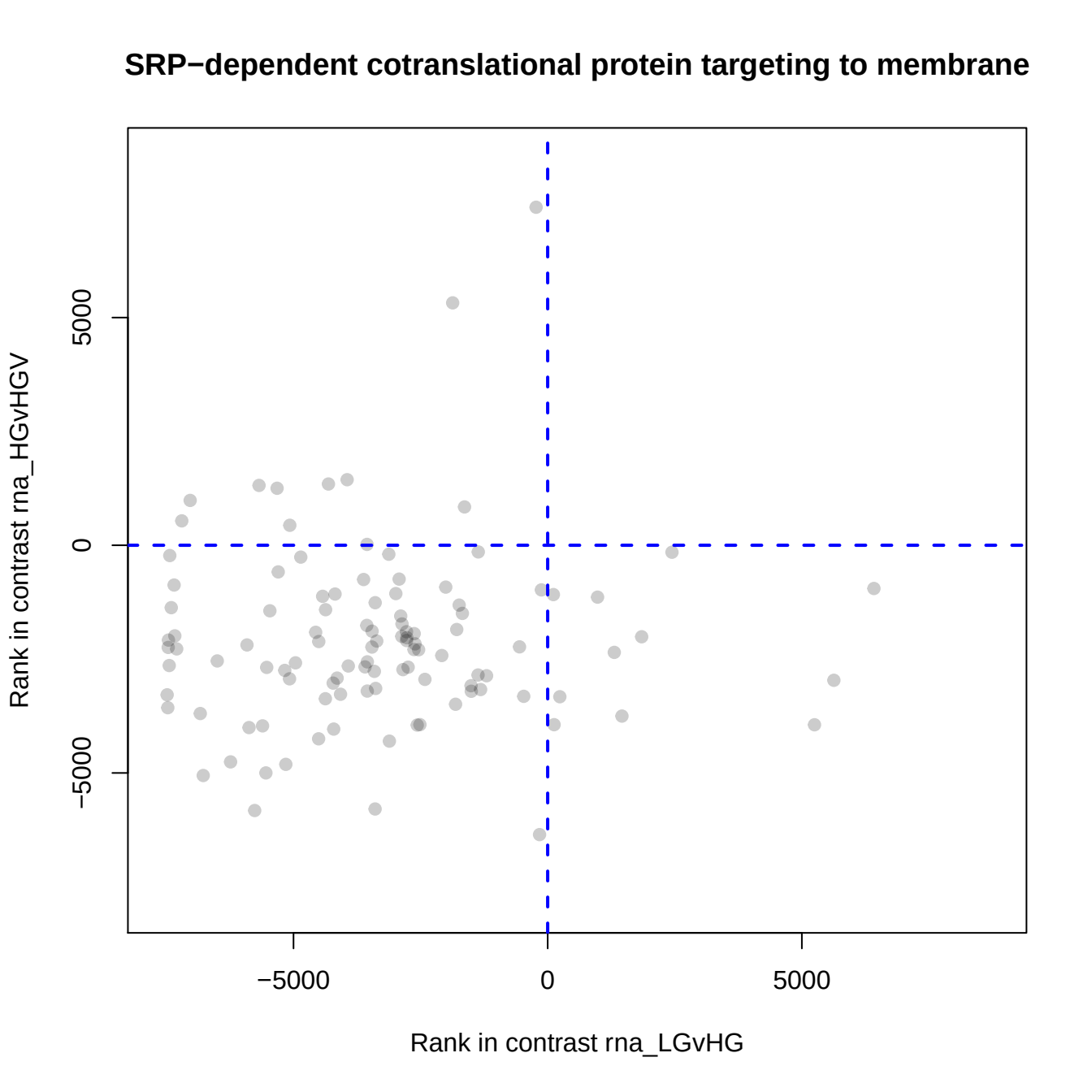

mRNA Splicing − Major Pathway
Position in rank
5000
0
−5000
rna_LGvHG
rna_HGvHGV
Var2

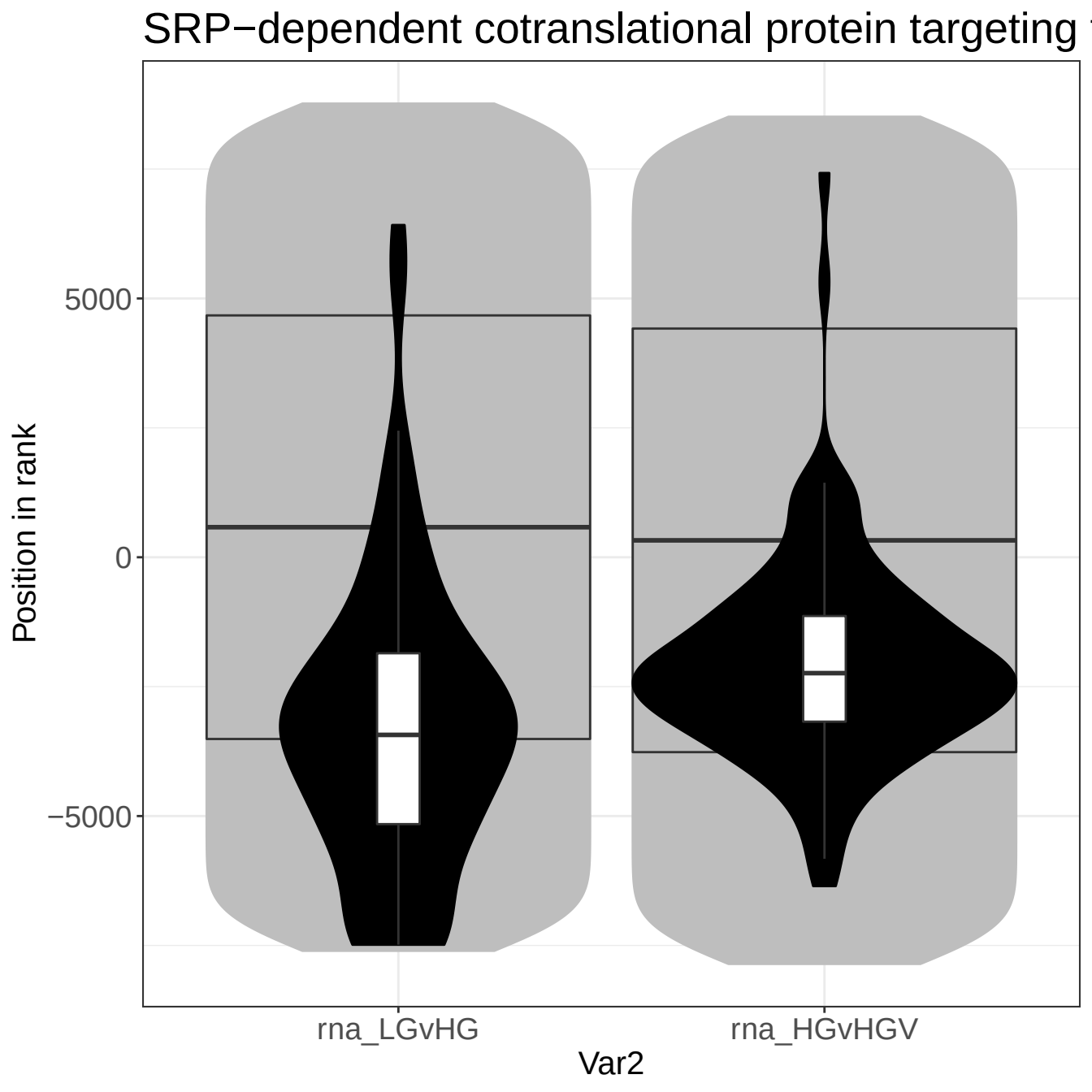

mRNA Splicing
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
1e−08
8e−09
6e−09
4e−09
2e−09
0e+00

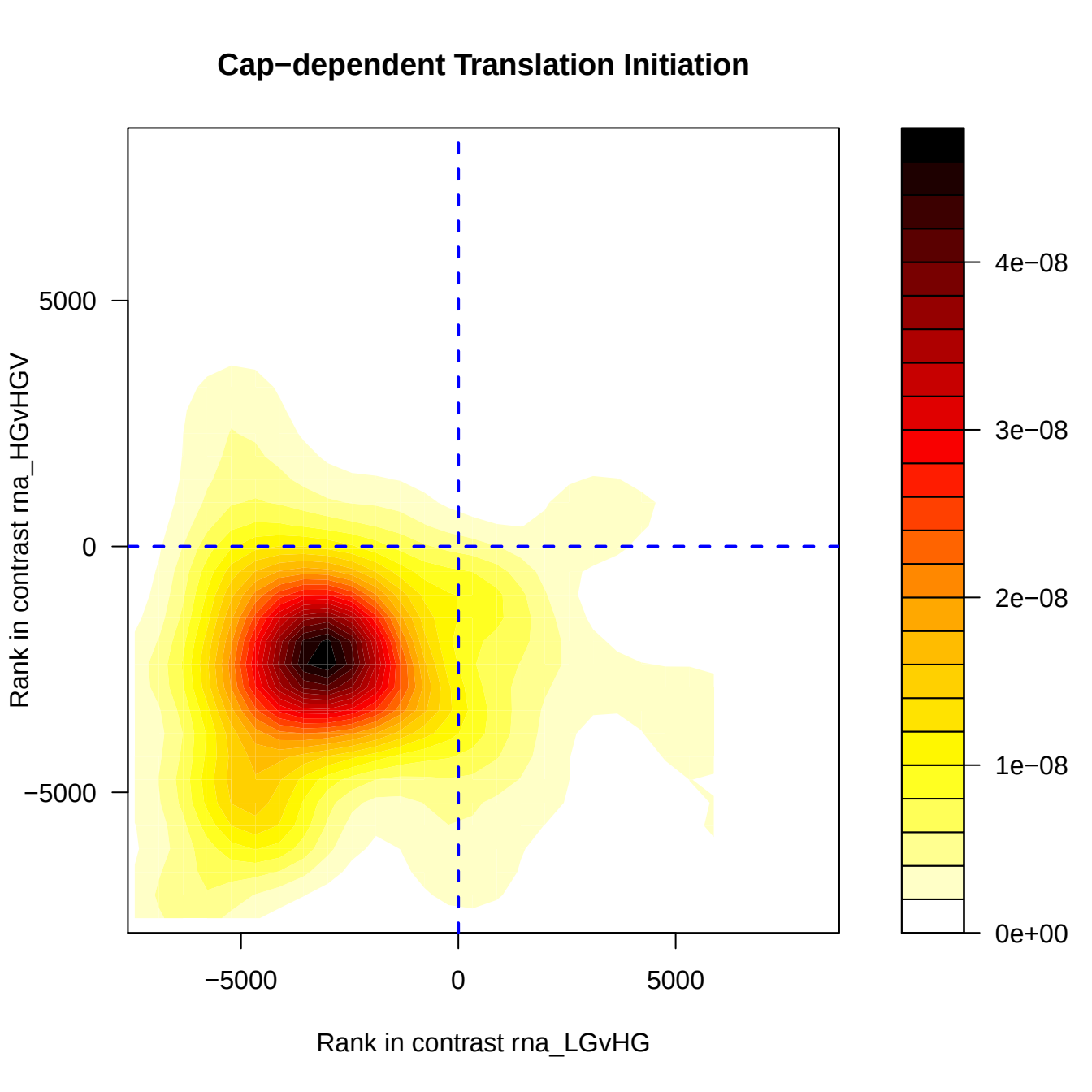

mRNA Splicing
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

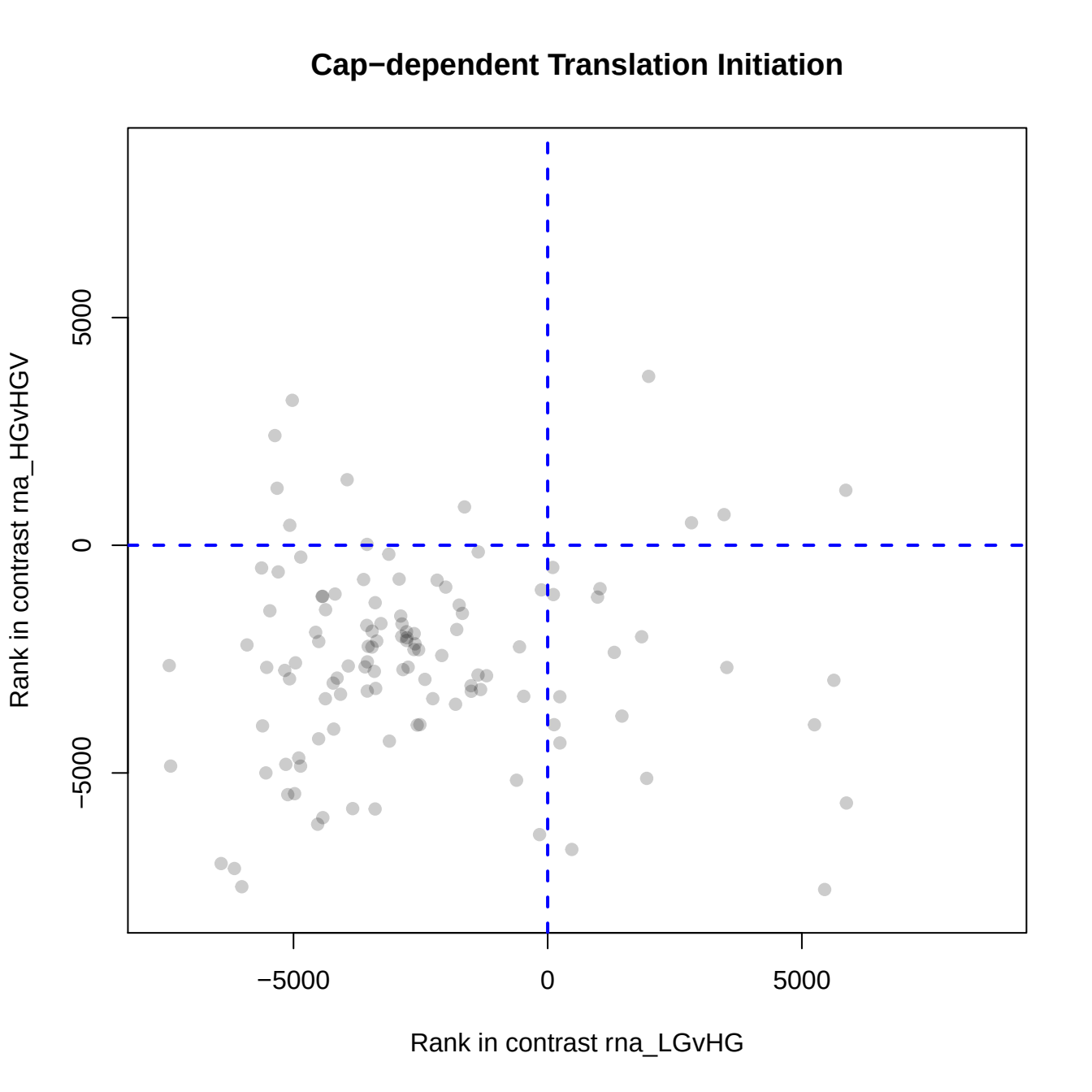

mRNA Splicing
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

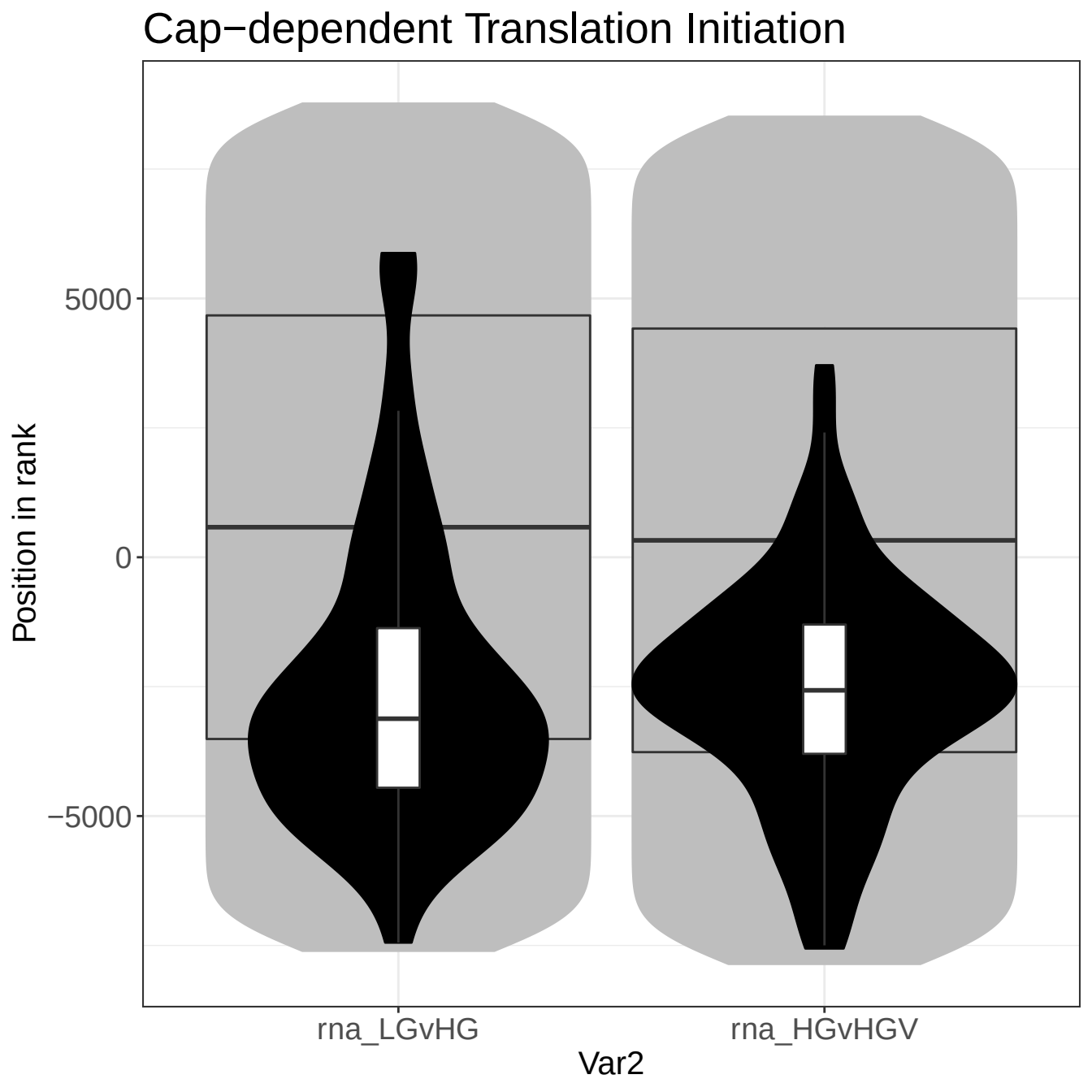

SRP−dependent cotranslational protein targeting to memb
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00

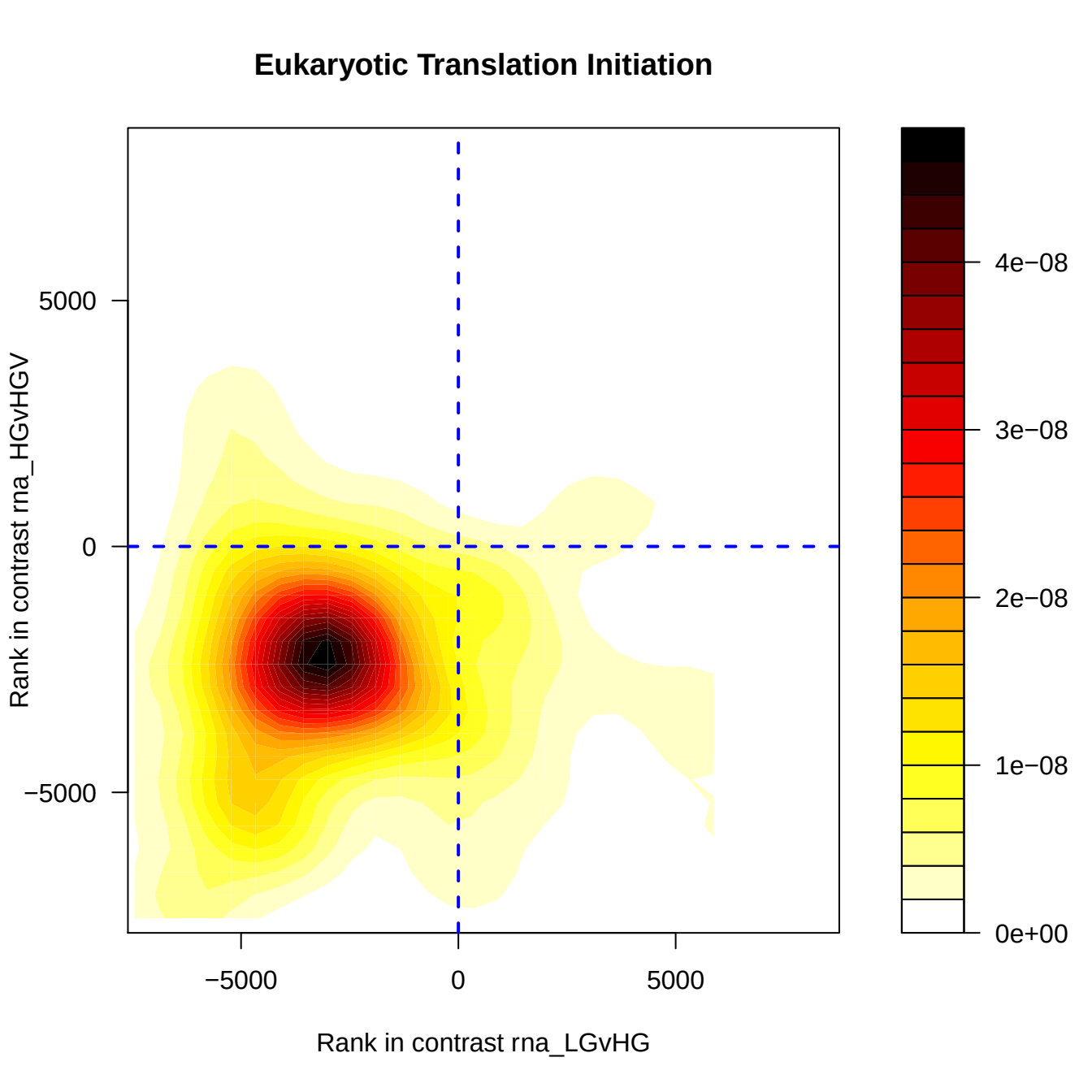

SRP−dependent cotranslational protein targeting to membrane
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

