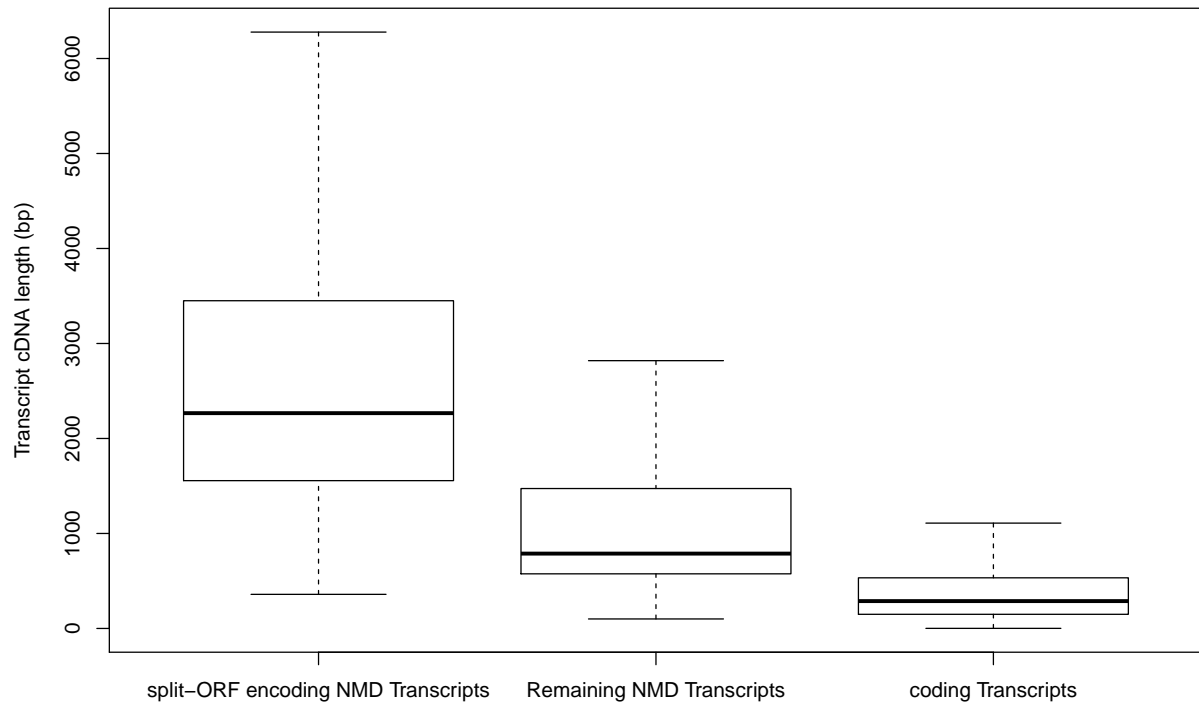


TranscriptStatistics

Human

Transcript length and Methionine density

Length Distribution and two sided t-test between split-ORF encoding NMD transcripts and coding transcripts



```
## T-test between split-ORF encoding and remaining NMD transcripts:
```

```
##
```

```
## Welch Two Sample t-test
```

```
##
```

```
## data: comparelengths[[1]] and comparelengths[[2]]
```

```
## t = 54.016, df = 9877.8, p-value < 2.2e-16
```