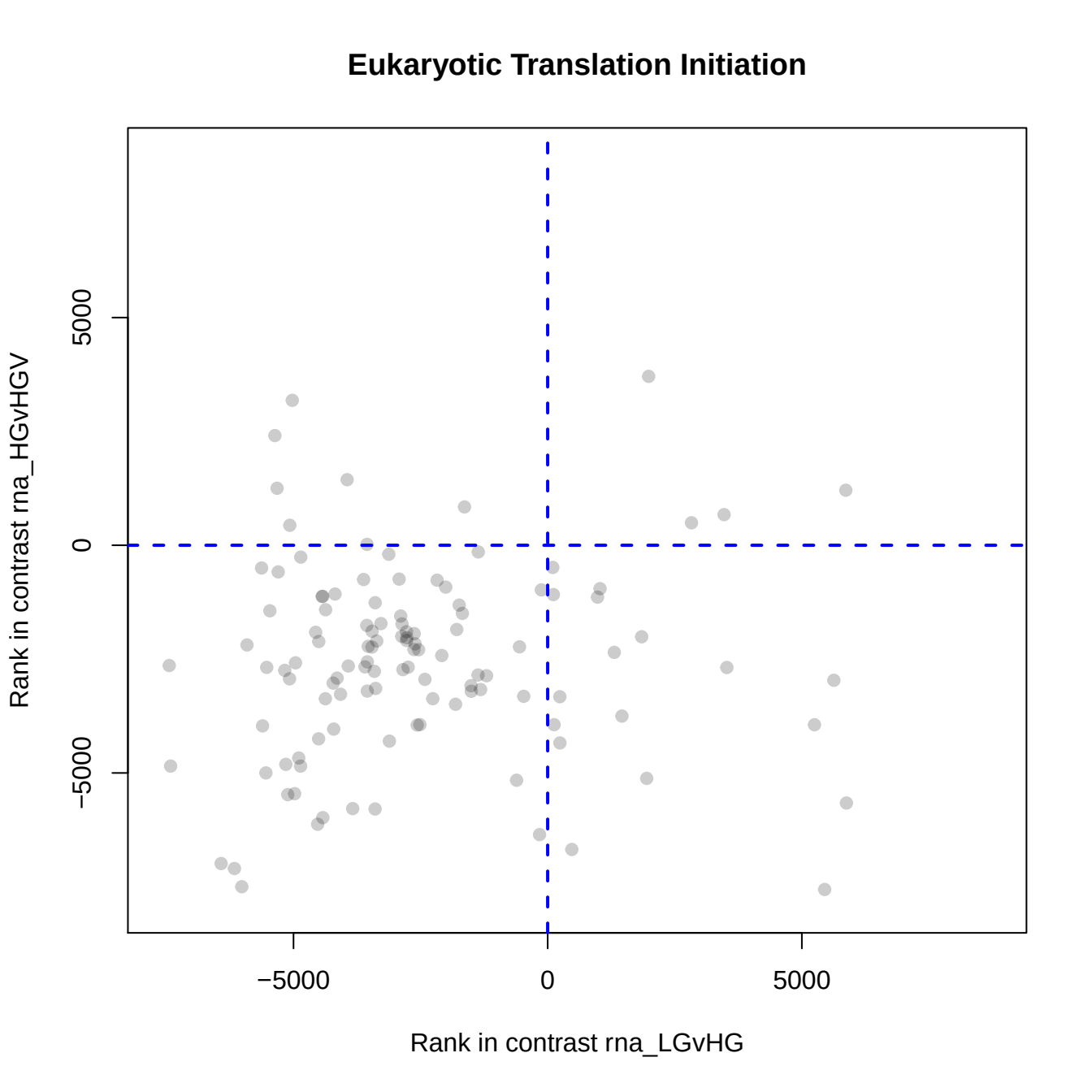

SRP−dependent cotranslational protein targeting
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

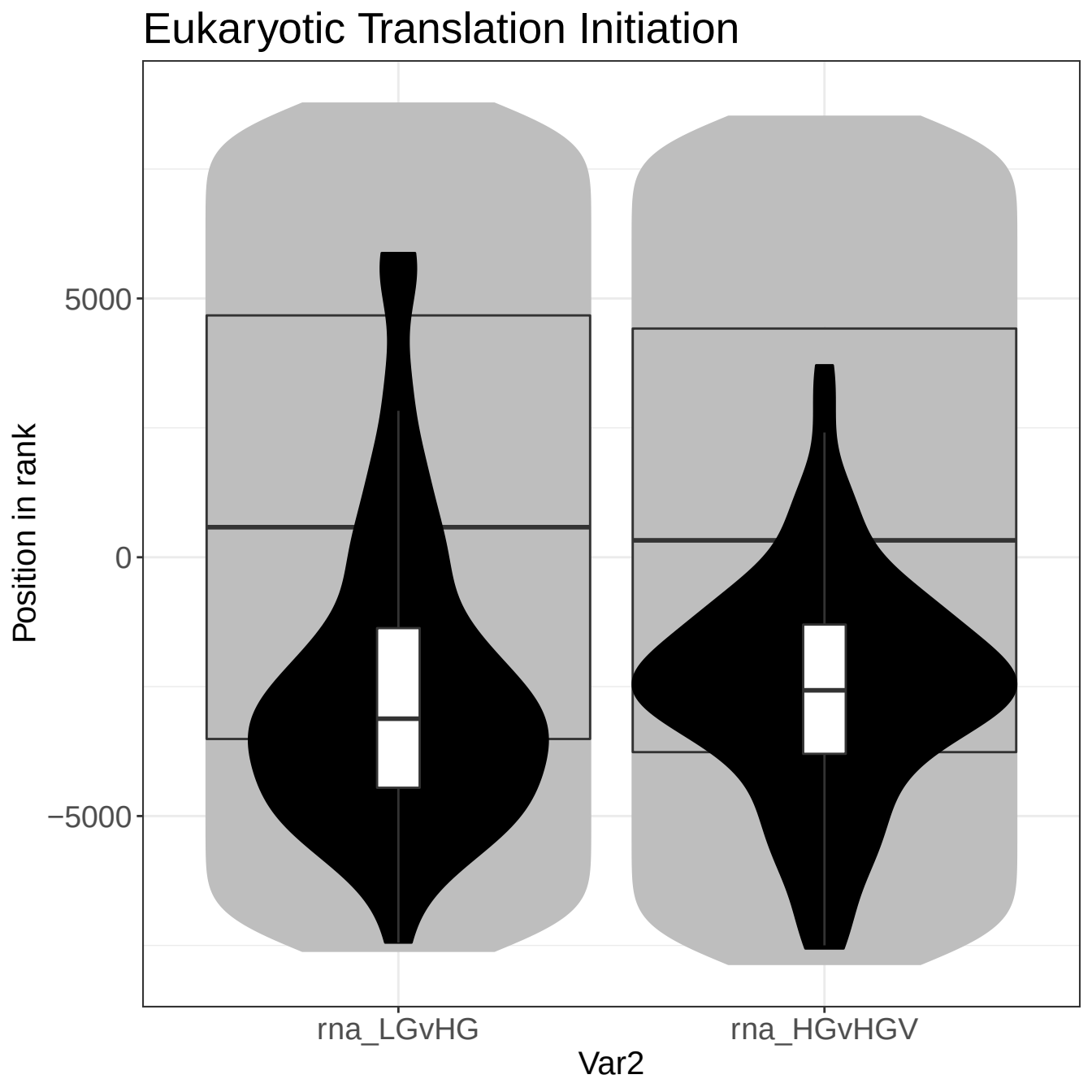

Cap−dependent Translation Initiation
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
4e−08
3e−08
2e−08
1e−08
0e+00

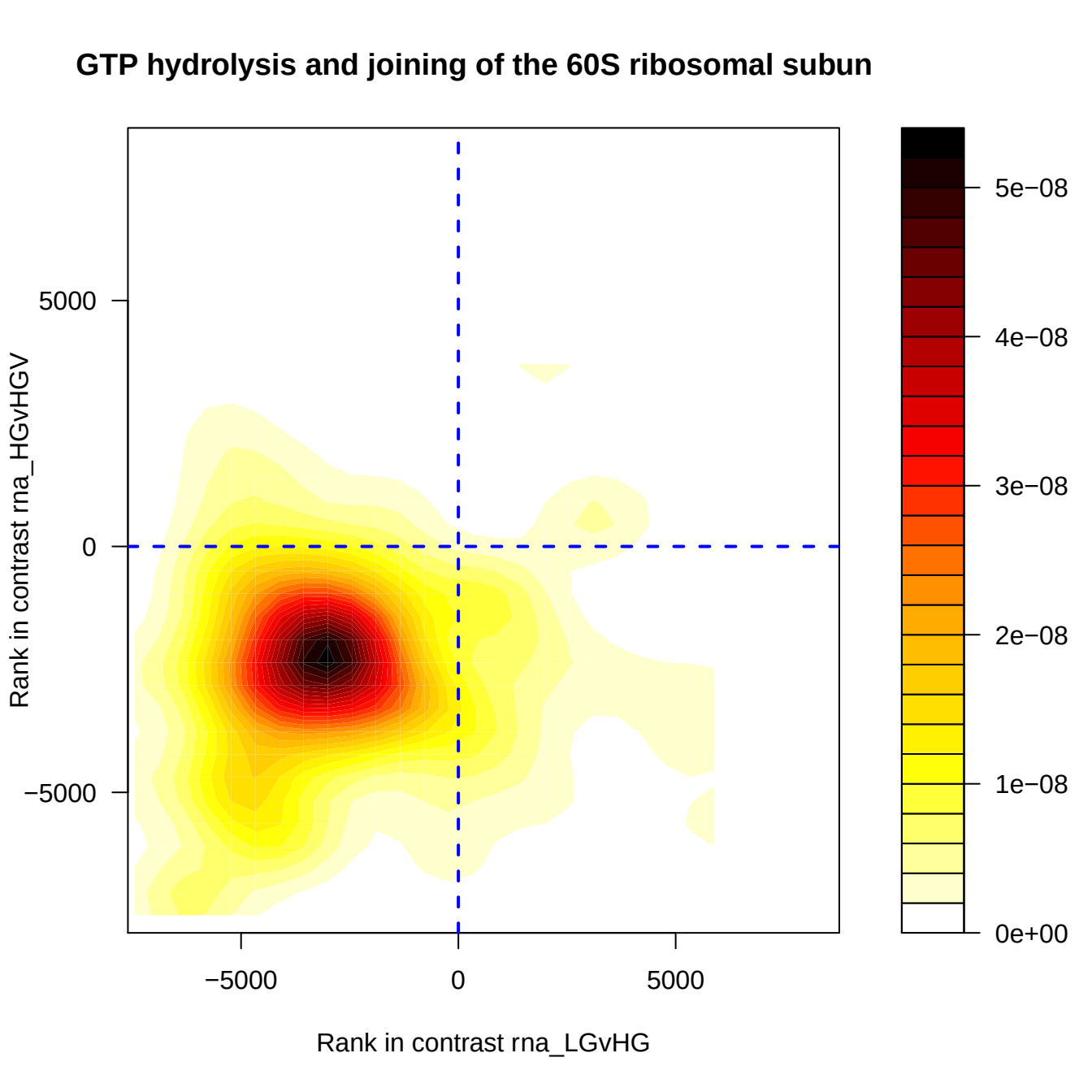

Cap−dependent Translation Initiation
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

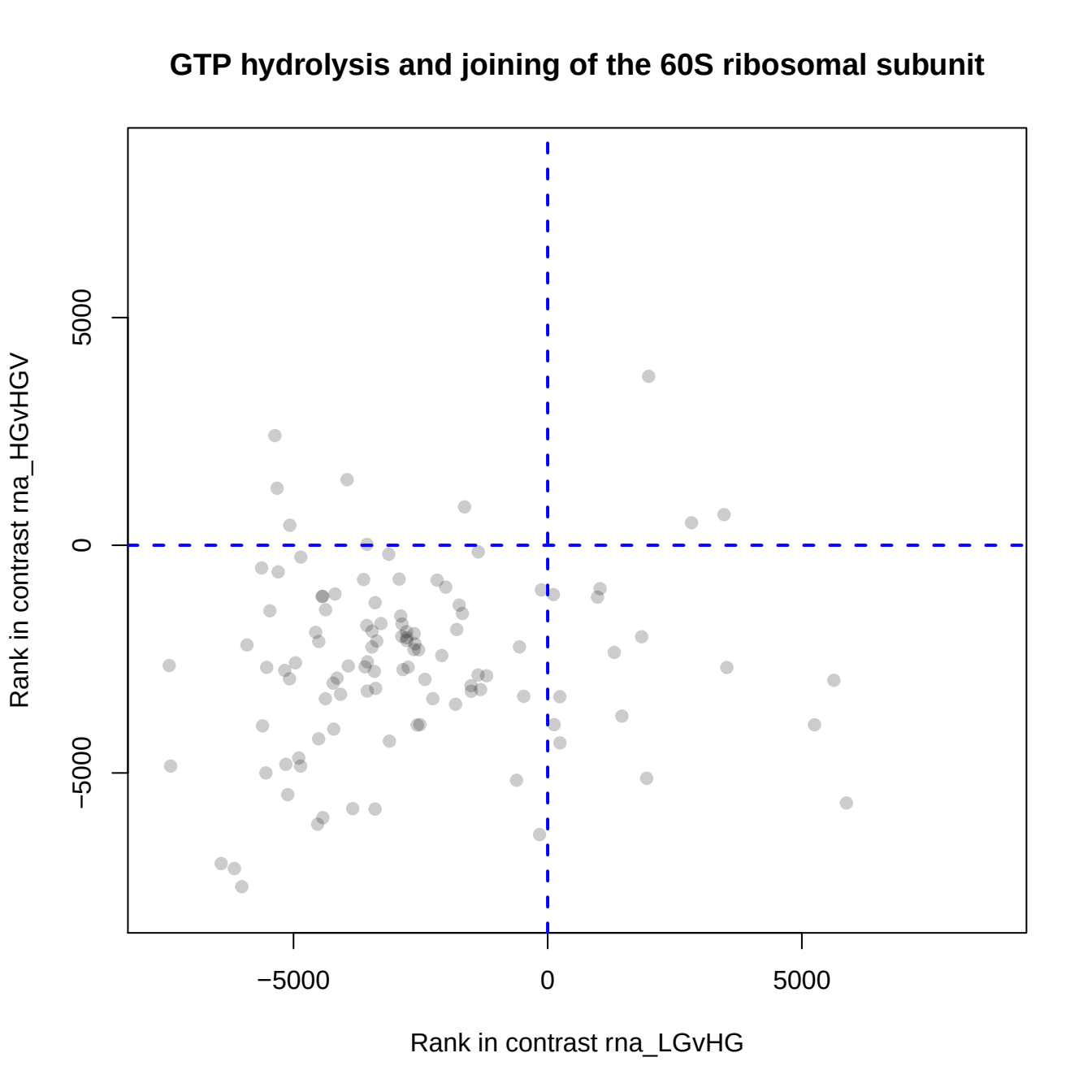

Cap−dependent Translation Initiation
Position in rank
5000
0
−5000
rna_LGvHG
rna_HGvHGV
Var2

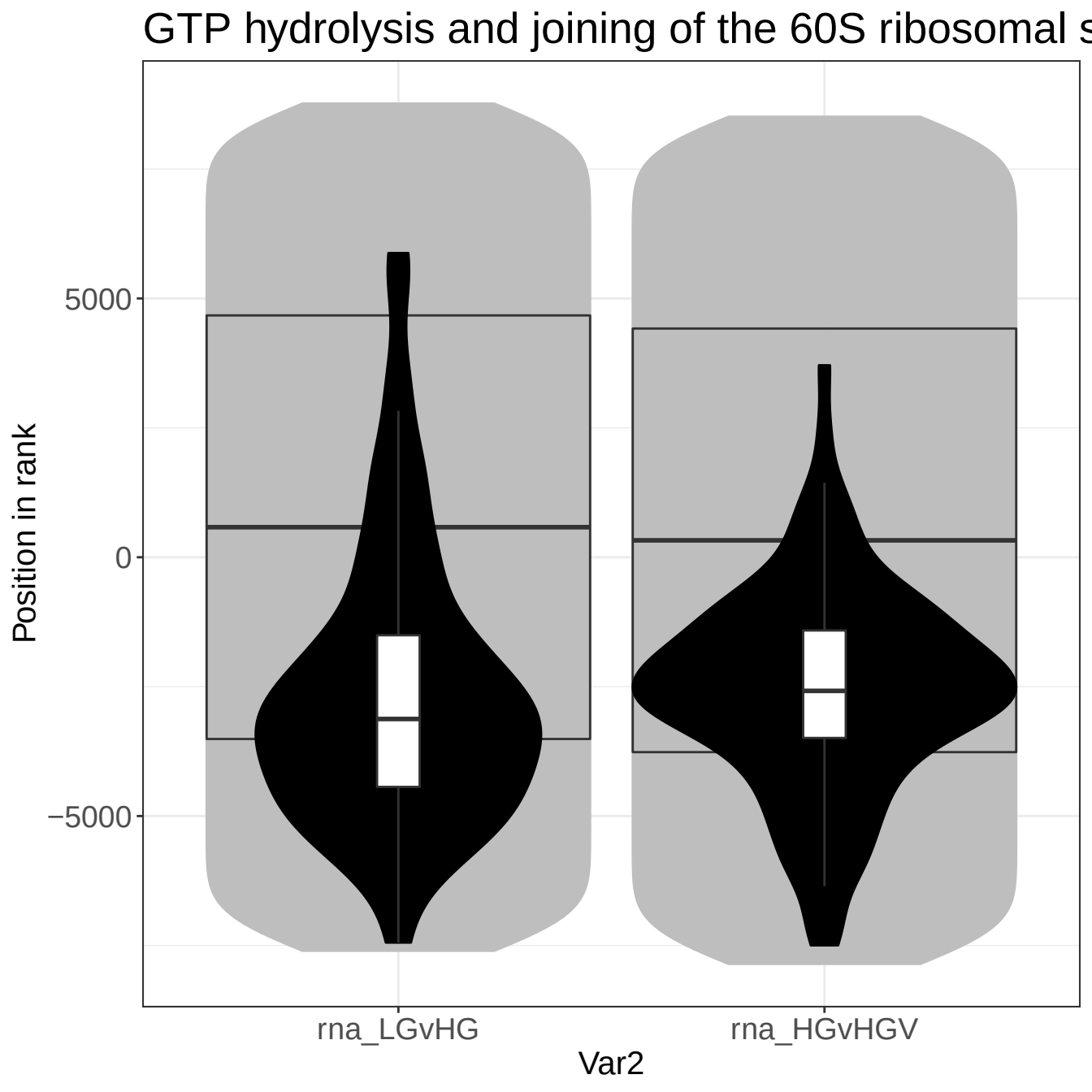

Eukaryotic Translation Initiation
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
4e−08
3e−08
2e−08
1e−08
0e+00

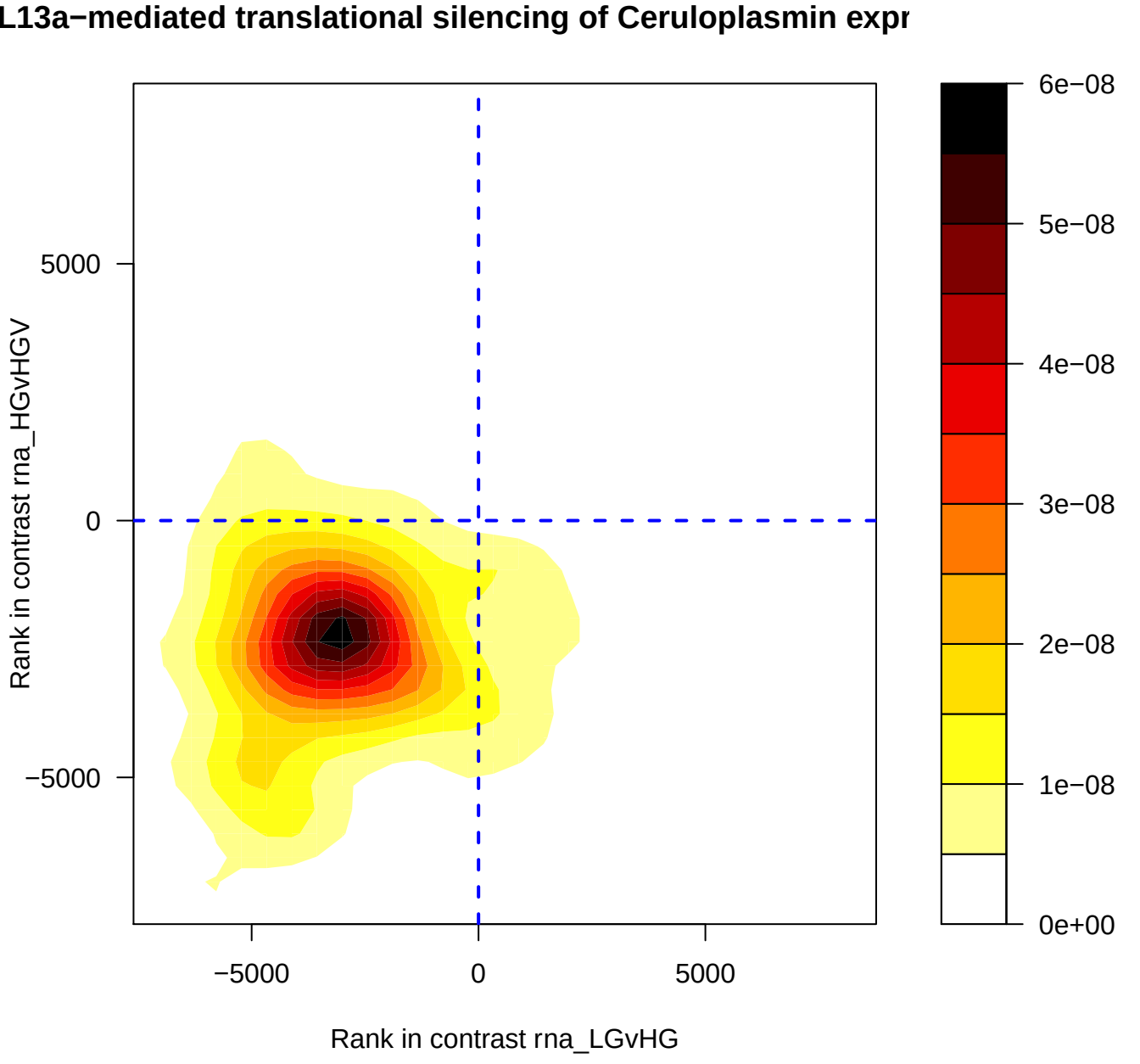

Eukaryotic Translation Initiation
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