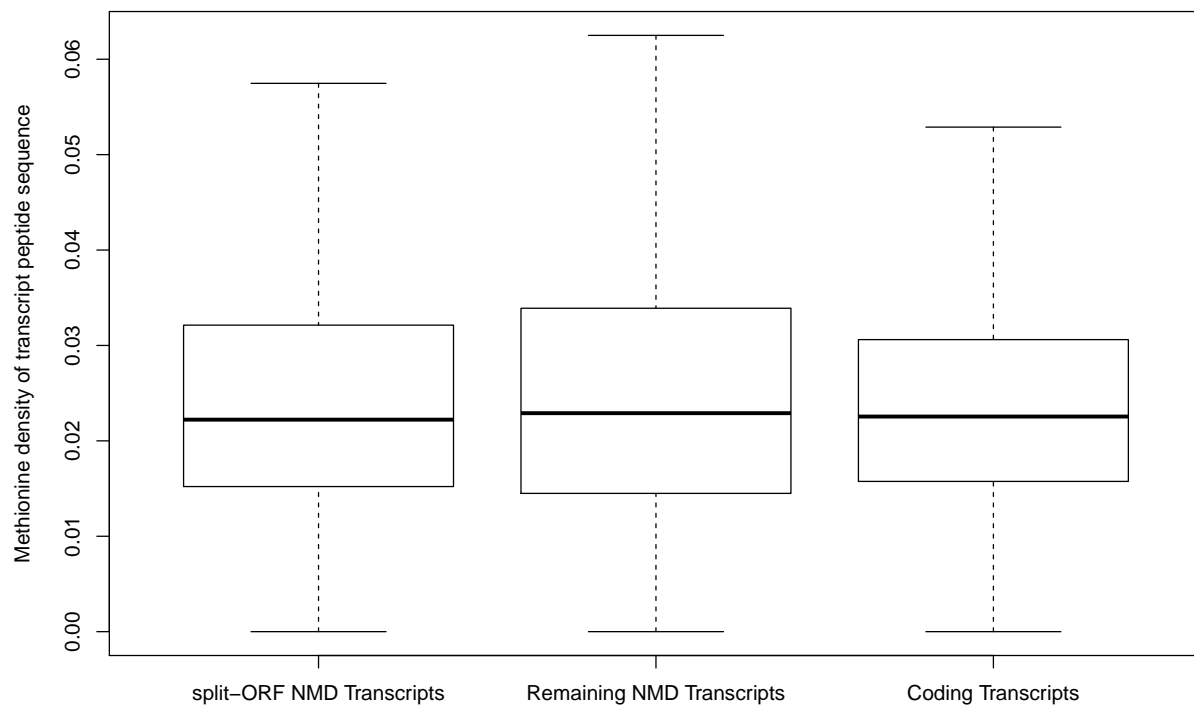
```
## alternative hypothesis: true difference in means is not equal to 0
```

```
## 95 percent confidence interval:
## 1509.948 1623.664
## sample estimates:
## mean of x mean of y
## 2811.161 1244.355

## T-test between split-ORF encoding and coding transcripts:

##
## Welch Two Sample t-test
##
## data: comparelengths[[1]] and comparelengths[[3]]
## t = 89.802, df = 7111.9, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 2332.766 2436.884
## sample estimates:
## mean of x mean of y
## 2811.1609 426.3358
```

Methionine density Distribution and two sided t-test between split-ORF encoding NMD transcripts and coding transcripts