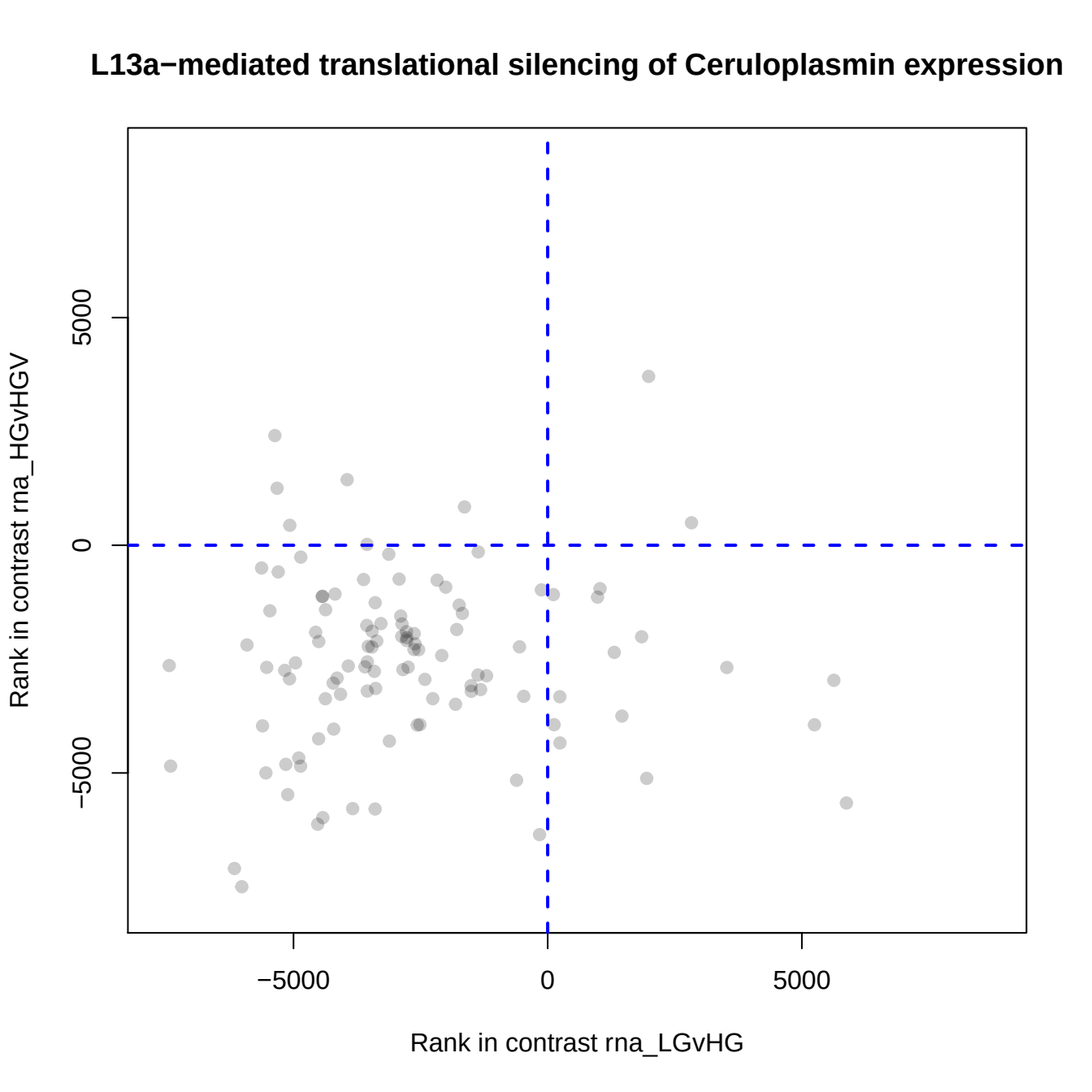

Eukaryotic Translation Initiation
Position in rank
5000
0
−5000
rna_LGvHG
rna_HGvHGV
Var2

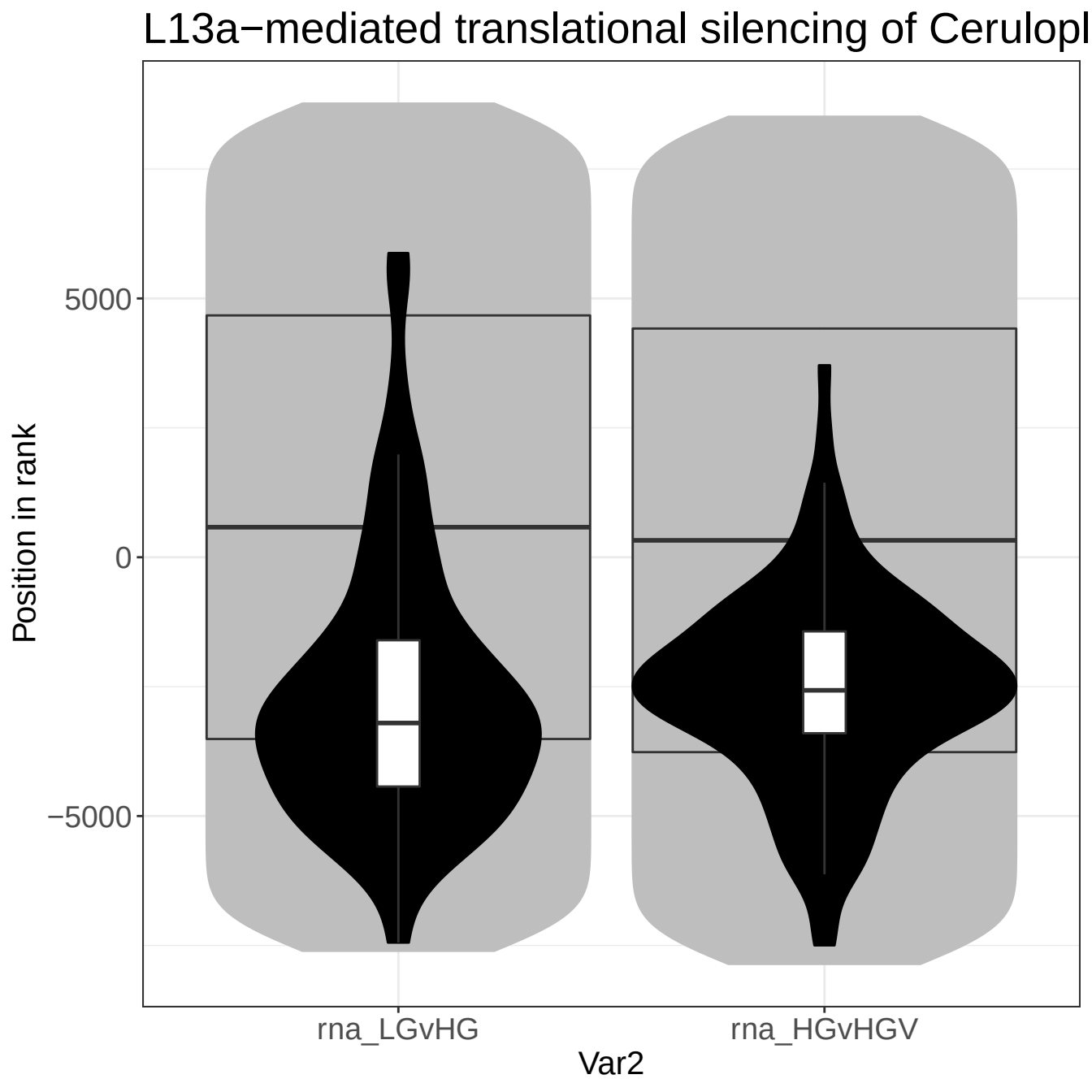

GTP hydrolysis and joining of the 60S ribosomal subun
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00

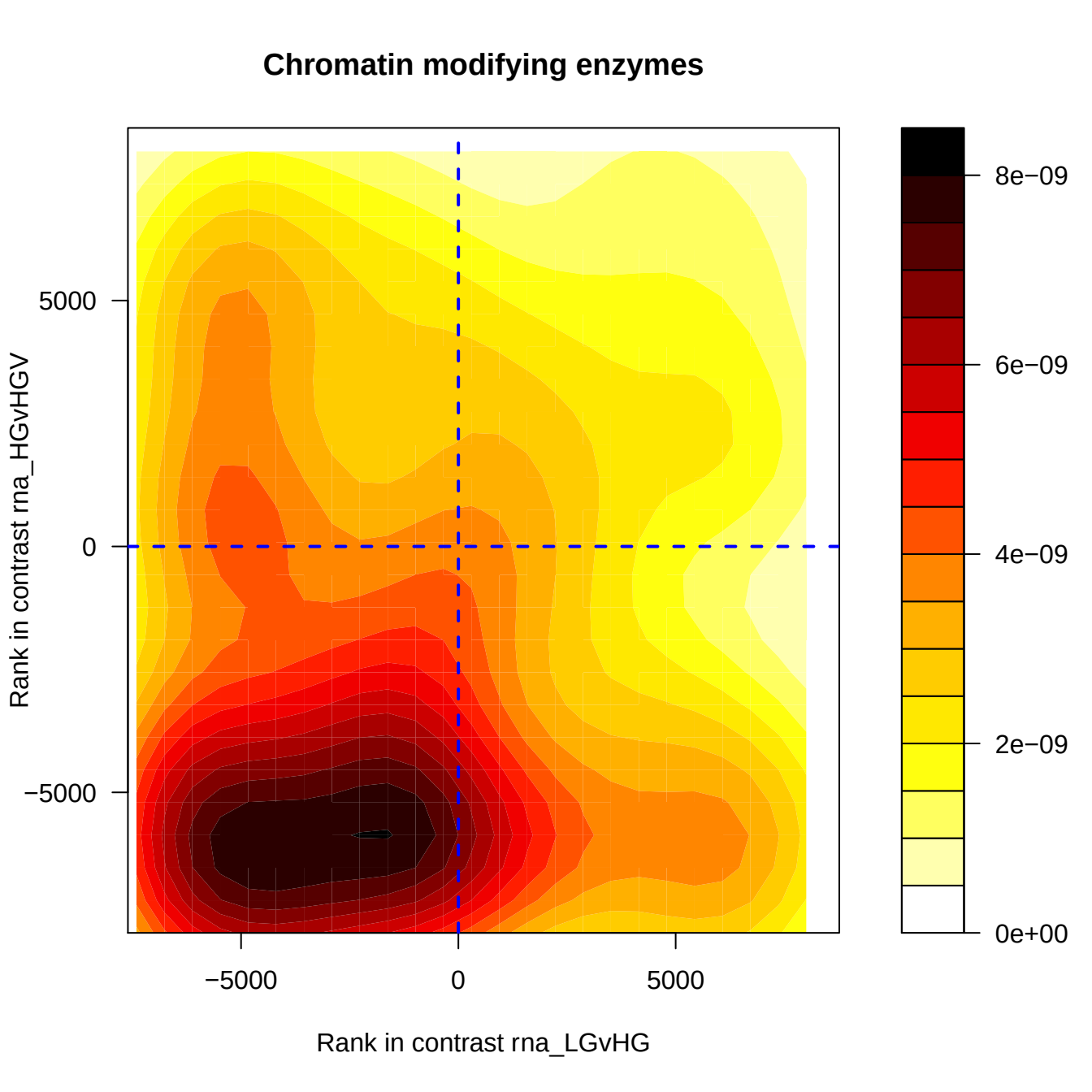

GTP hydrolysis and joining of the 60S ribosomal subunit
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

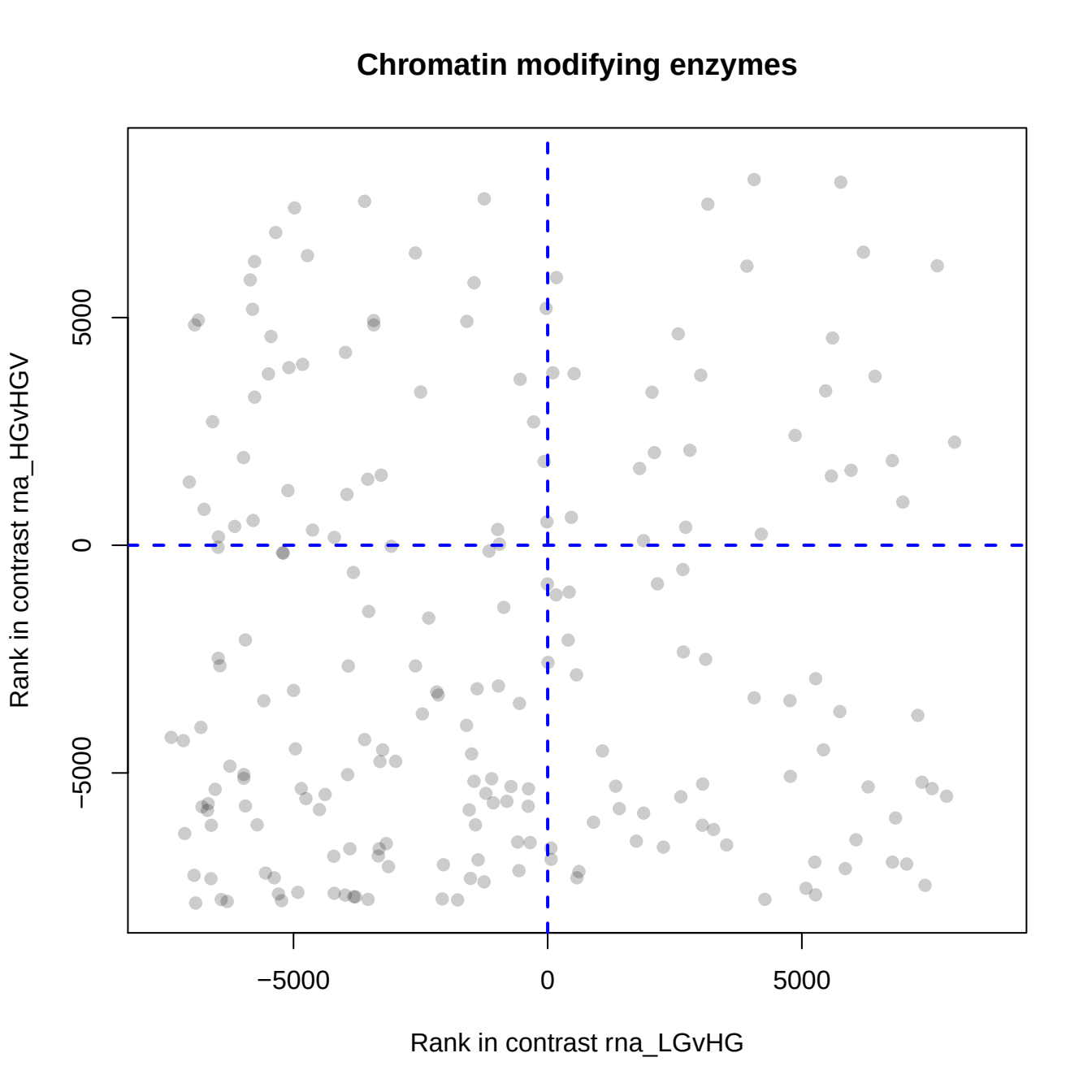

GTP hydrolysis and joining of the 60S ribosomal s
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

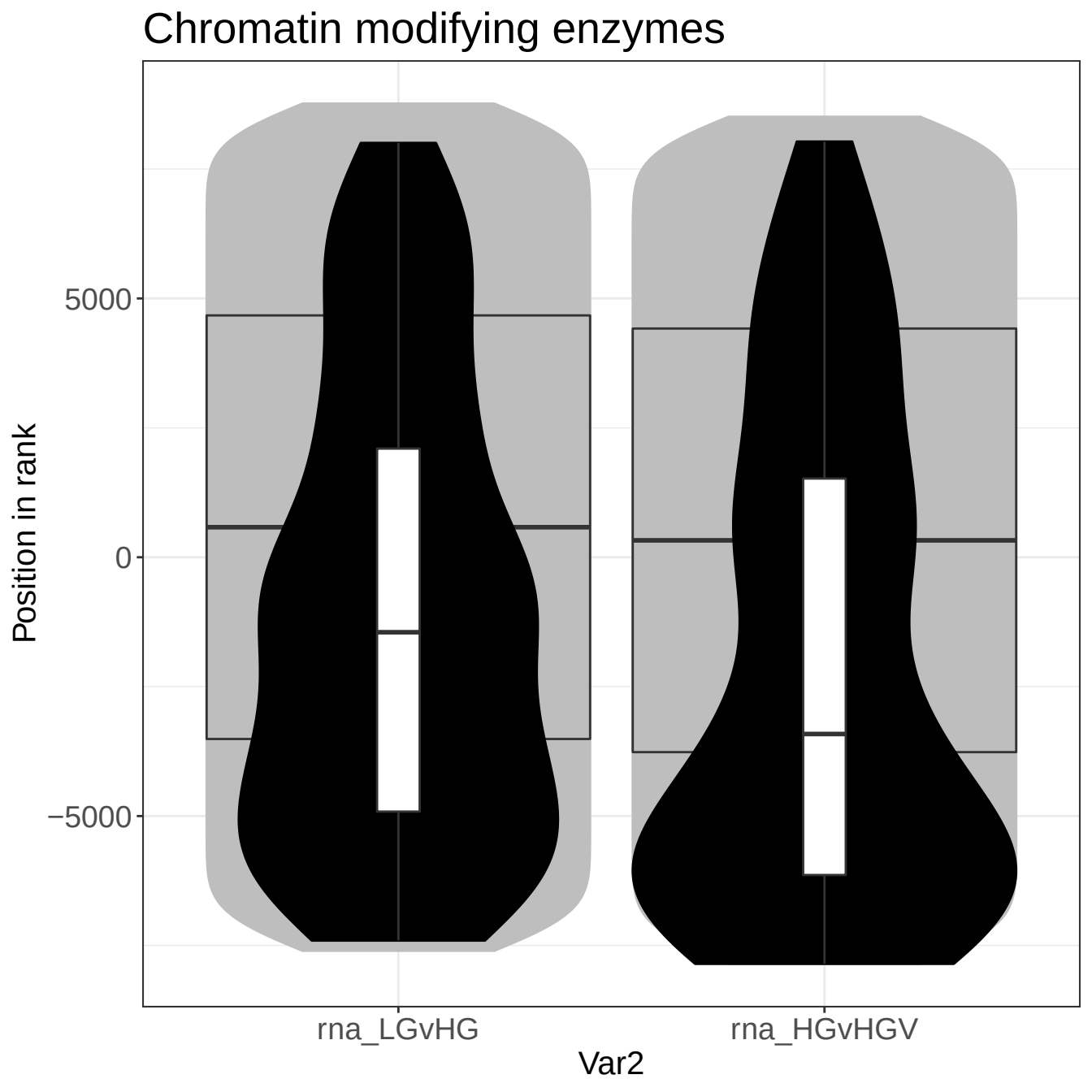

L13a−mediated translational silencing of Ceruloplasmin expr
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
6e−08
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00

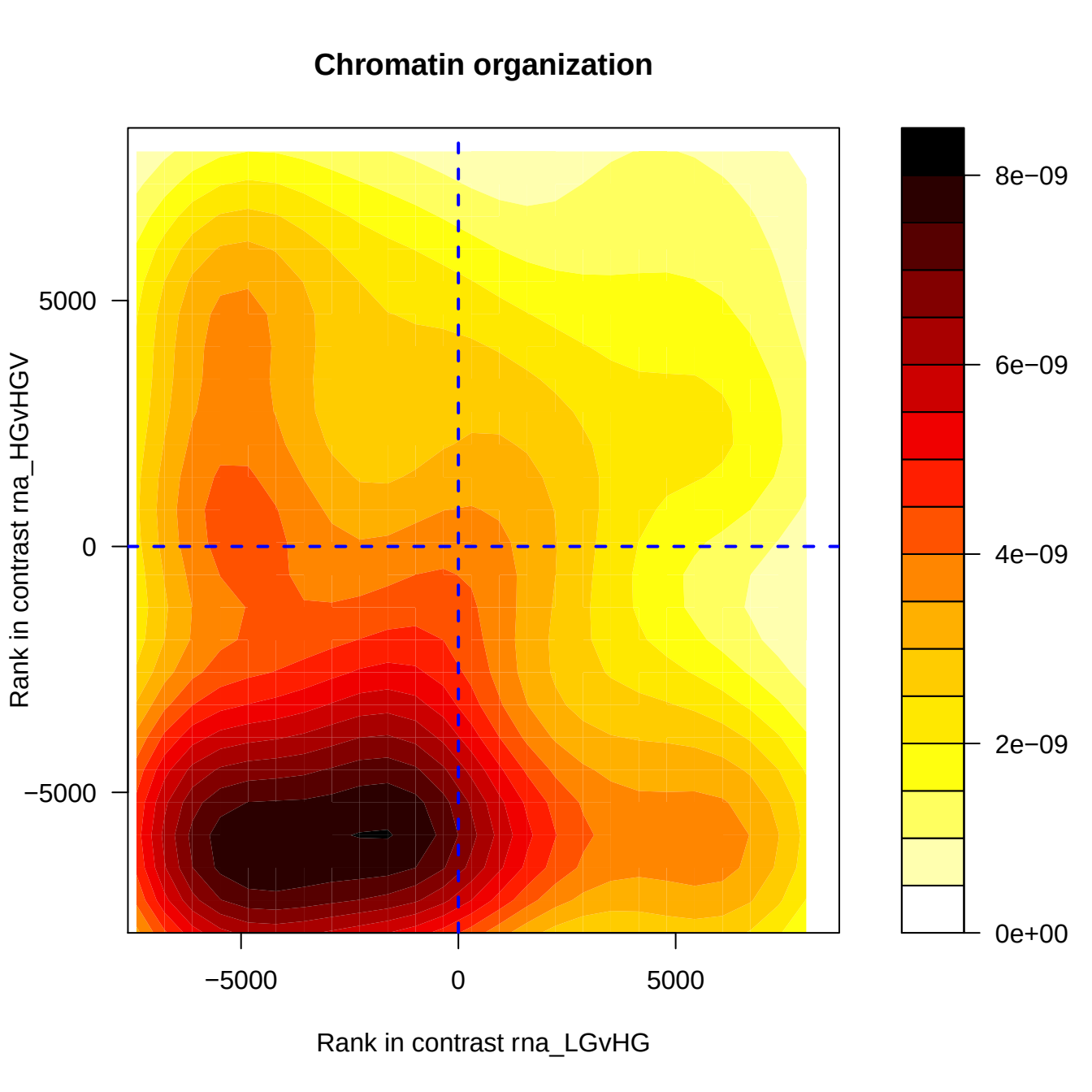

L13a−mediated translational silencing of Ceruloplasmin expression
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