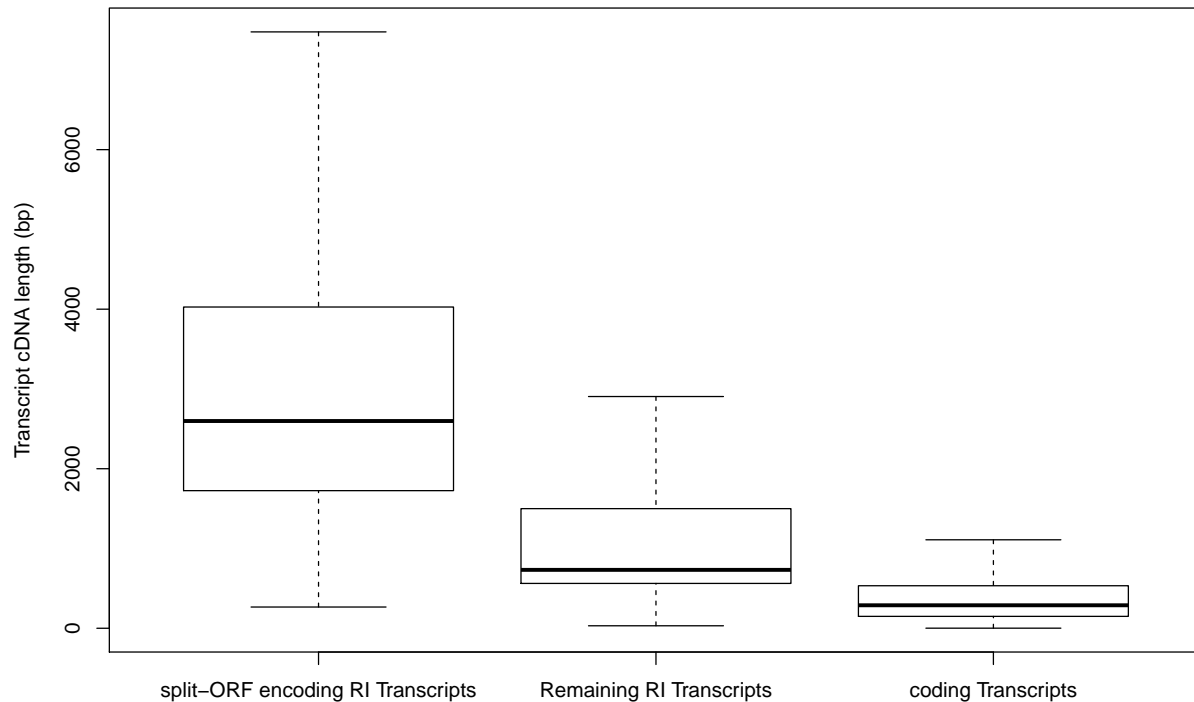
```
## T-test between split-ORF encoding and remaining NMD transcripts:
```

```
##
## Welch Two Sample t-test
##
## data: densitiesCompare[[1]] and densitiesCompare[[2]]
## t = -3.9555, df = 17995, p-value = 7.668e-05
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.0013783687 -0.0004649351
## sample estimates:
## mean of x mean of y
## 0.02503397 0.02595562
```

T-test between split-ORF encoding and coding transcripts:

```
##
## Welch Two Sample t-test
##
## data: densitiesCompare[[1]] and densitiesCompare[[3]]
## t = -2.1849, df = 10010, p-value = 0.02892
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -7.504862e-04 -4.068637e-05
## sample estimates:
## mean of x mean of y
## 0.02503397 0.02542955
```

Length Distribution and two sided t-test between split-ORF encoding RI transcripts and coding transcripts



T-test between split-ORF encoding and remaining RI transcripts:

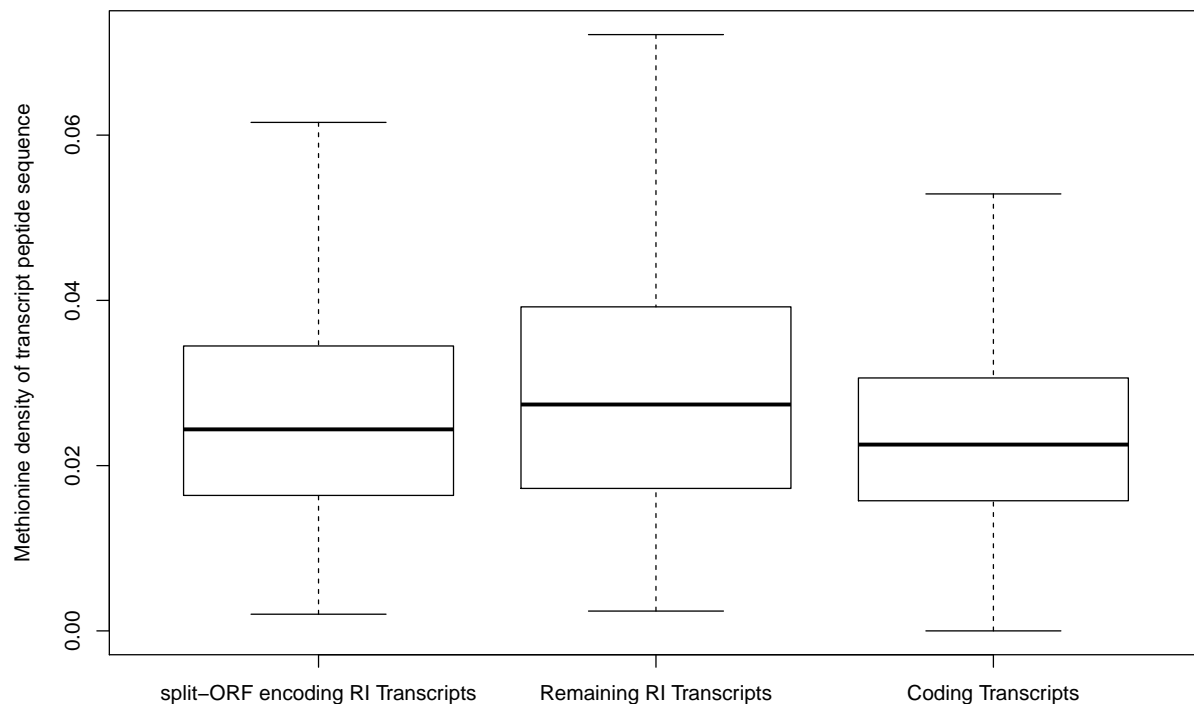
```
##
## Welch Two Sample t-test
##
## data: RIcomparelengths[[1]] and RIcomparelengths[[2]]
## t = 60.15, df = 5262.9, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  1667.320 1779.664
## sample estimates:
## mean of x mean of y
##  3015.105 1291.612
```

T-test between split-ORF encoding and coding transcripts:

```
##
## Welch Two Sample t-test
##
## data: RIcomparelengths[[1]] and RIcomparelengths[[3]]
## t = 93.673, df = 4558.9, p-value < 2.2e-16
```

```
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 2534.589 2642.949
## sample estimates:
## mean of x mean of y
## 3015.1048 426.3358
```

Methionine density Distribution and two sided t-test between split-ORF encoding RI transcripts and coding transcripts



```
## T-test between split-ORF encoding and remaining RI transcripts:

##
## Welch Two Sample t-test
##
## data: RIdensitiesCompare[[1]] and RIdensitiesCompare[[2]]
## t = -26.391, df = 16898, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.004842690 -0.004173084
## sample estimates:
## mean of x mean of y
## 0.02707746 0.03158534
```

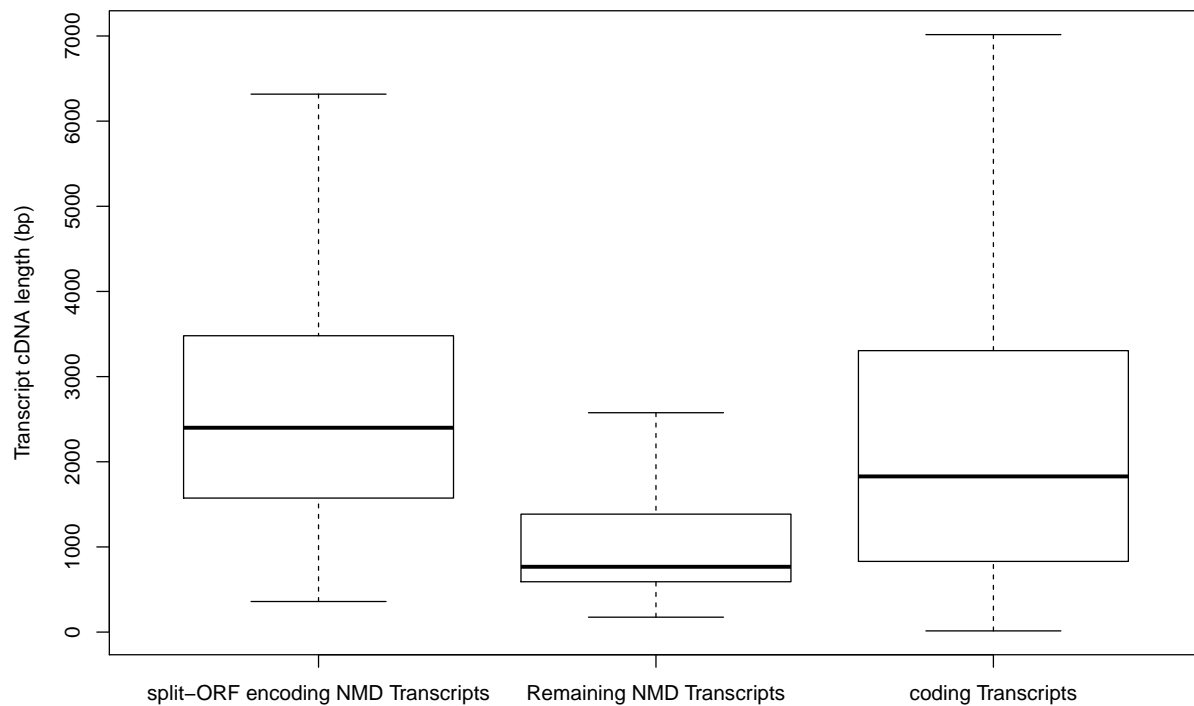
```
## T-test between split-ORF encoding and coding transcripts:

##
## Welch Two Sample t-test
##
## data:  RIdensitiesCompare[[1]] and RIdensitiesCompare[[3]]
## t = 9.9256, df = 15256, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  0.001322474 0.001973336
## sample estimates:
## mean of x mean of y
## 0.02707746 0.02542955
```