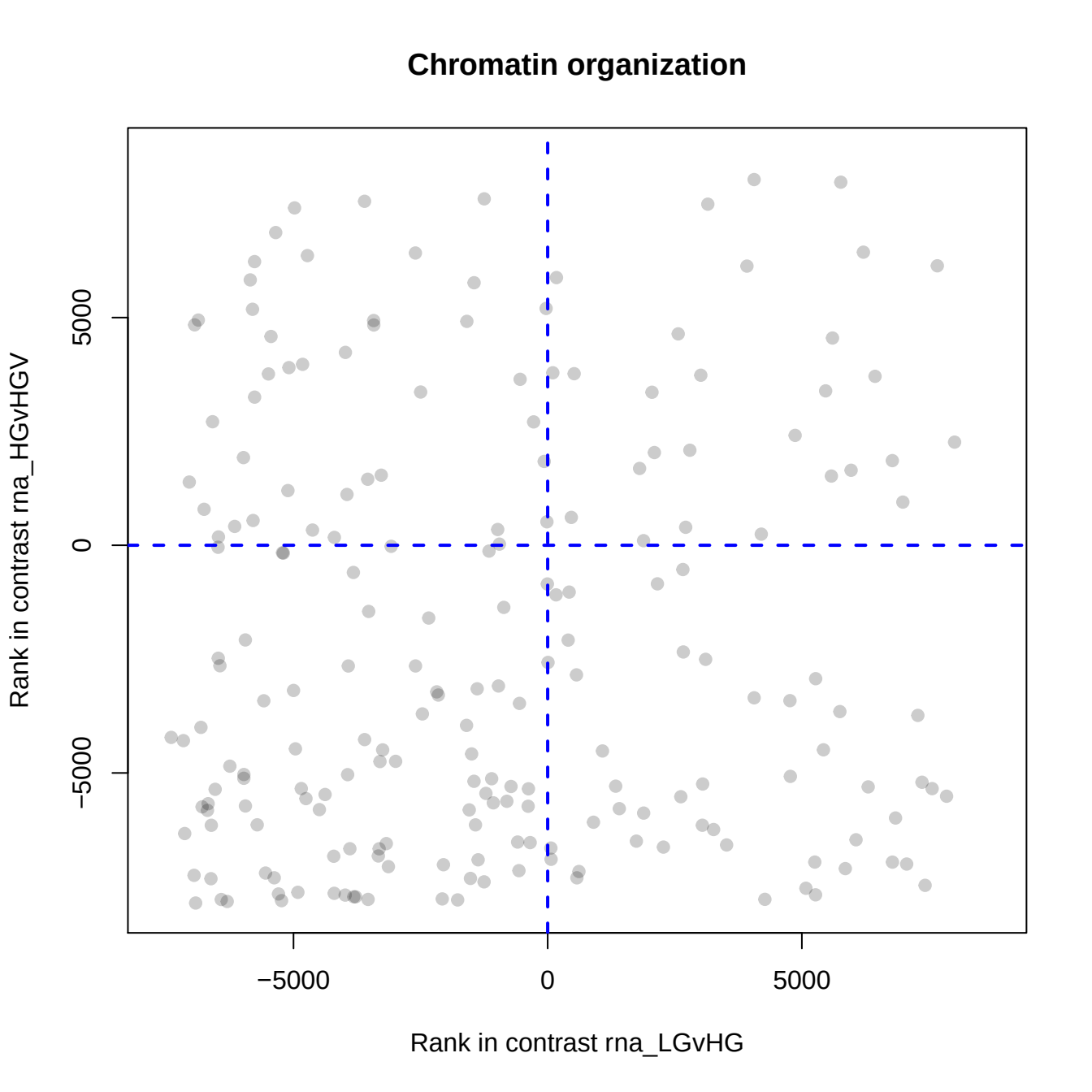

L13a−mediated translational silencing of Cerulopl
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

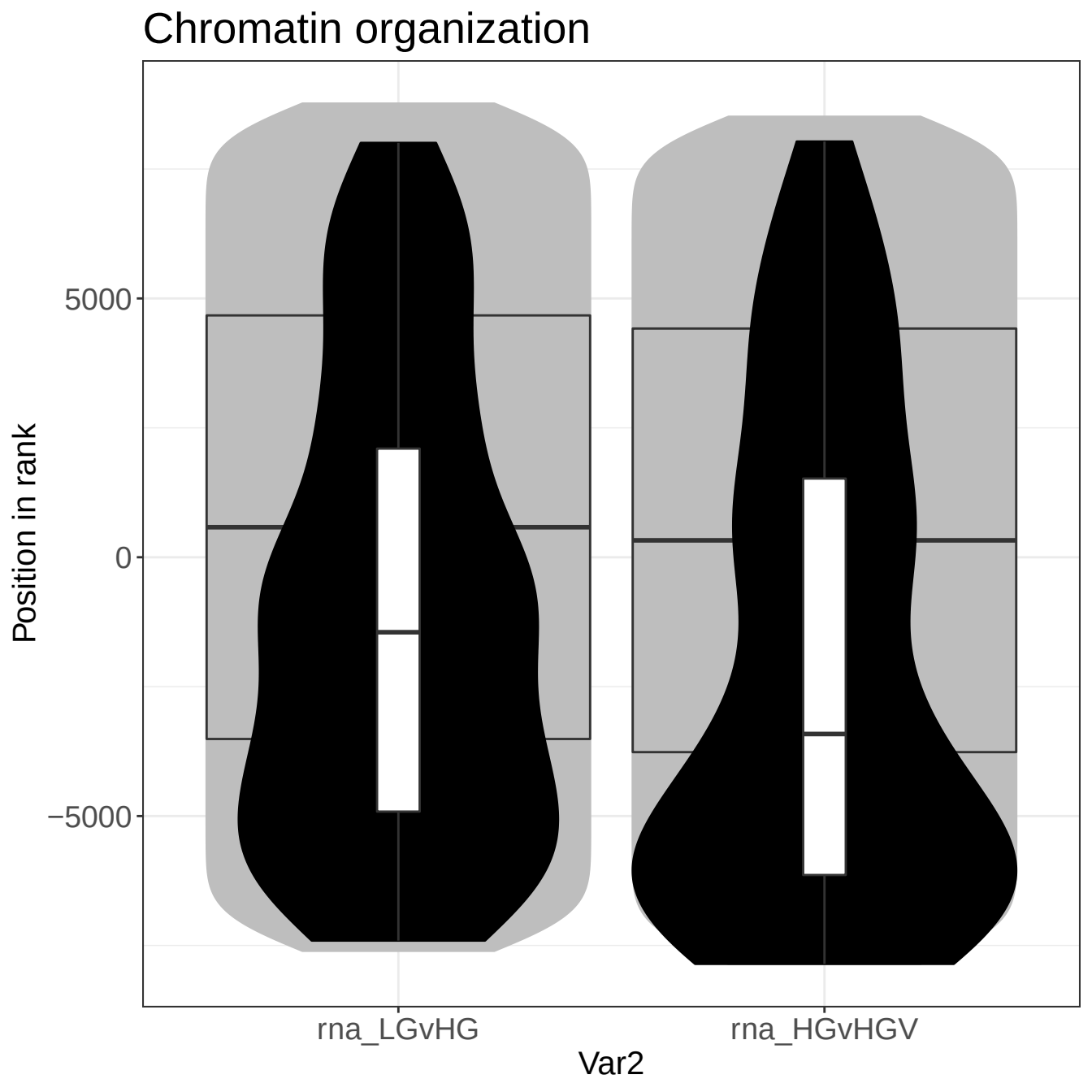

Chromatin modifying enzymes
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
8e−09
6e−09
4e−09
2e−09
0e+00

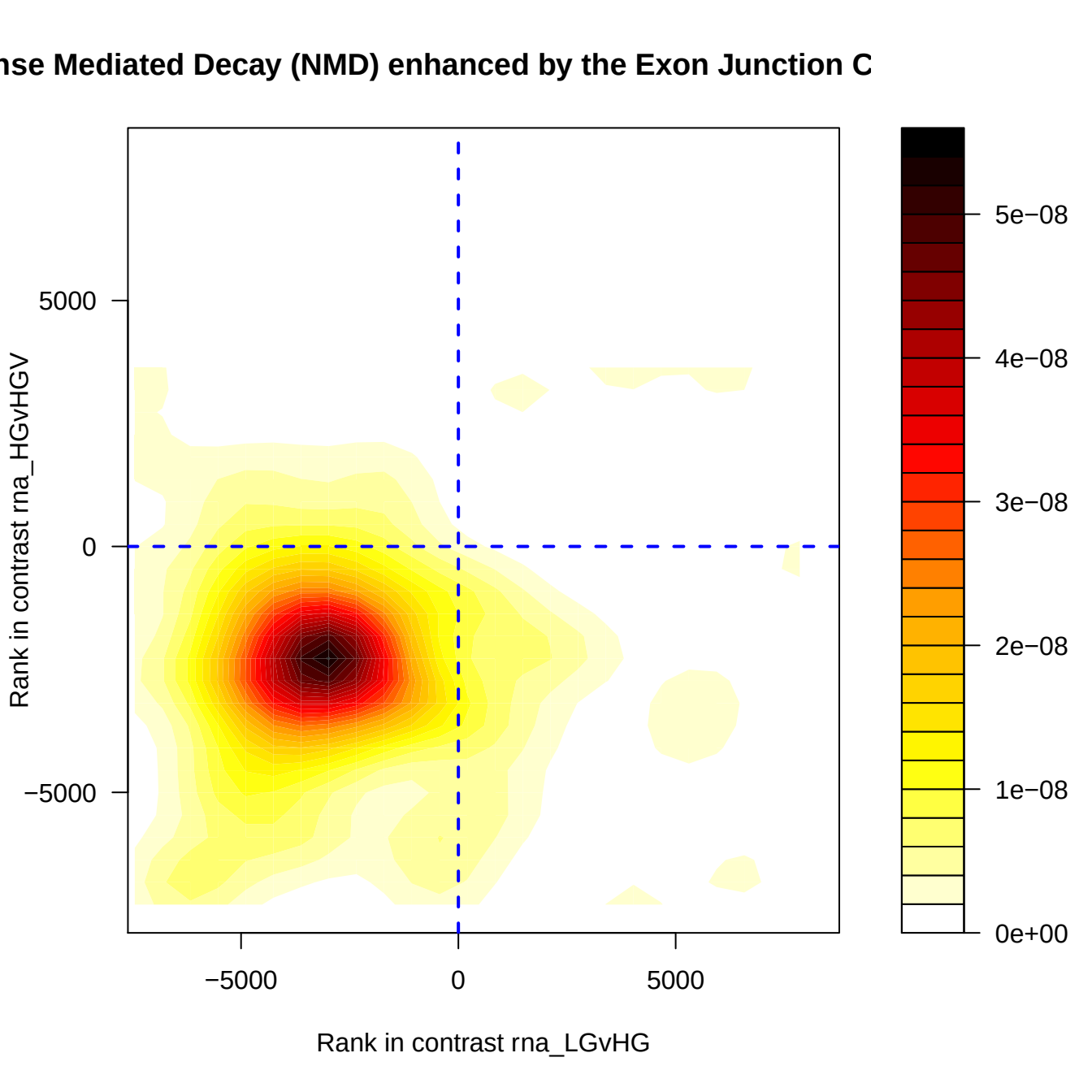

Chromatin modifying enzymes
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

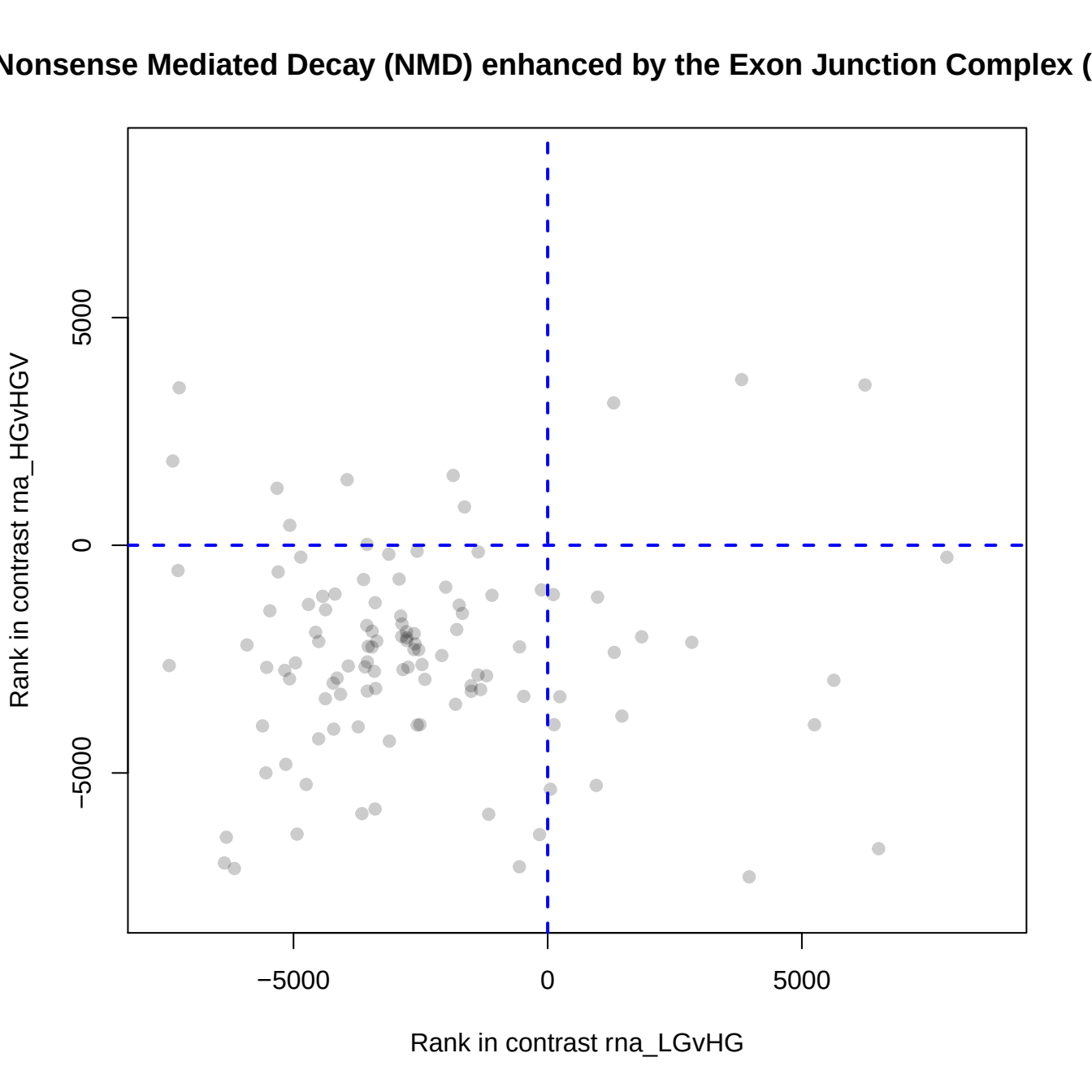

Chromatin modifying enzymes
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

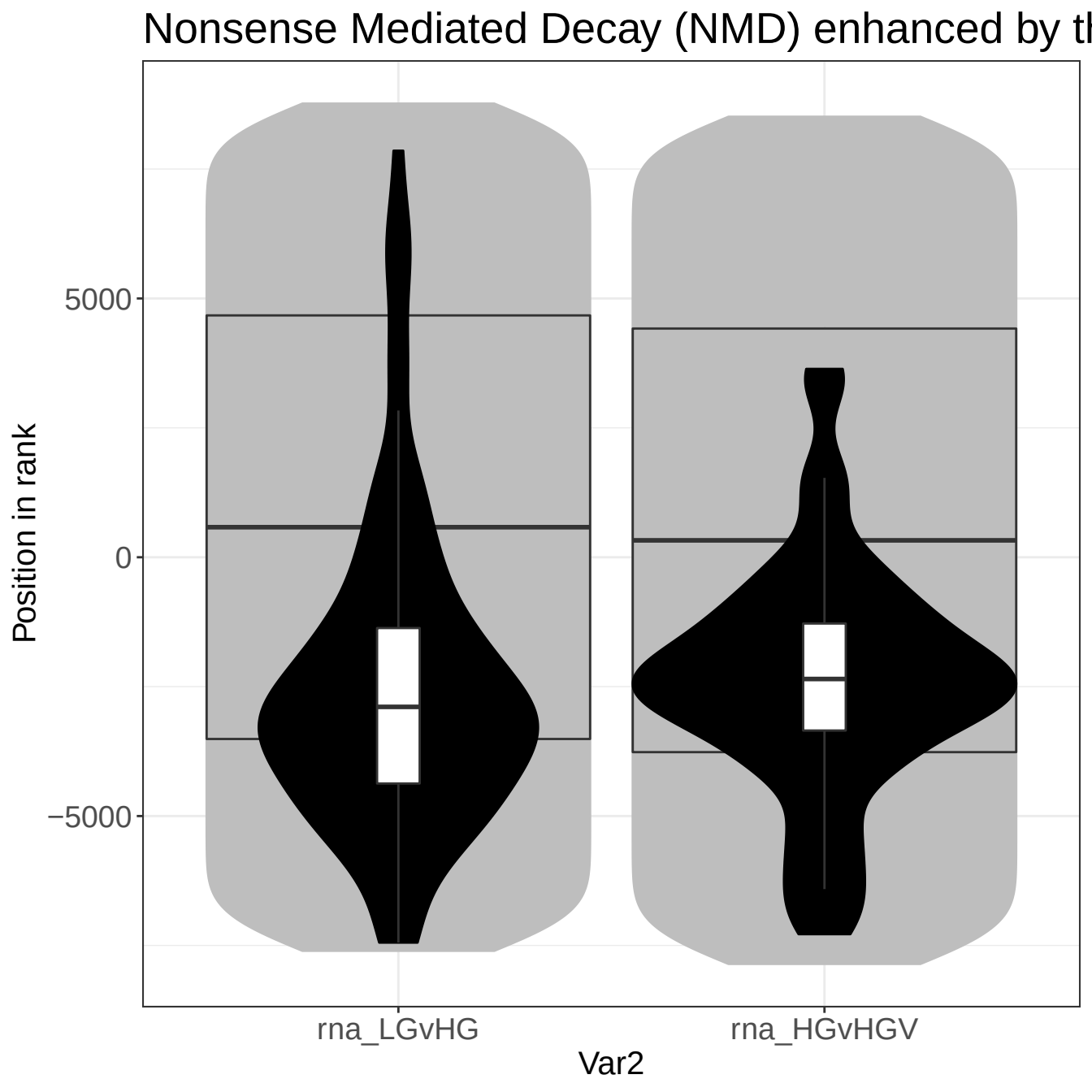

Chromatin organization
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
8e−09
6e−09
4e−09
2e−09
0e+00

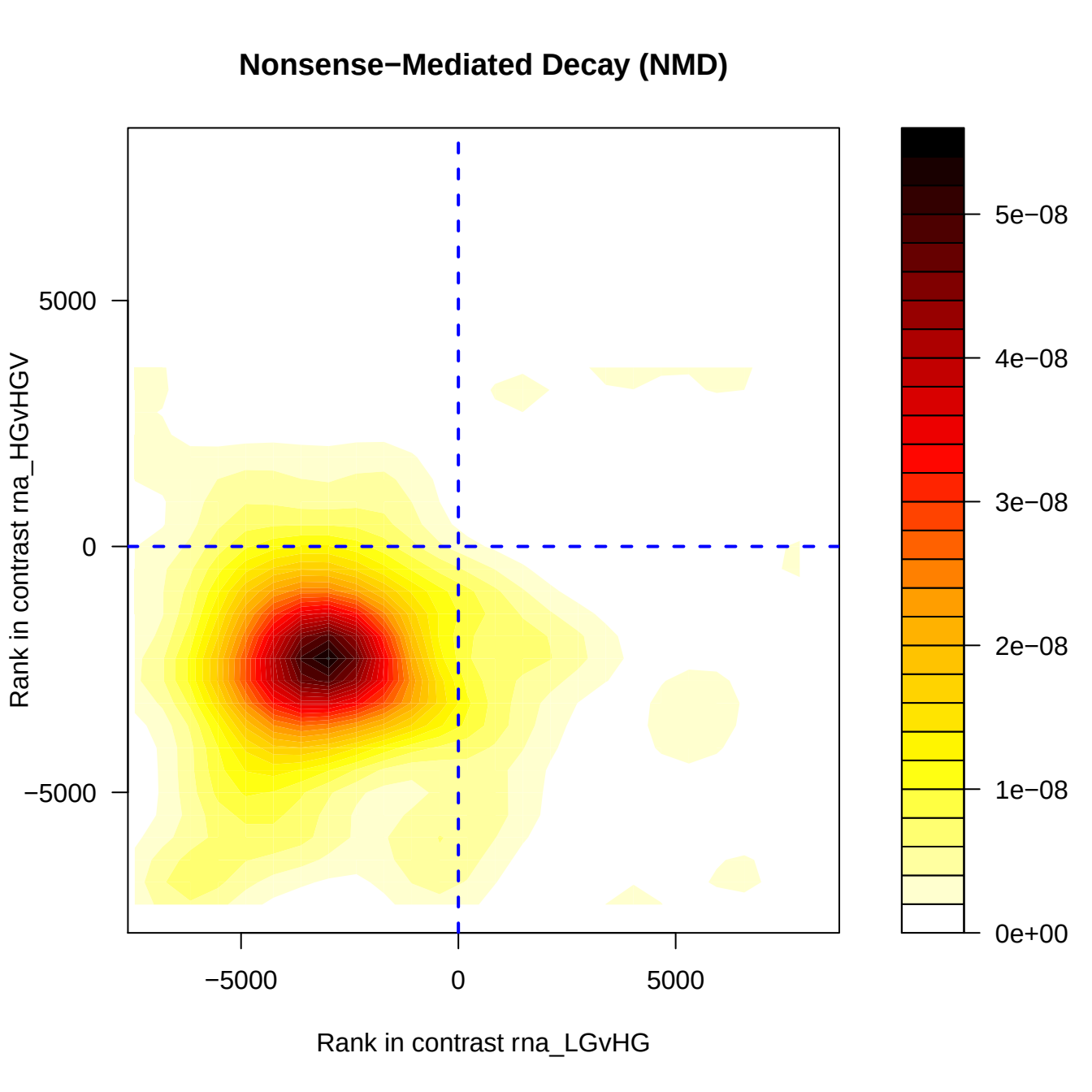

Chromatin organization
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

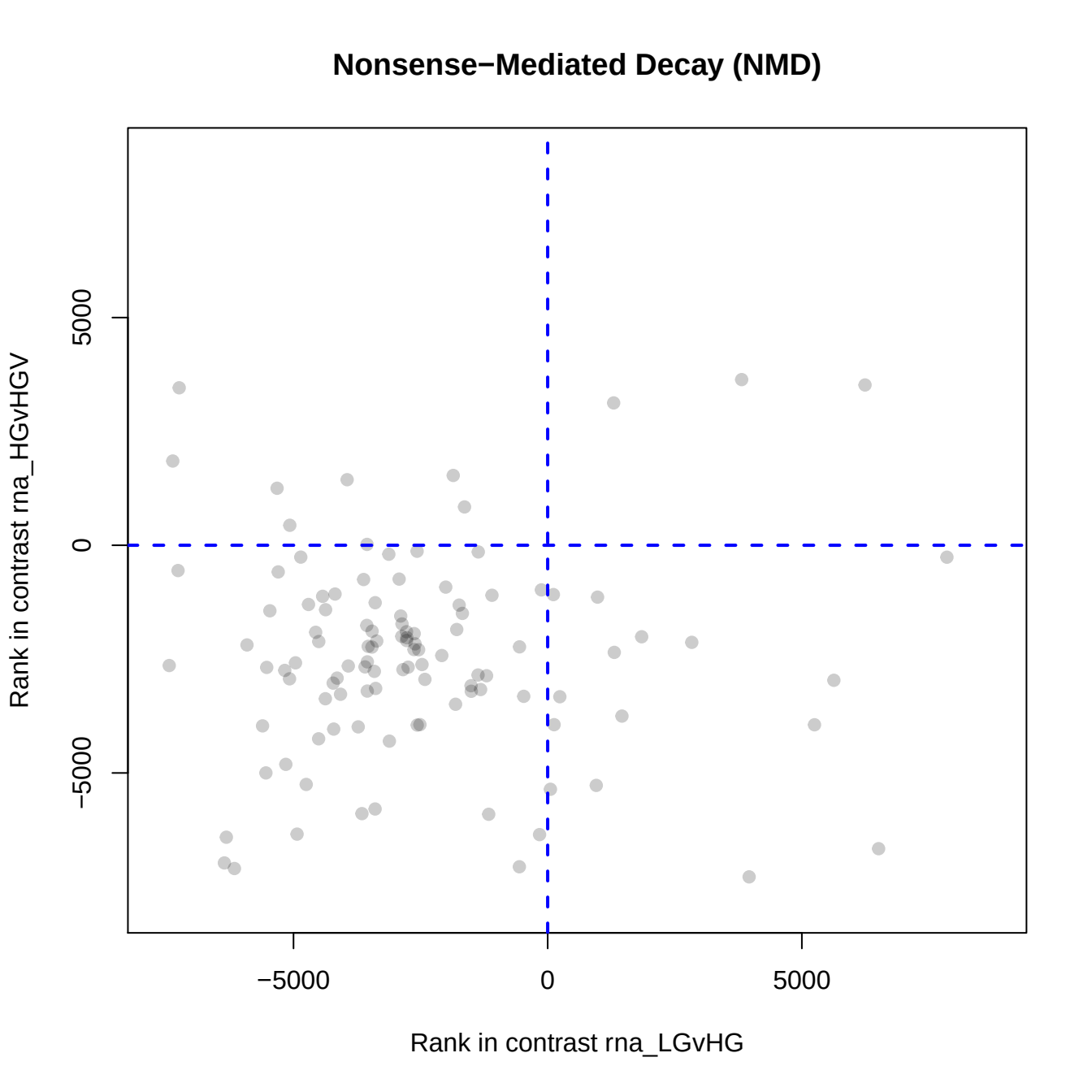

Chromatin organization
Position in rank
5000
0
−5000
rna_LGvHG
rna_HGvHGV
Var2

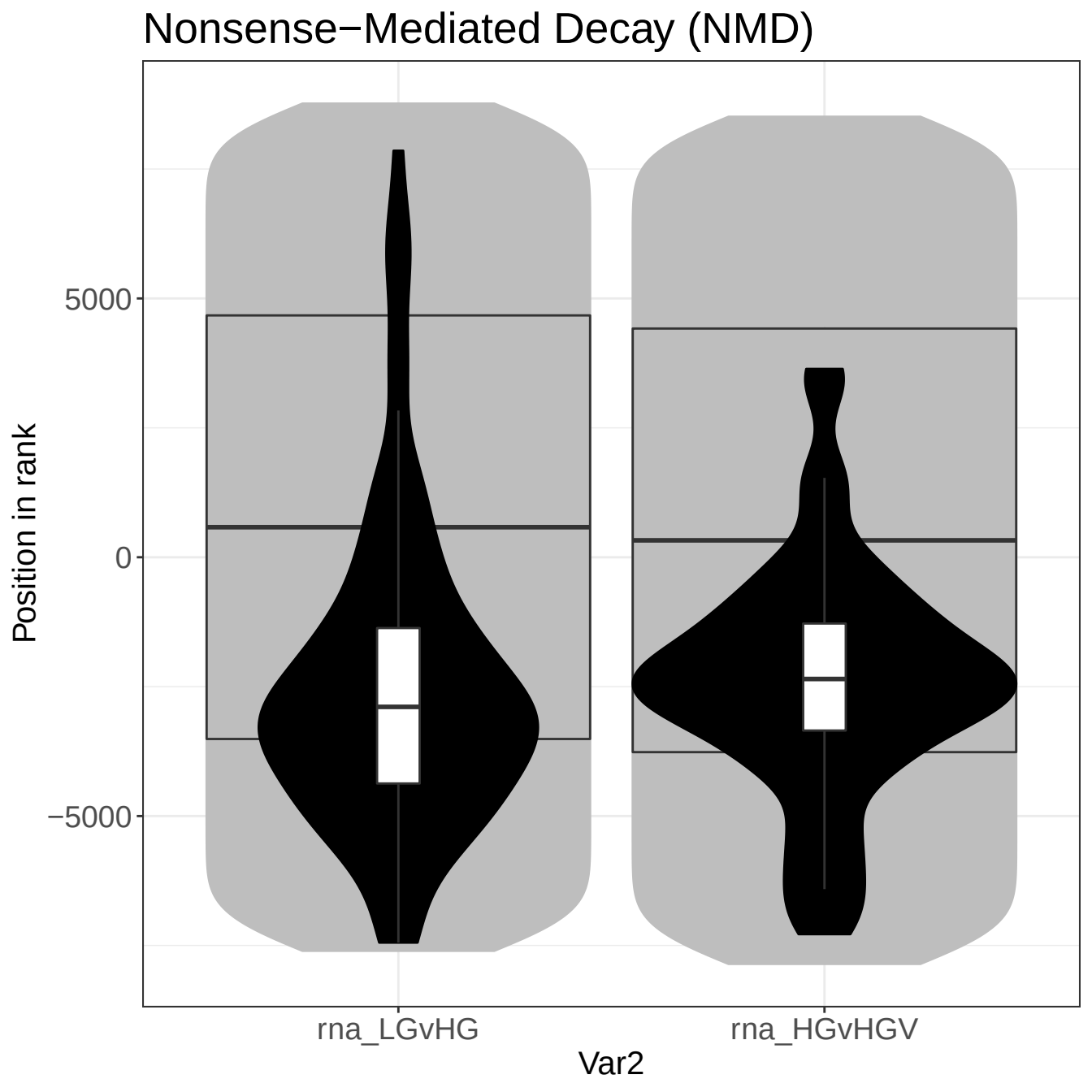

nse Mediated Decay (NMD) enhanced by the Exon Junction C
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00

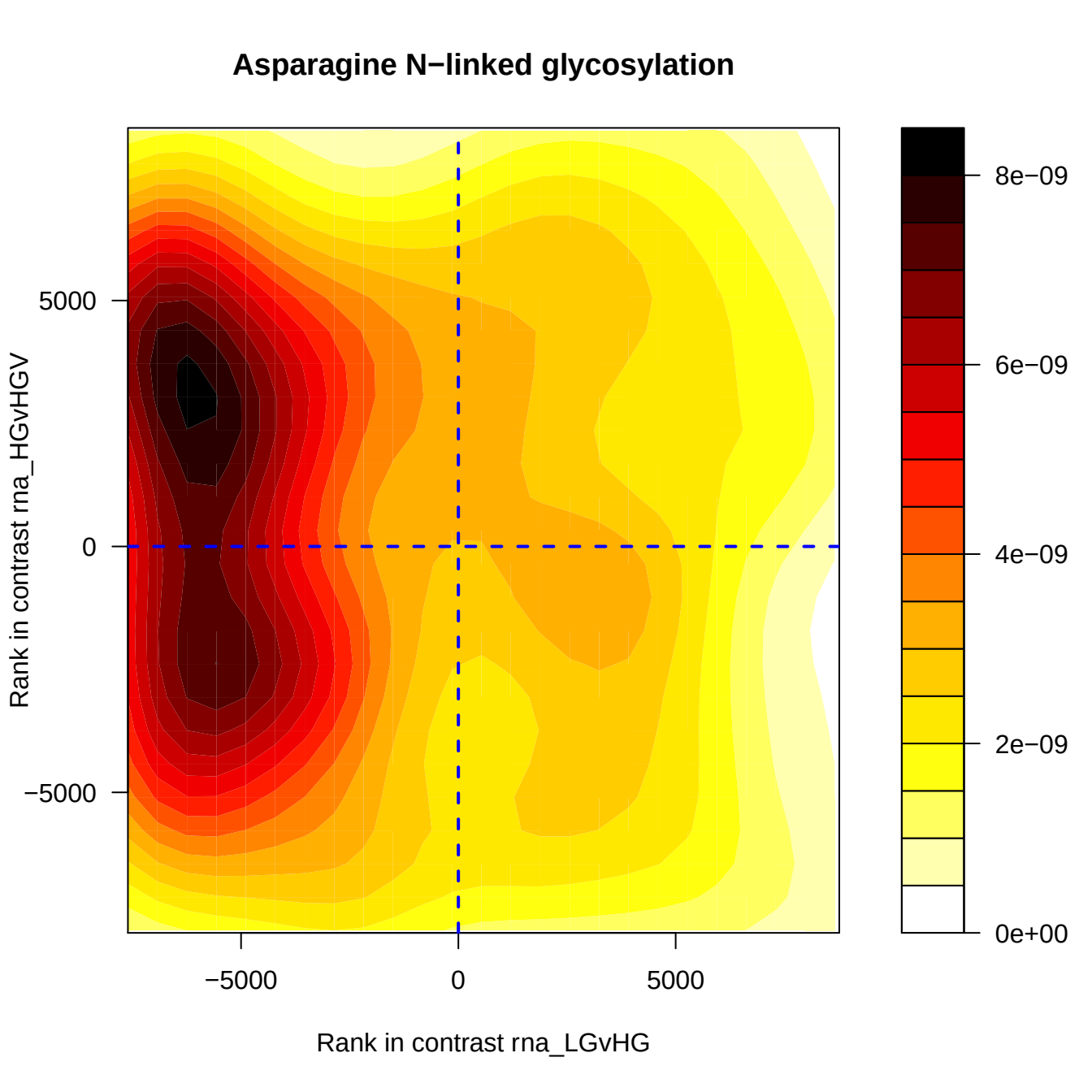

Nonsense Mediated Decay (NMD) enhanced by the Exon Junction Complex (
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

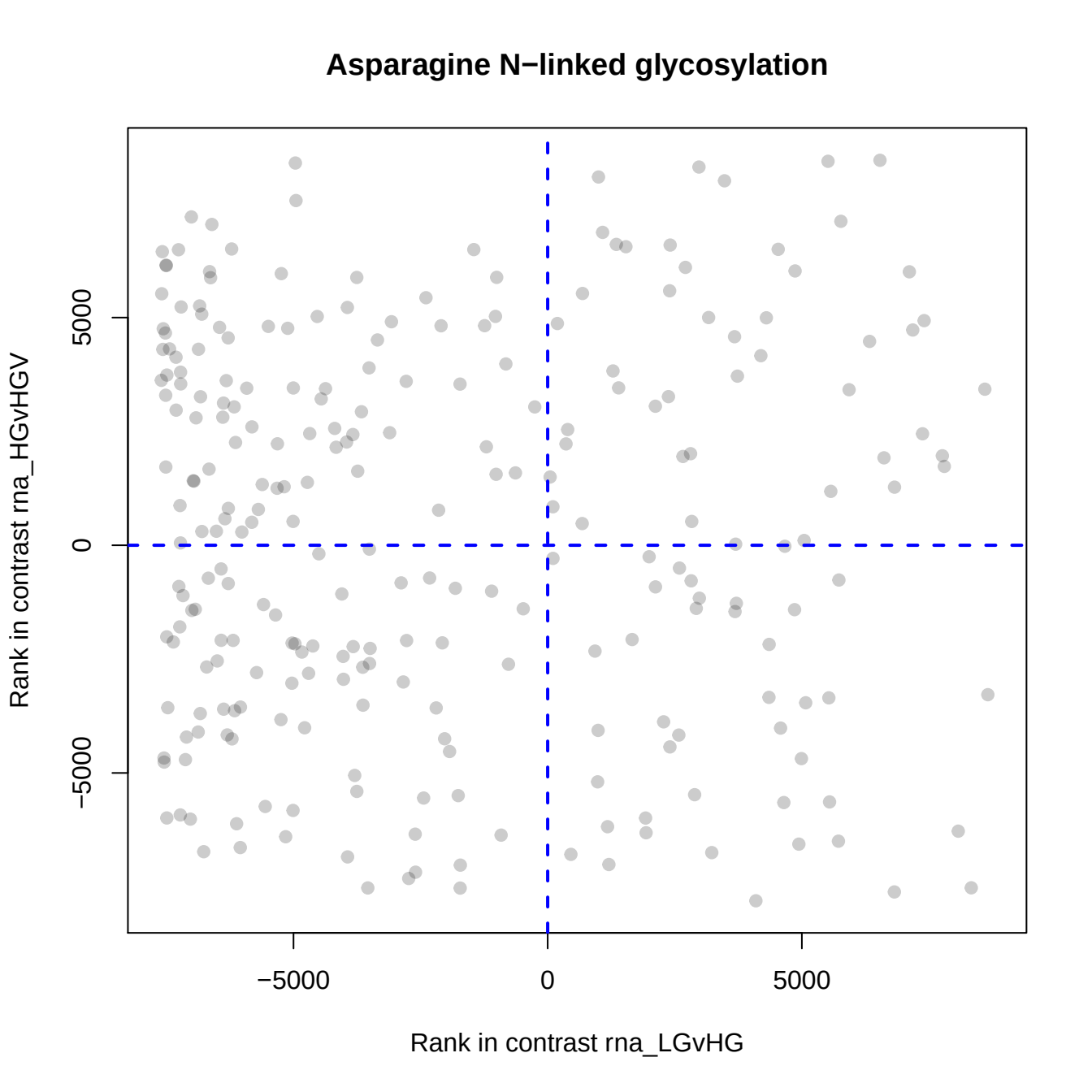

Nonsense Mediated Decay (NMD) enhanced by th
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

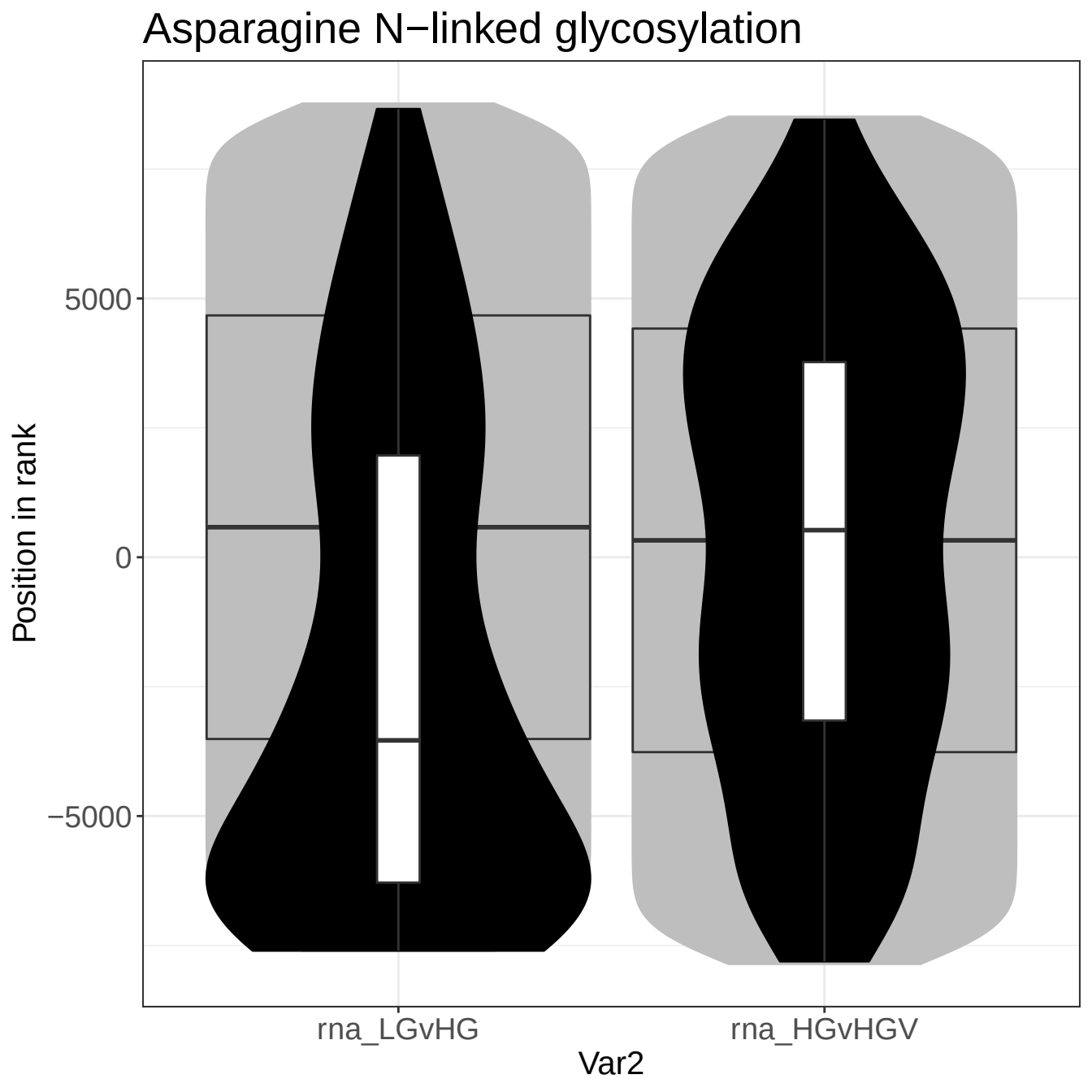

Nonsense−Mediated Decay (NMD)
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00

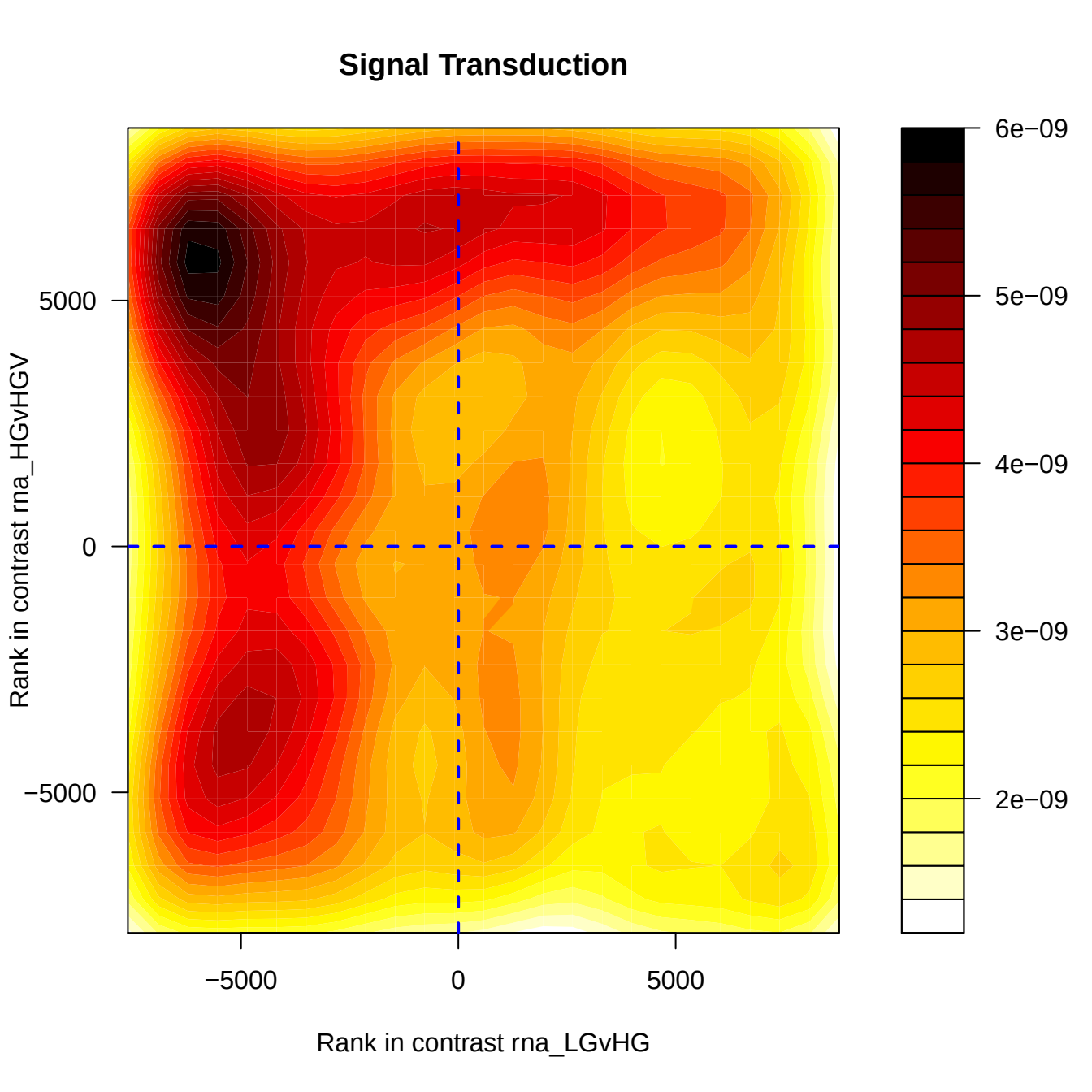

Nonsense−Mediated Decay (NMD)
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