Mouse

Transcript length and Methionine density

Length Distribution and two sided t-test between split-ORF encoding NMD transcripts and coding transcripts



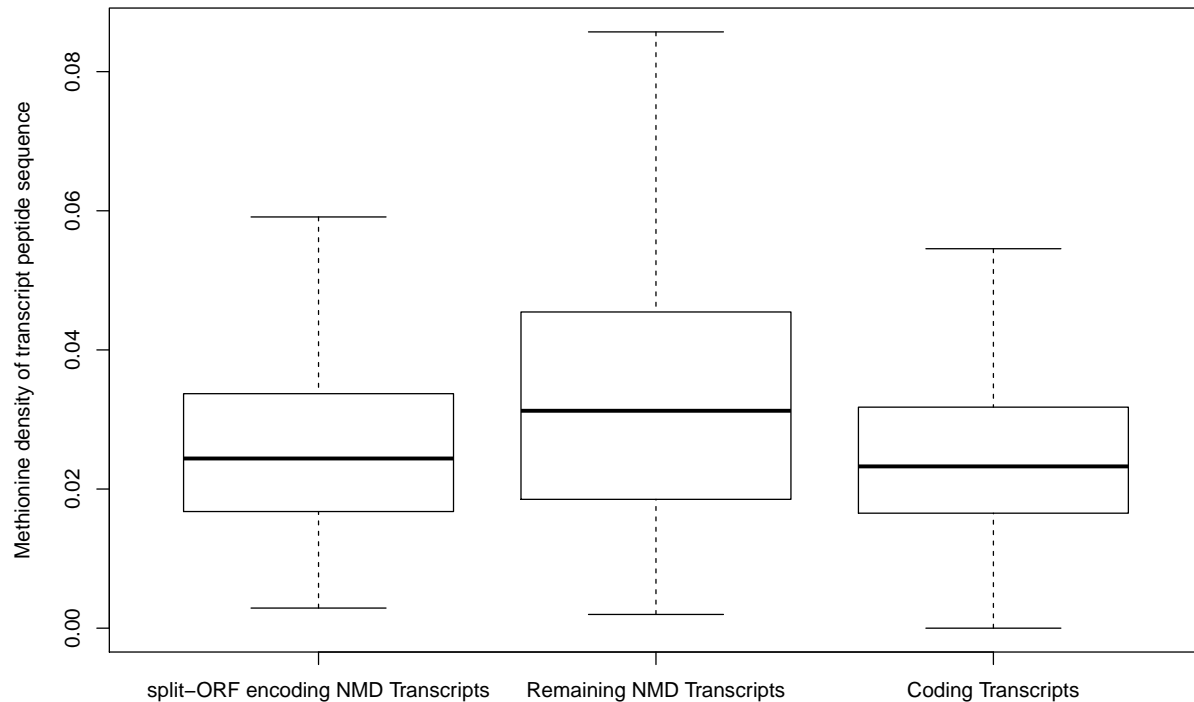
```
## T-test between split-ORF encoding and remaining RI transcripts:
```

```
##
## Welch Two Sample t-test
##
## data: comparelengthsMouse[[1]] and comparelengthsMouse[[2]]
## t = 40.453, df = 4415.4, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 1448.704 1596.277
## sample estimates:
## mean of x mean of y
## 2749.118 1226.627
```