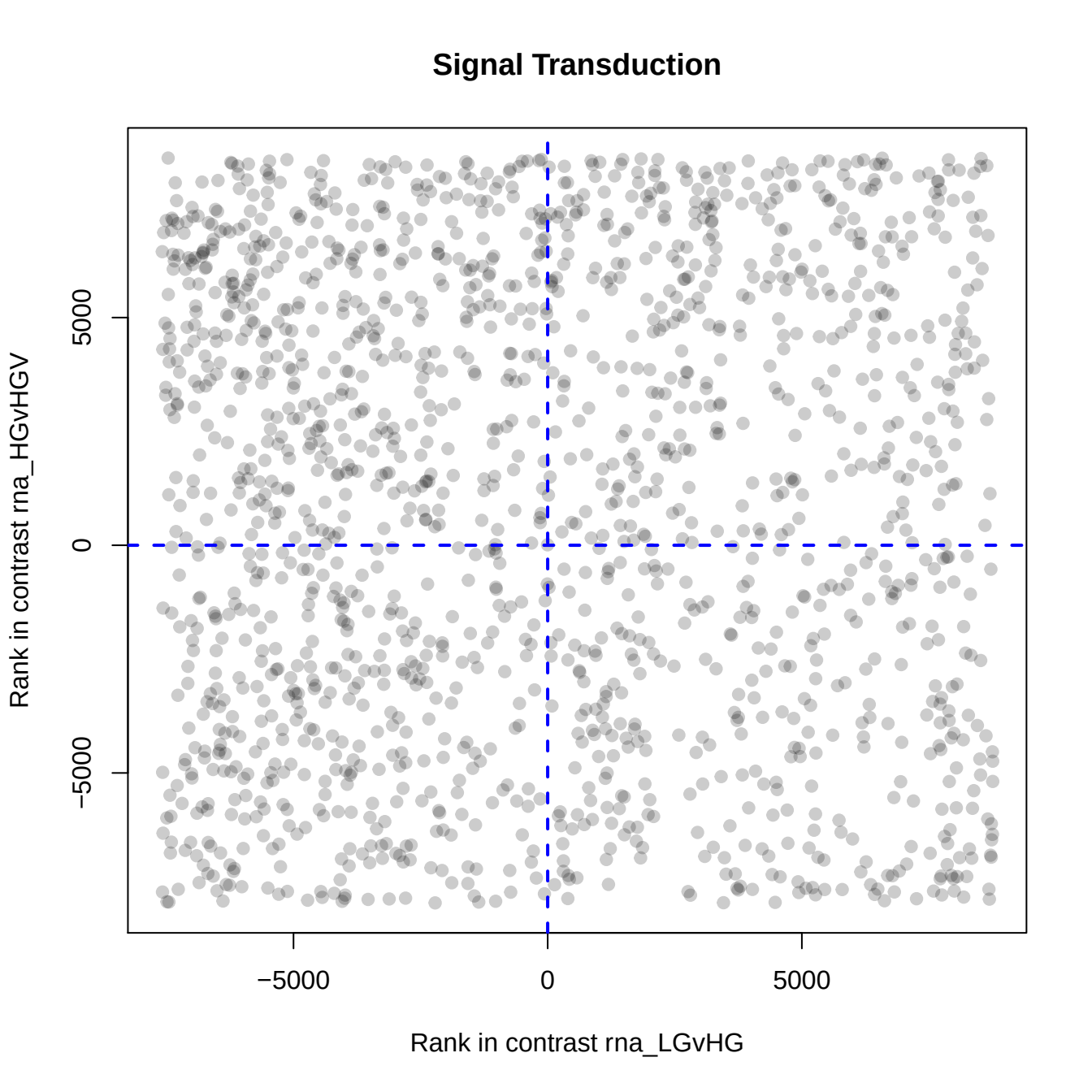

Nonsense−Mediated Decay (NMD)
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

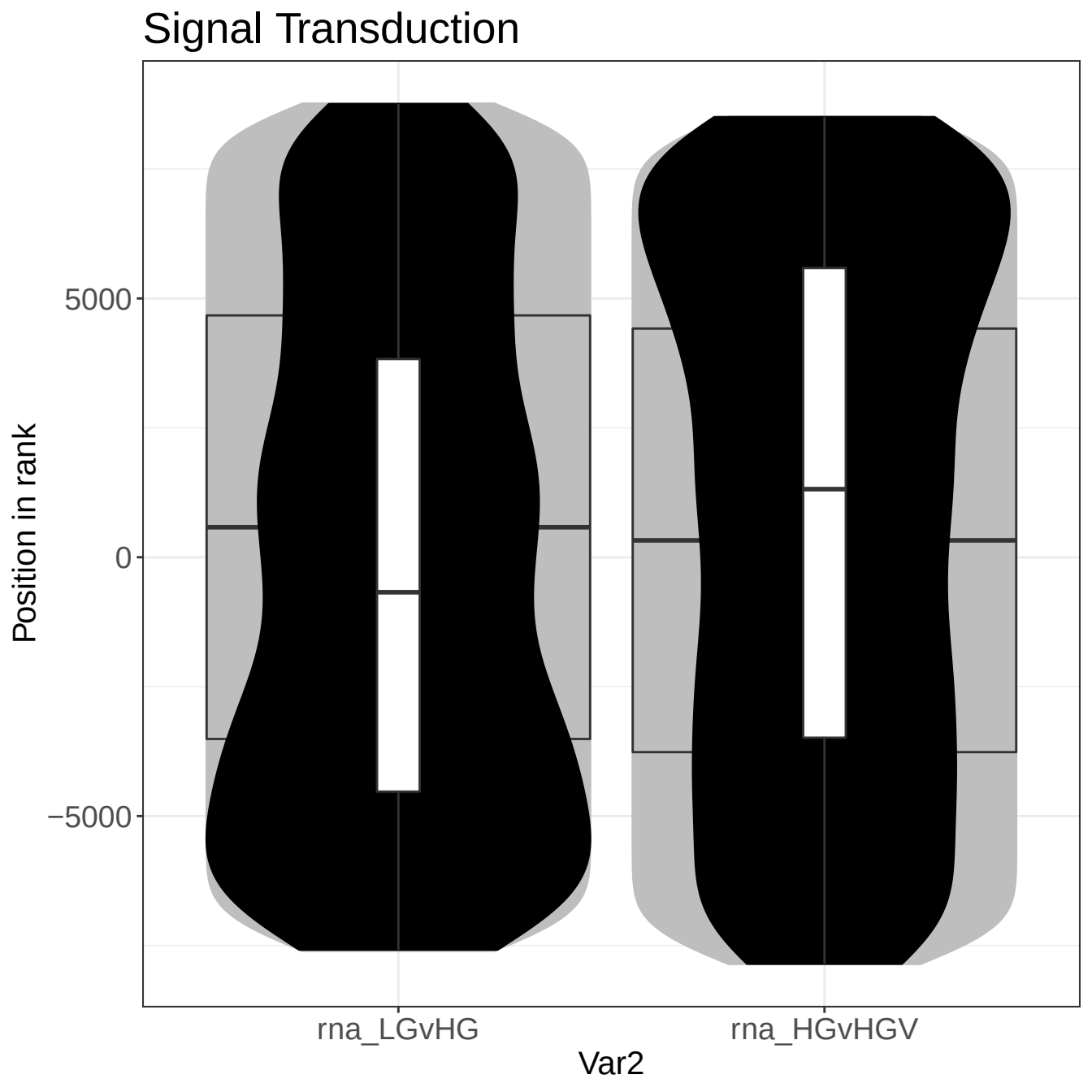

Asparagine N−linked glycosylation
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
8e−09
6e−09
4e−09
2e−09
0e+00

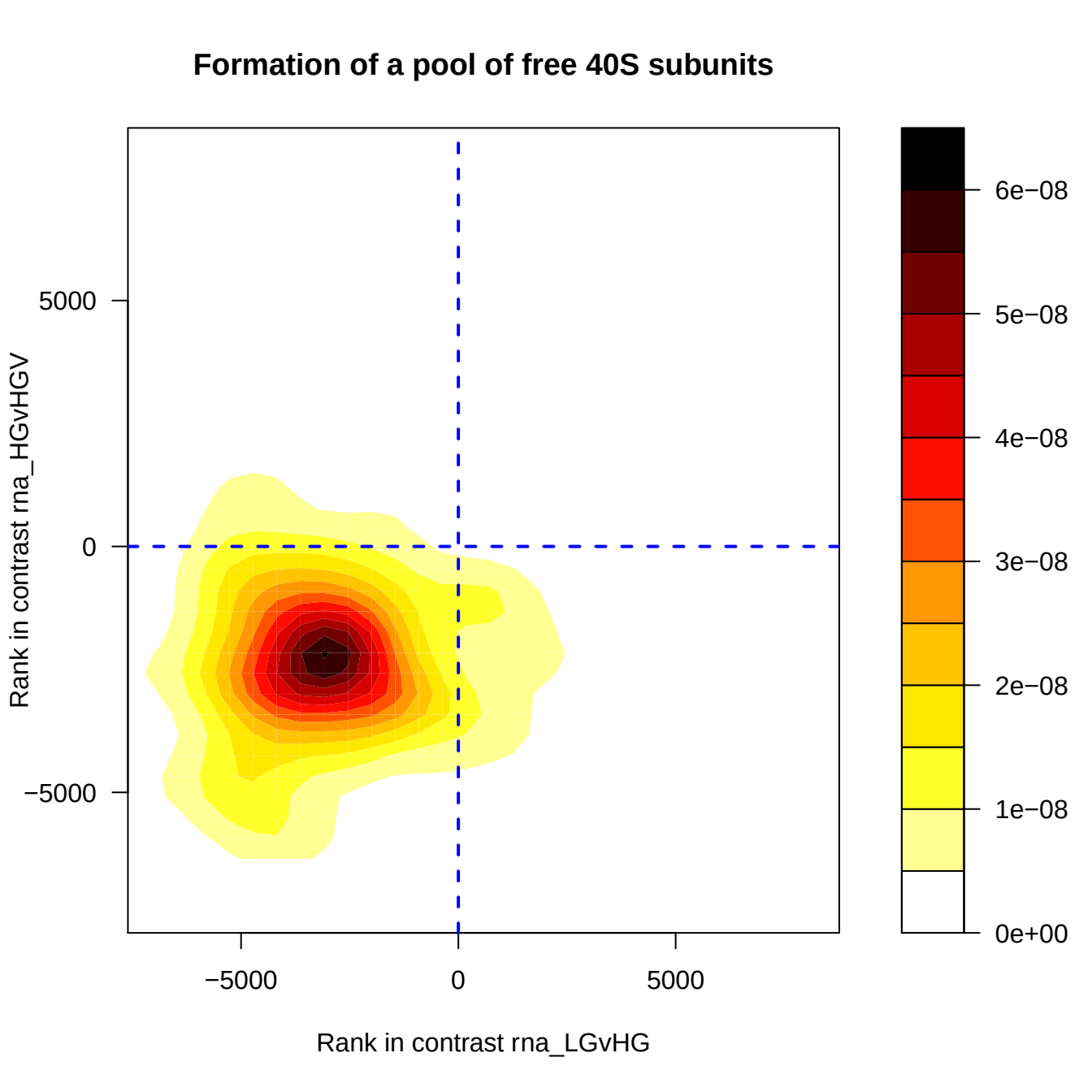

Asparagine N−linked glycosylation
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

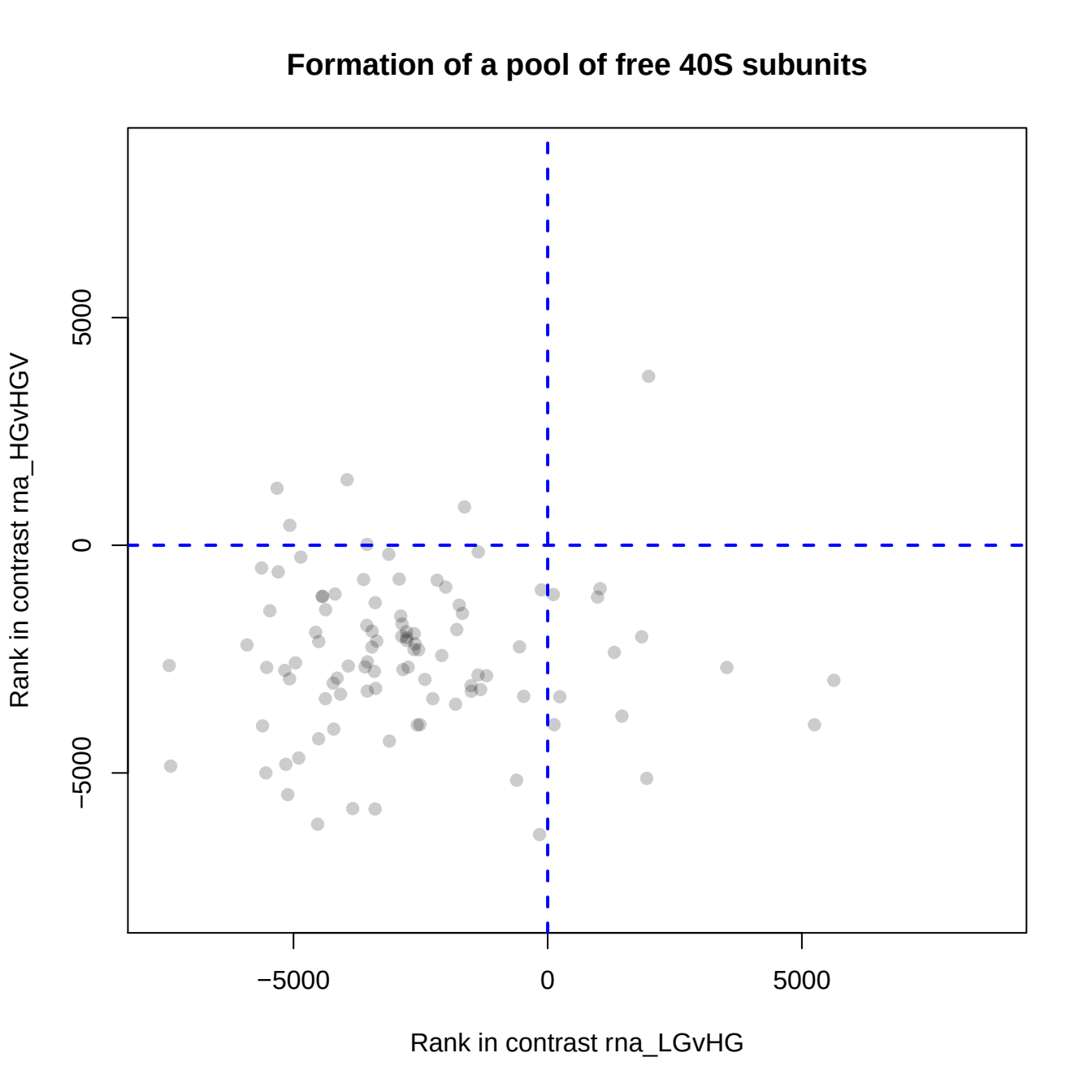

Asparagine N−linked glycosylation
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

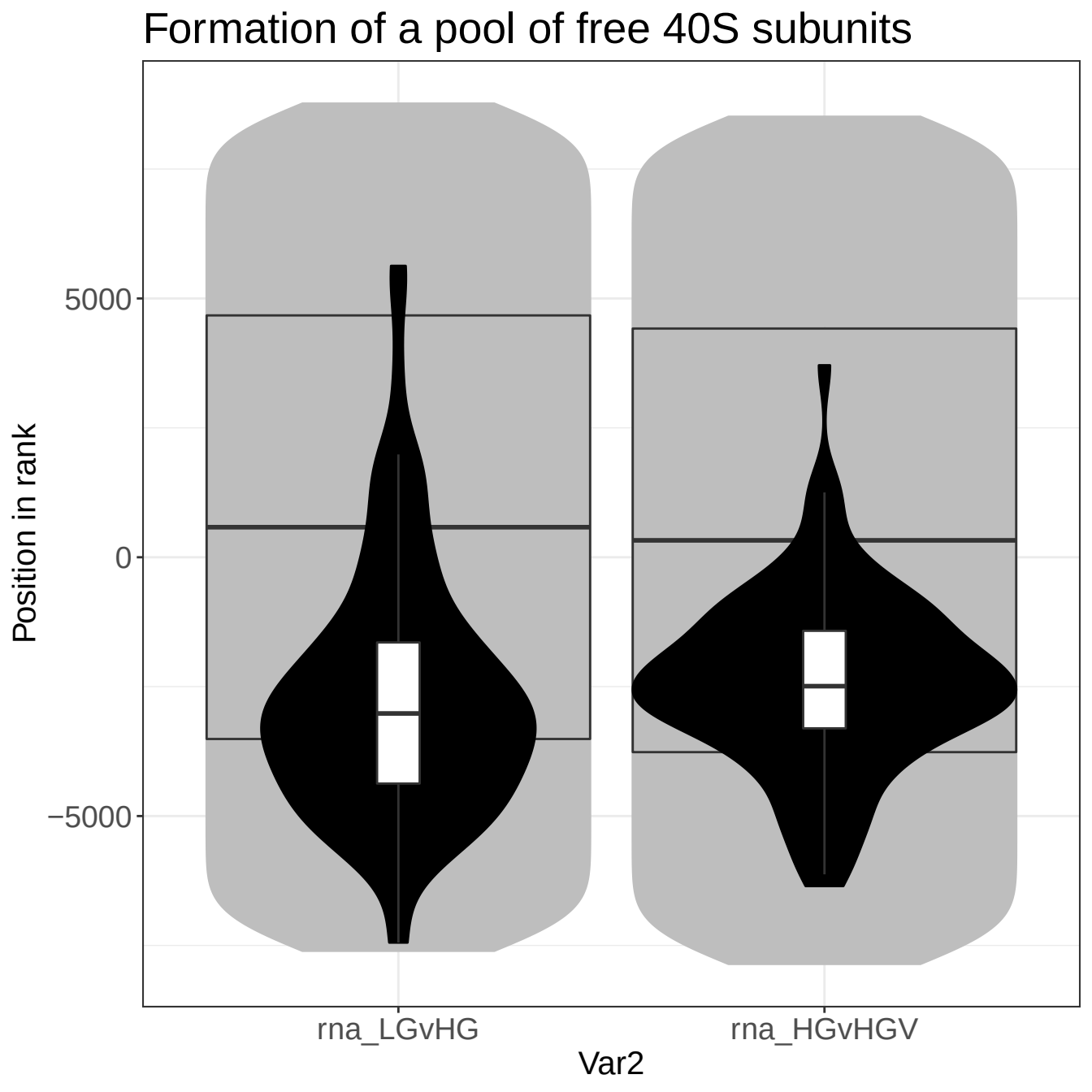

Signal Transduction
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG
6e−09
5e−09
4e−09
3e−09
2e−09

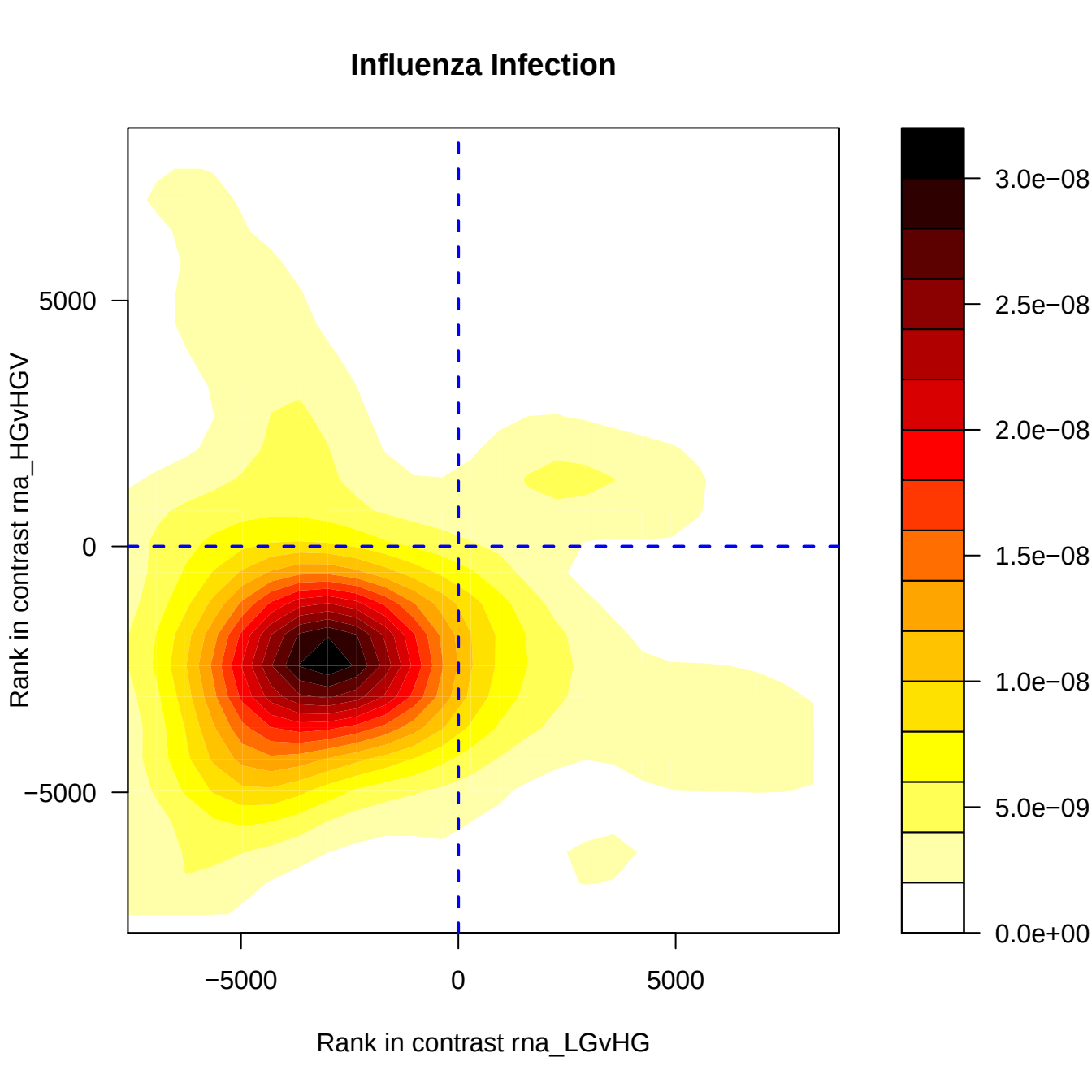

Signal Transduction
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

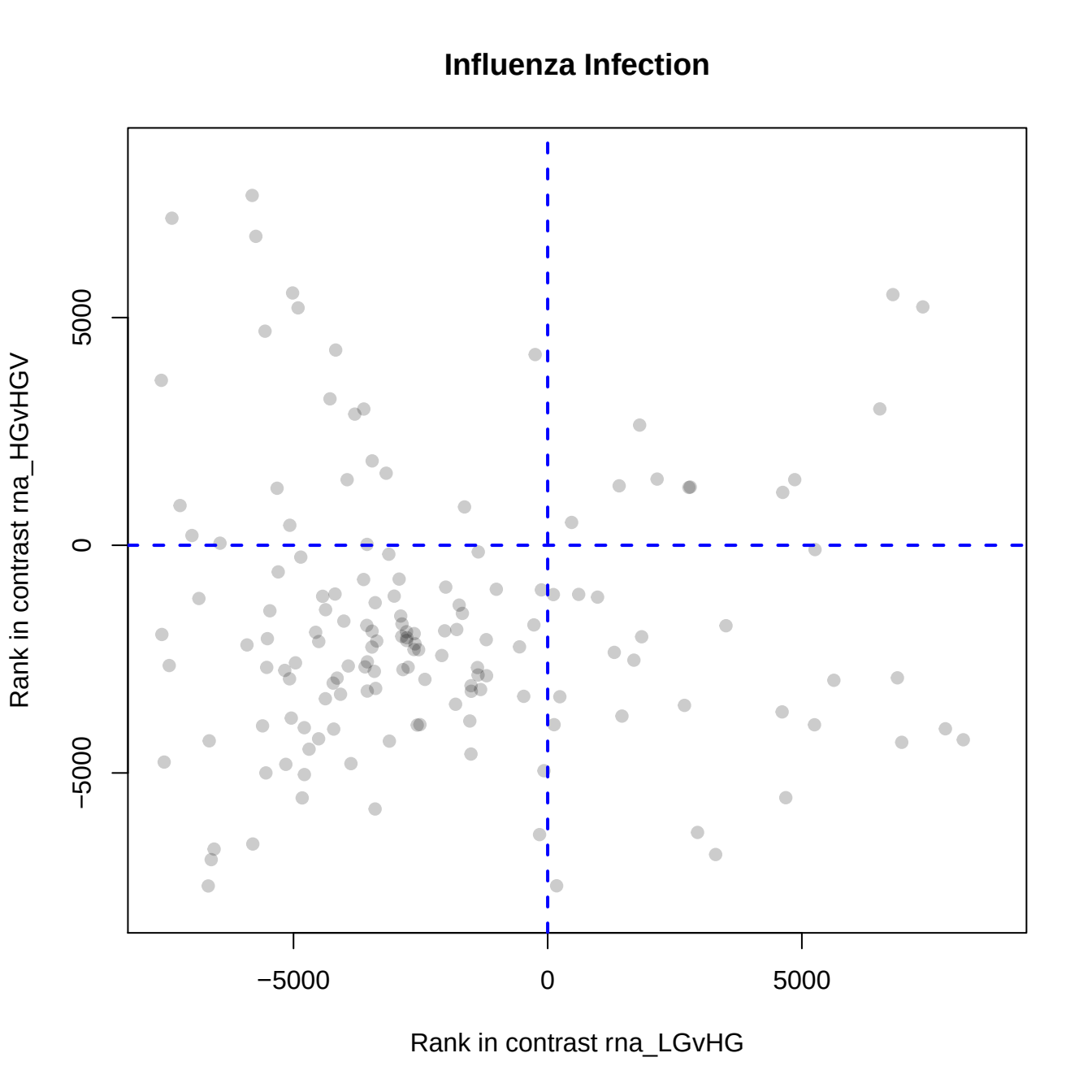

Signal Transduction
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

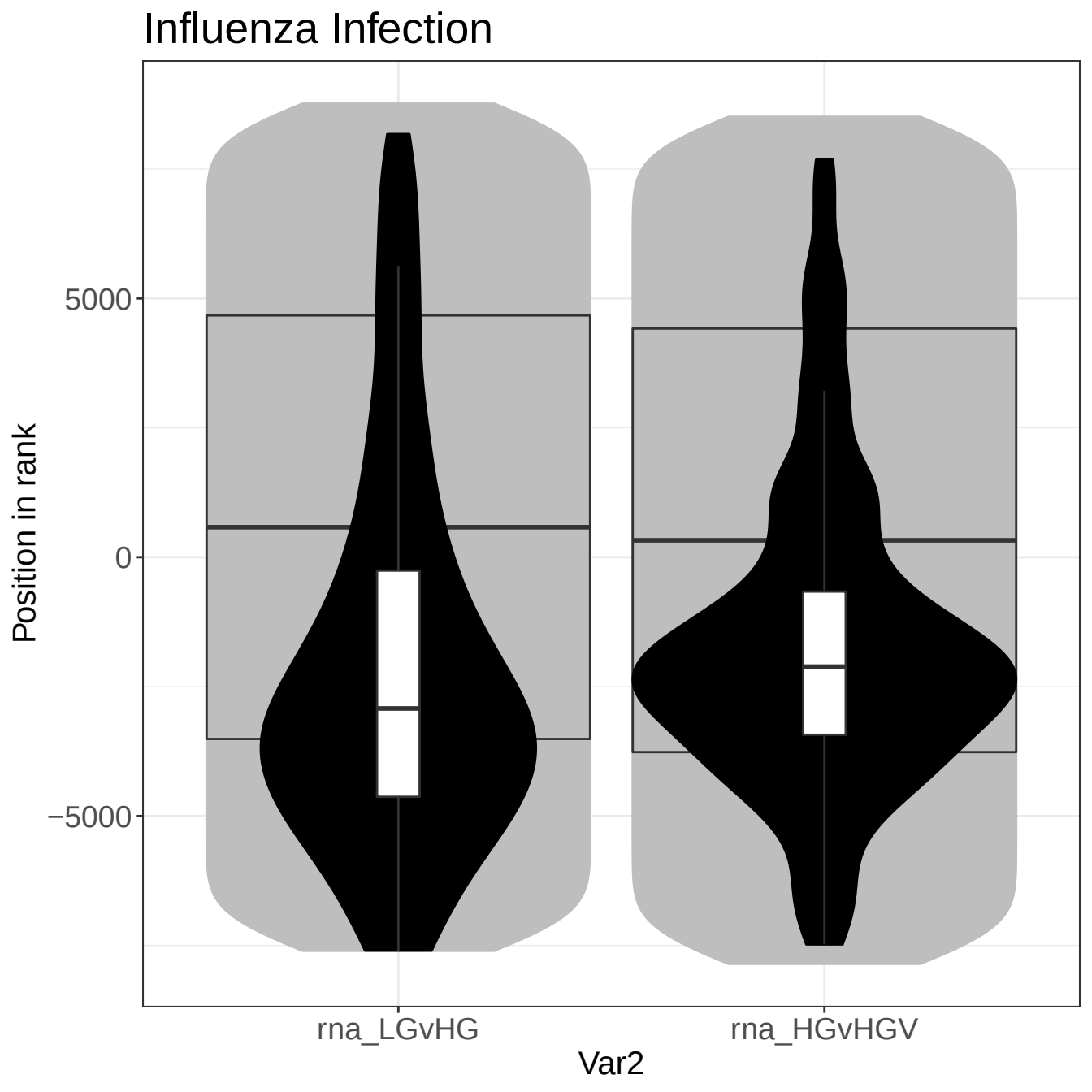

Formation of a pool of free 40S subunits
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
6e−08
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00

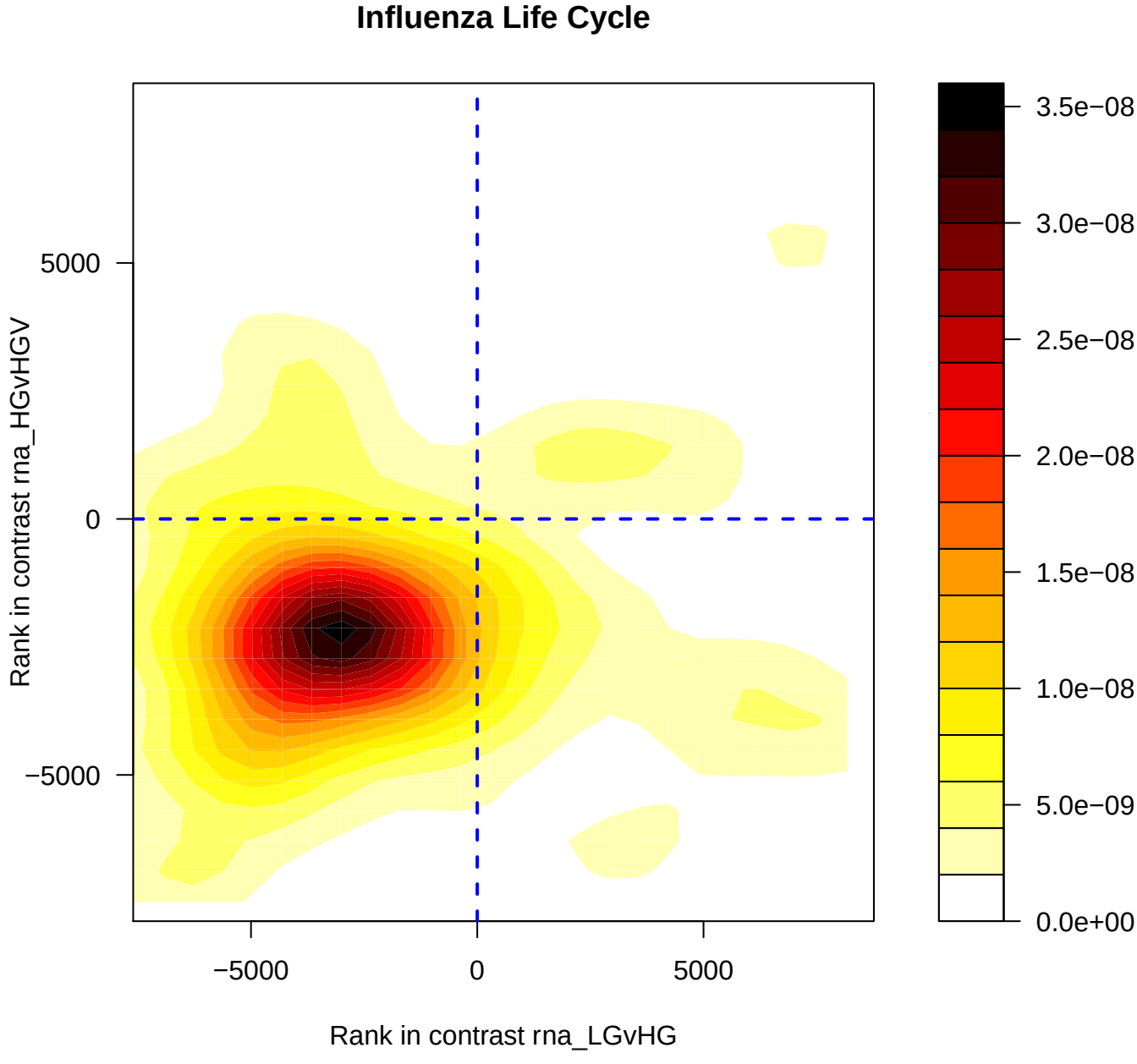

Formation of a pool of free 40S subunits
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

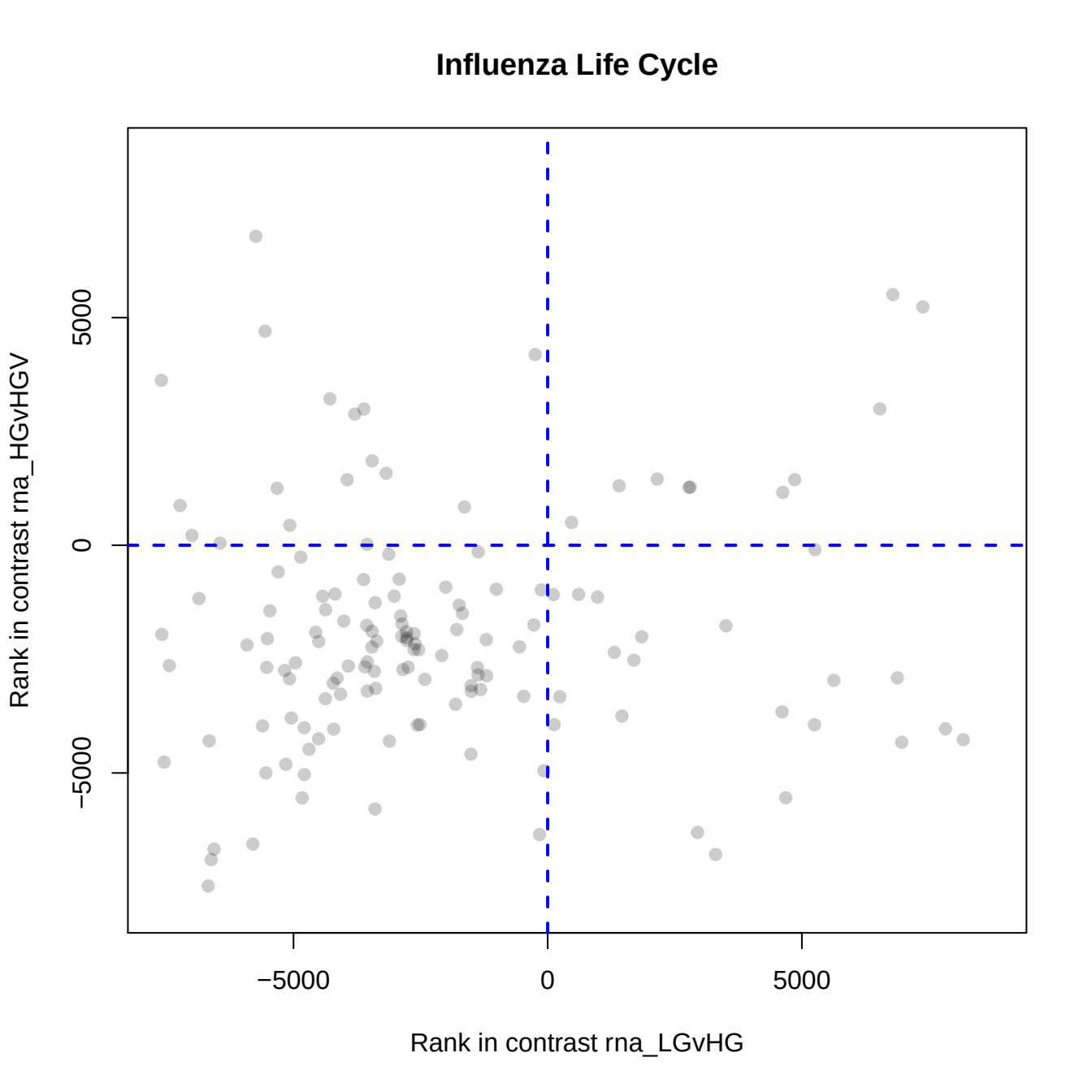

Formation of a pool of free 40S subunits
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

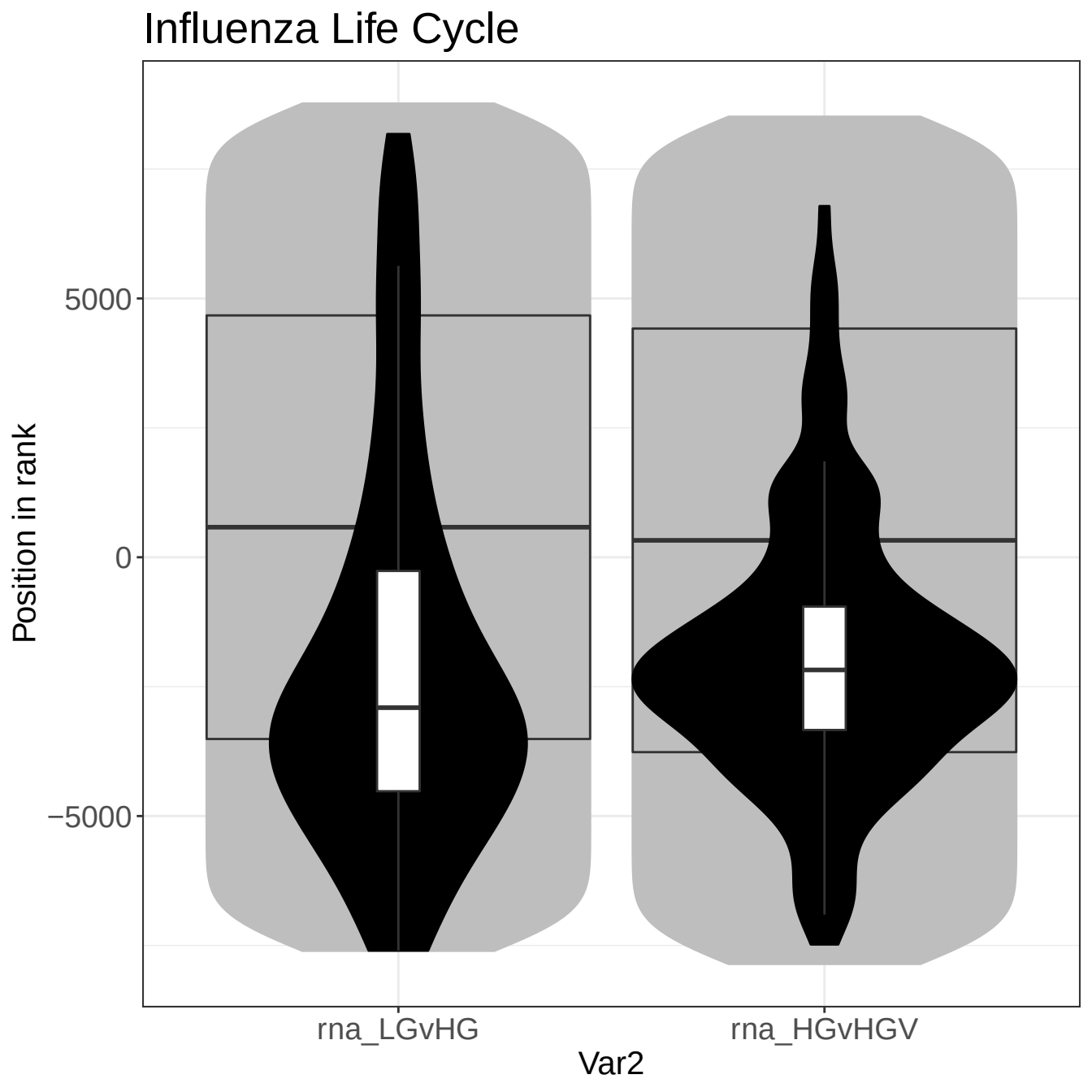

Influenza Infection
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
3.0e−08
2.5e−08
2.0e−08
1.5e−08
1.0e−08
5.0e−09
0.0e+00