T-test between split-ORF encoding and coding transcripts:

```
##
## Welch Two Sample t-test
##
## data: comparelengthsMouse[[1]] and comparelengthsMouse[[3]]
## t = 9.0353, df = 3375.7, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 246.0672 382.4579
## sample estimates:
## mean of x mean of y
## 2749.118 2434.855
```

Methionine density Distribution and two sided t-test between split-ORF encoding NMD transcripts and coding transcripts



T-test between split-ORF encoding and remaining RI transcripts:

```
##
## Welch Two Sample t-test
##
## data: densitiesCompareMouse[[1]] and densitiesCompareMouse[[2]]
## t = -33.024, df = 16988, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.009047186 -0.008033397
## sample estimates:
## mean of x mean of y
## 0.02666642 0.03520671
```

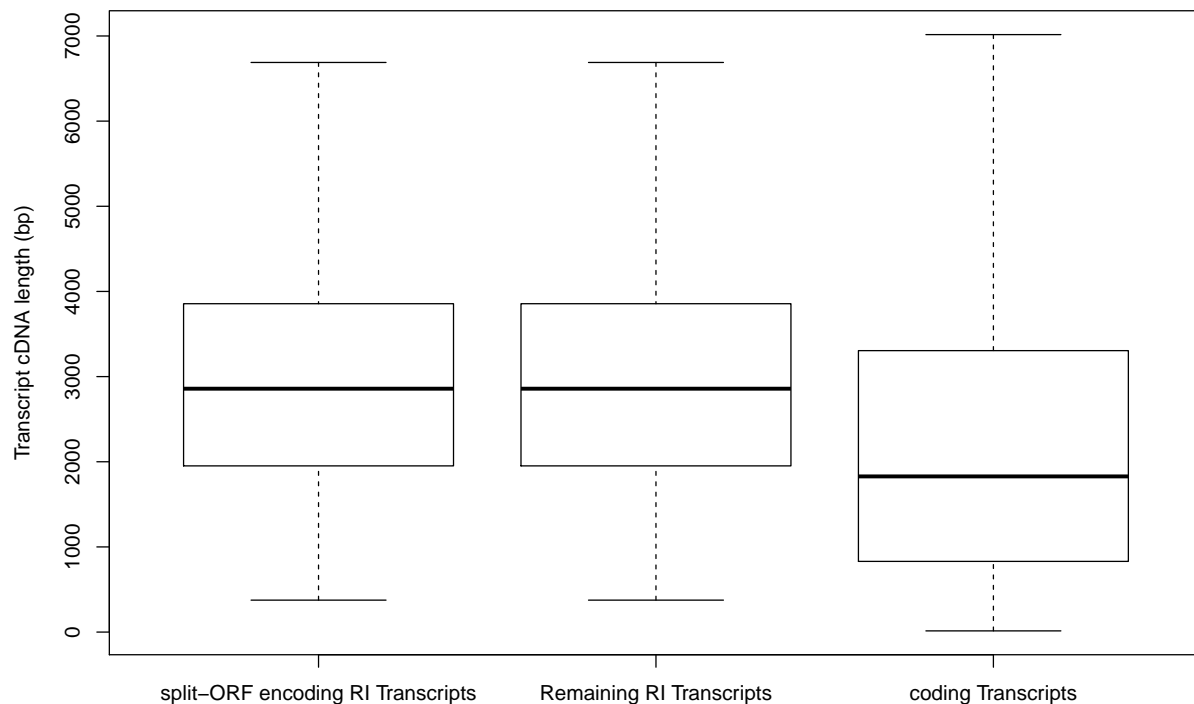
T-test between split-ORF encoding and coding transcripts:

```
##
## Welch Two Sample t-test
##
## data: densitiesCompareMouse[[1]] and densitiesCompareMouse[[3]]
## t = 2.4939, df = 9283.2, p-value = 0.01265
```



```
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  0.0001071494 0.0008942248
## sample estimates:
##  mean of x  mean of y
## 0.02666642 0.02616573
```