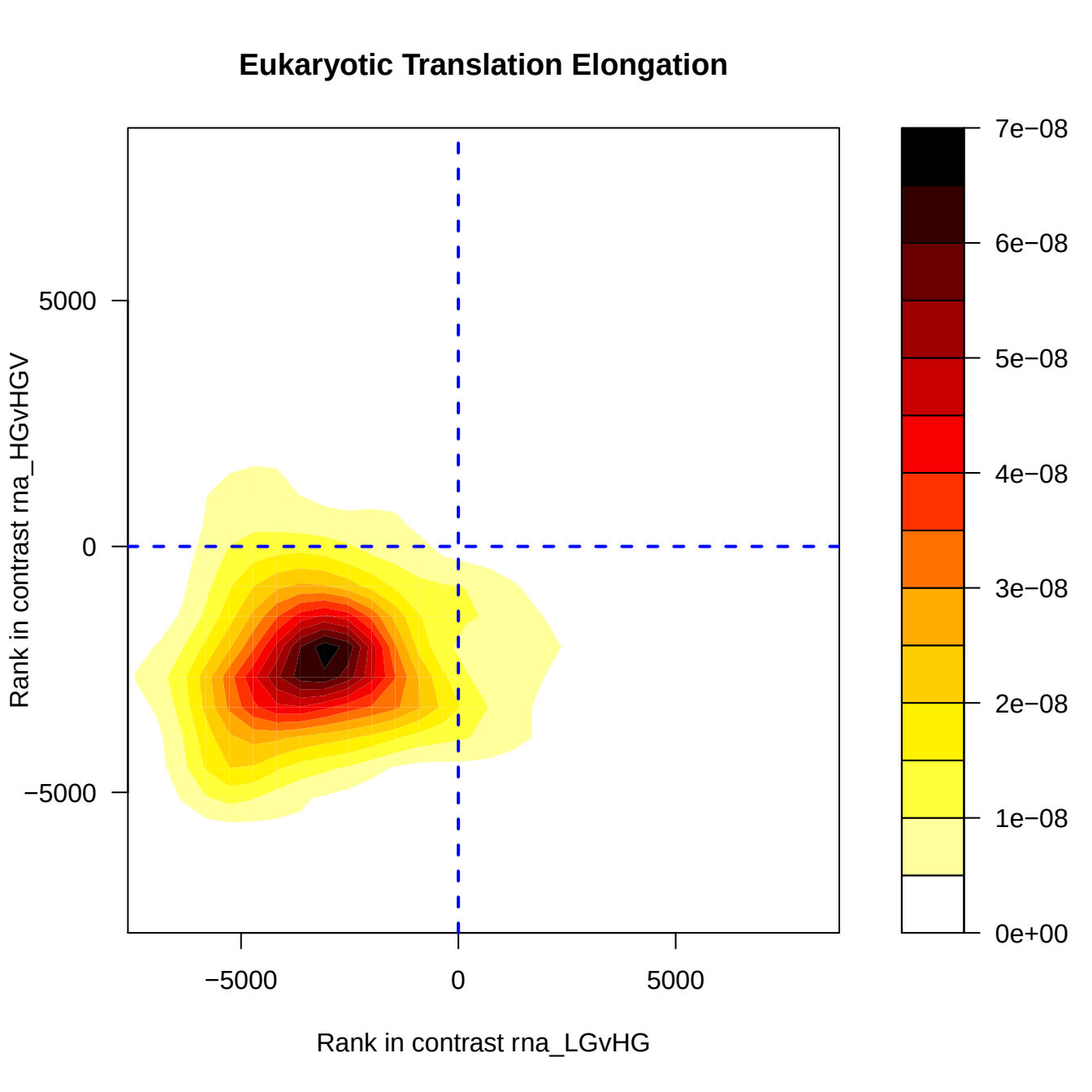

Influenza Infection
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

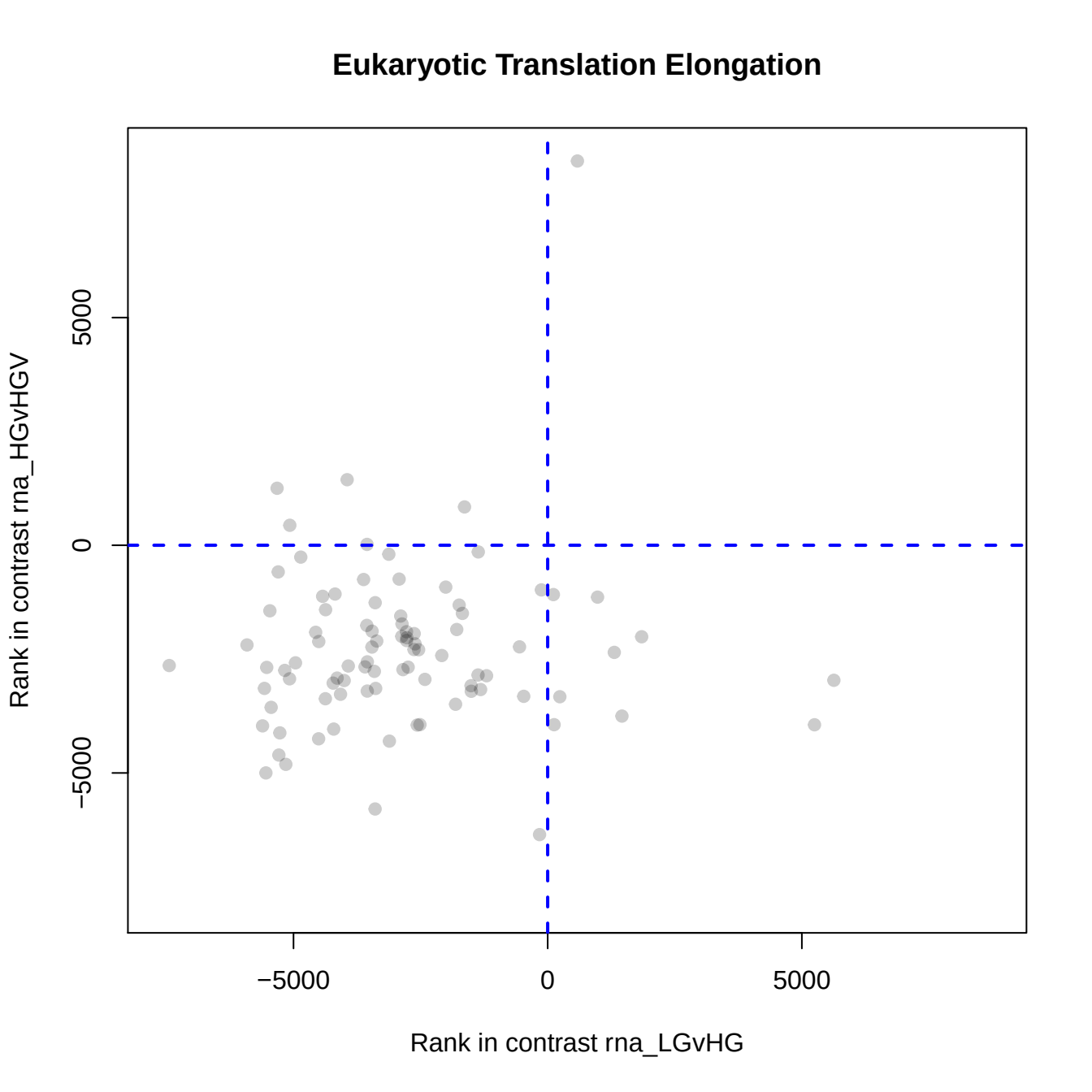

Influenza Infection
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

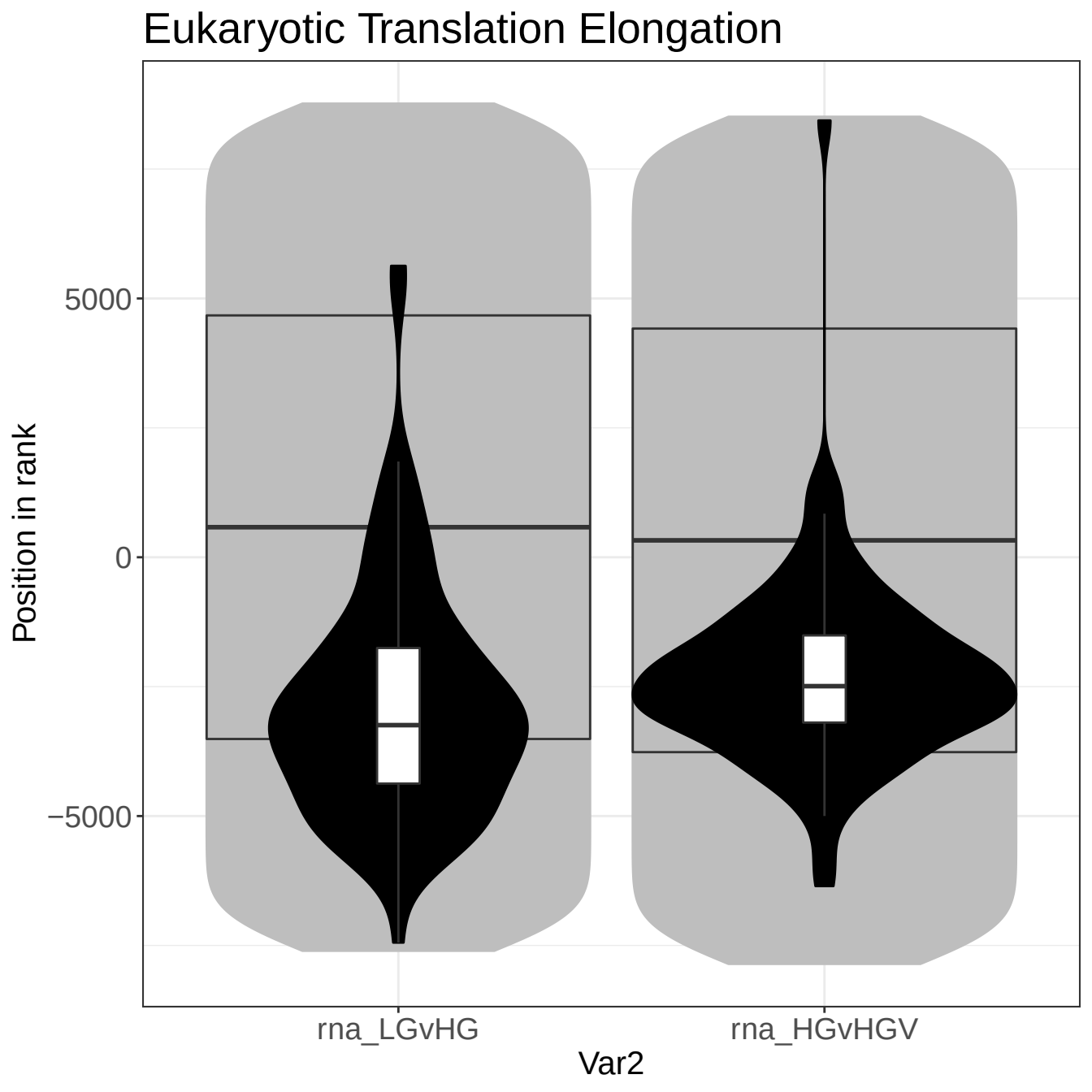

Influenza Life Cycle
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
3.5e−08
3.0e−08
2.5e−08
2.0e−08
1.5e−08
1.0e−08
5.0e−09
0.0e+00

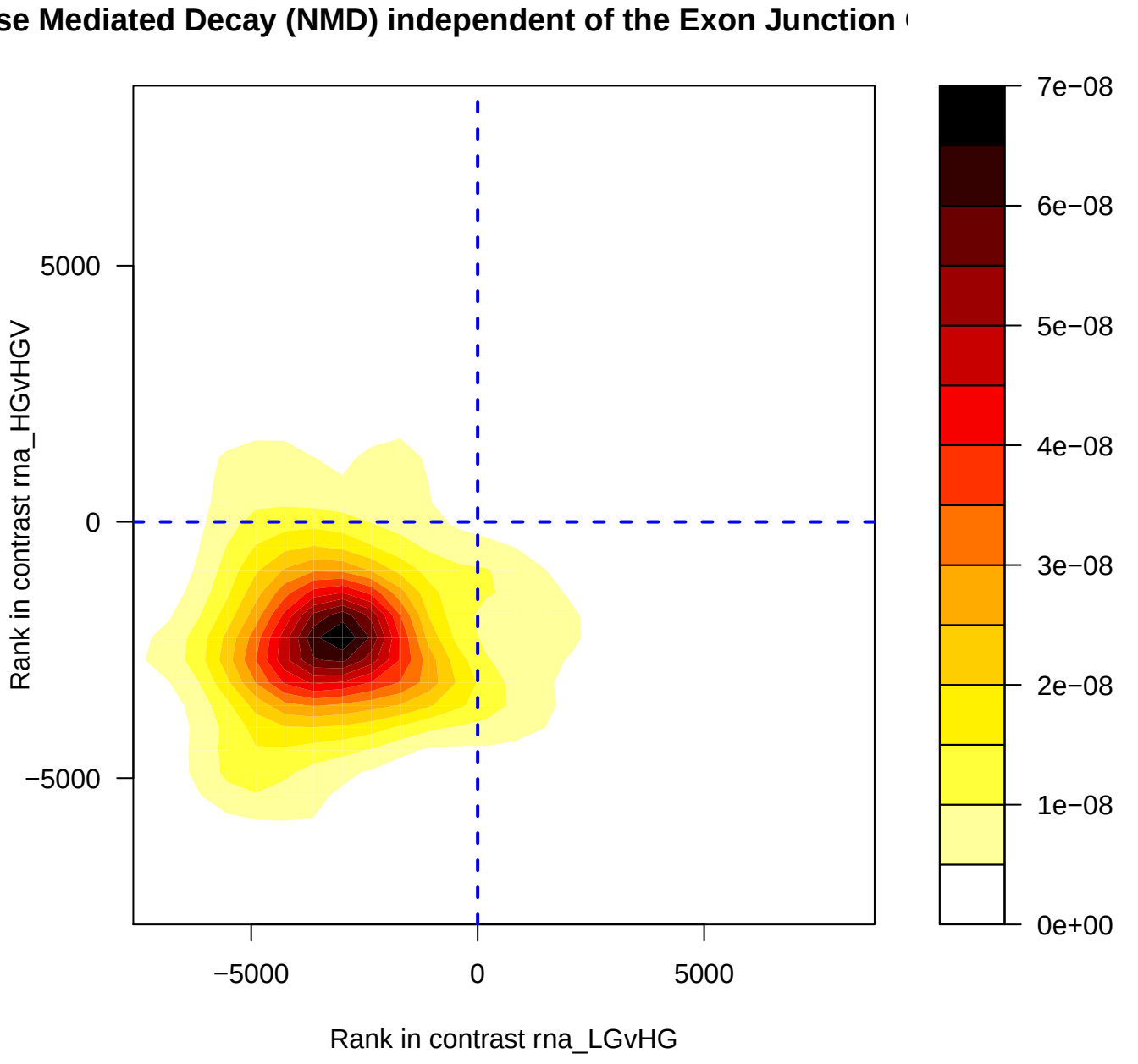

Influenza Life Cycle
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG

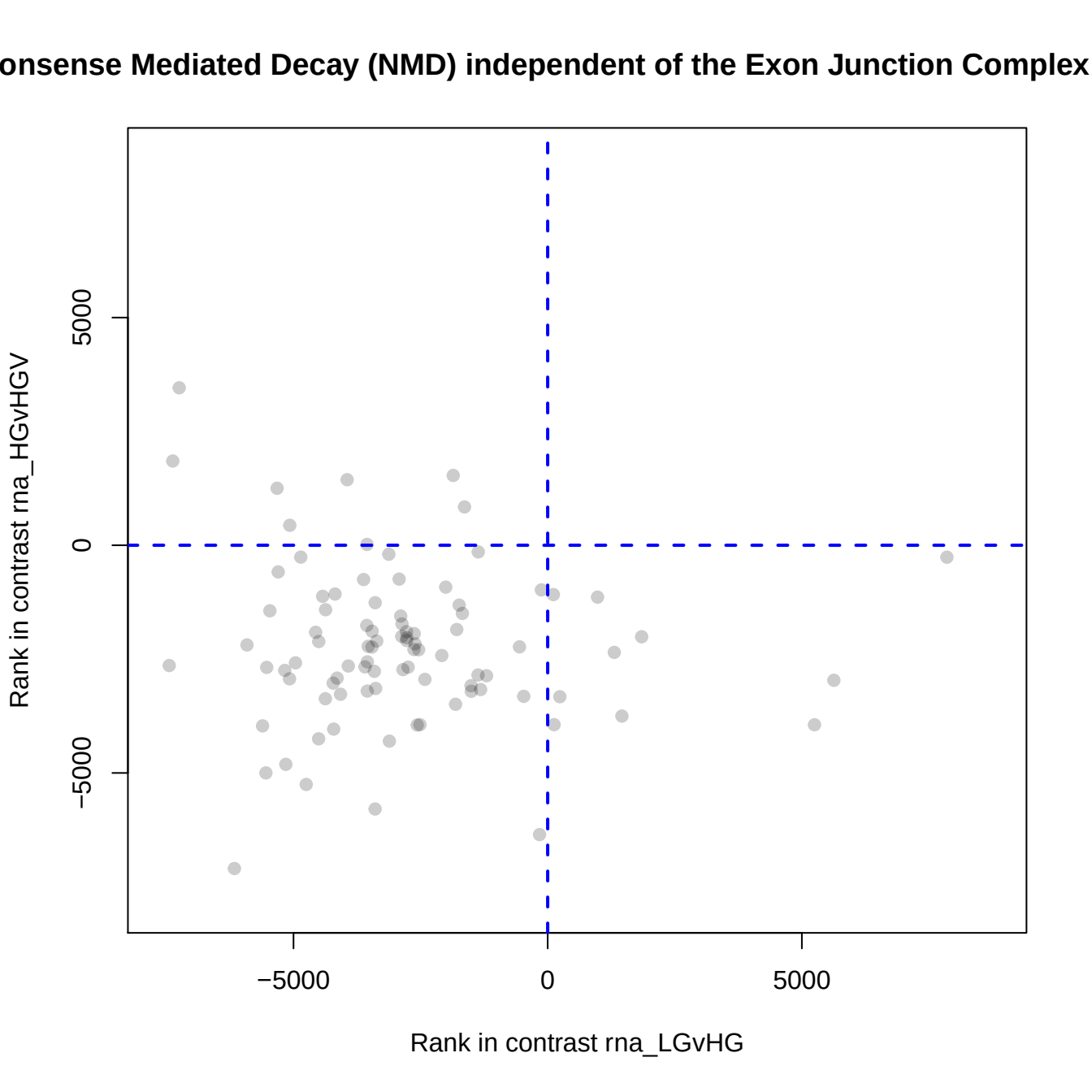

Influenza Life Cycle
5000
0
−5000
Position in rank
rna_LGvHG
rna_HGvHGV
Var2

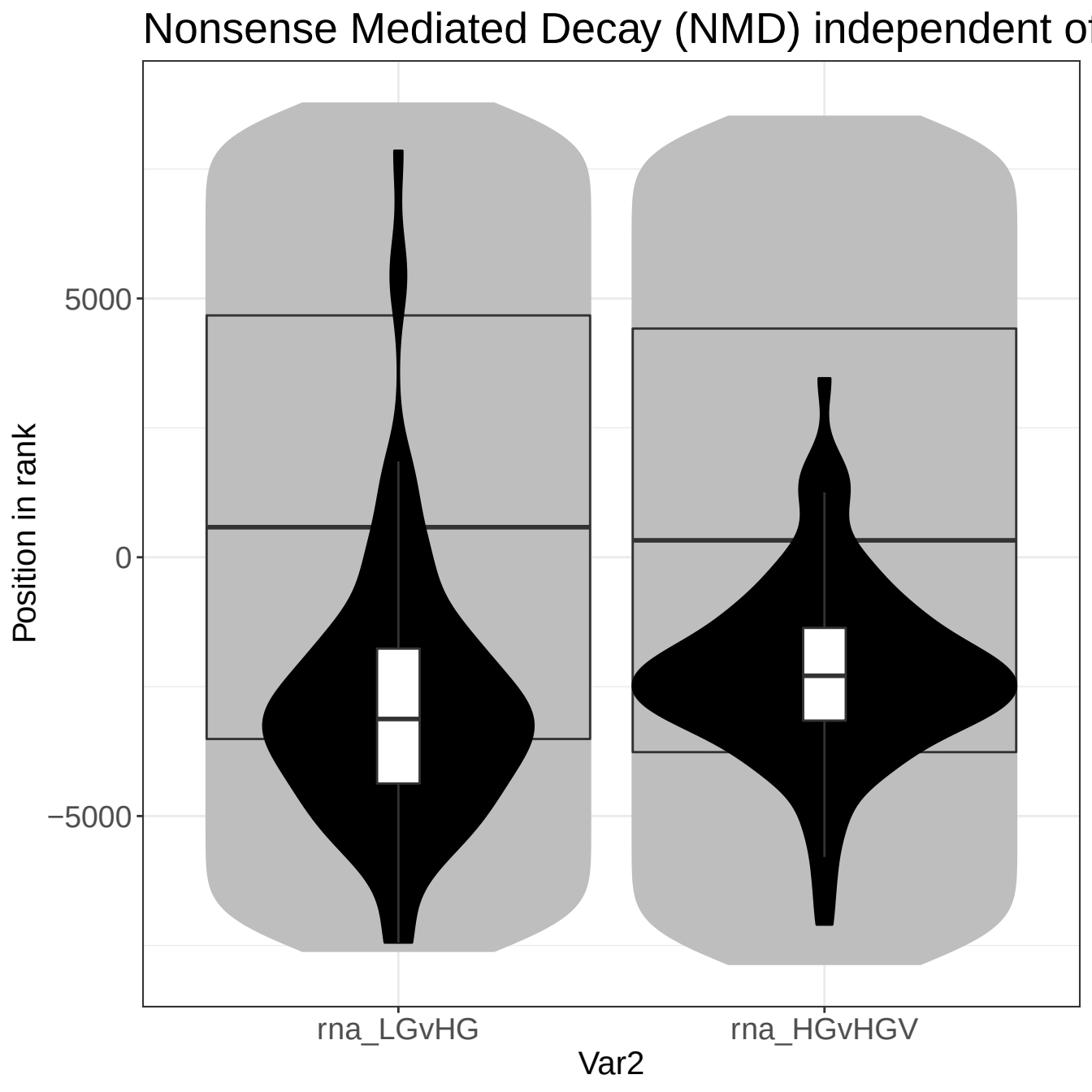

Eukaryotic Translation Elongation
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG
7e−08
6e−08
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00


Eukaryotic Translation Elongation
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG


Eukaryotic Translation Elongation
Position in rank
5000
0
−5000
rna_LGvHG
rna_HGvHGV
Var2


se Mediated Decay (NMD) independent of the Exon Junction
5000
0
−5000
Rank in contrast rna_HGvHGV
−5000
0
5000
Rank in contrast rna_LGvHG
7e−08
6e−08
5e−08
4e−08
3e−08
2e−08
1e−08
0e+00


onsense Mediated Decay (NMD) independent of the Exon Junction Complex
Rank in contrast rna_HGvHGV
5000
0
−5000
−5000
0
5000
Rank in contrast rna_LGvHG


Nonsense Mediated Decay (NMD) independent of
Position in rank
5000
0
−5000
rna_LGvHG
rna_HGvHGV
Var2