Length Distribution and two sided t-test between split-ORF encoding RI transcripts and coding transcripts



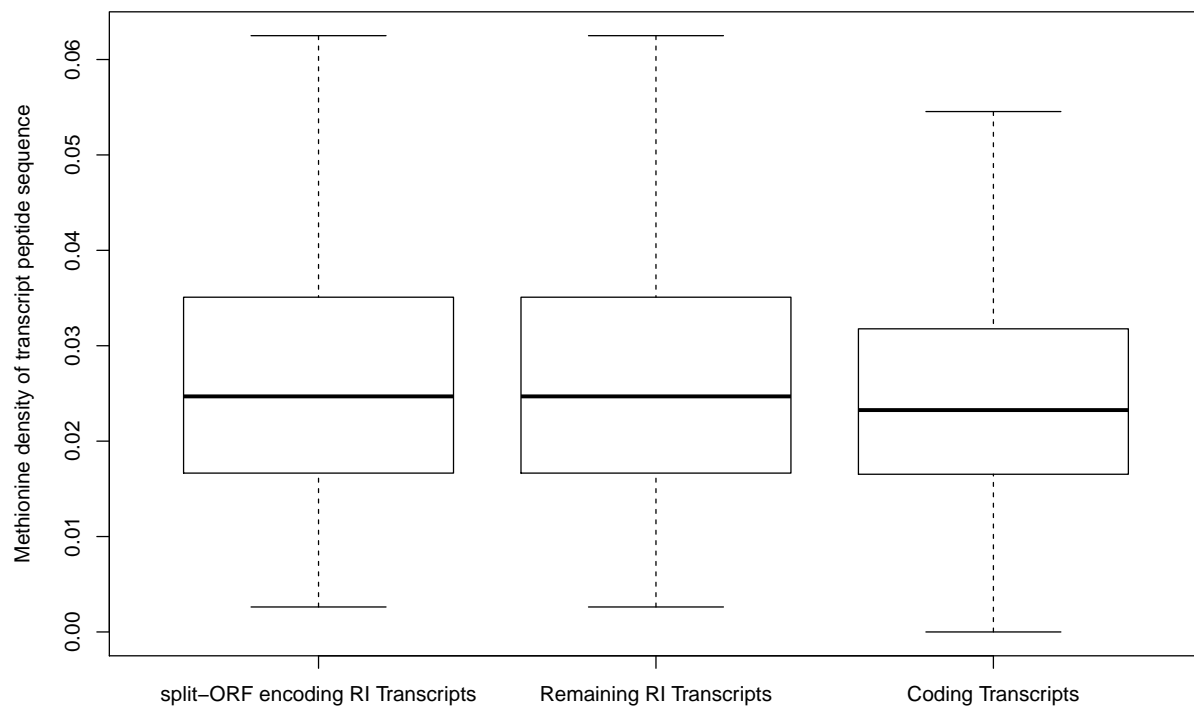
```
## T-test between split-ORF encoding and remaining RI transcripts:

##
## Welch Two Sample t-test
##
## data: RIcomparelengthsMouse[[1]] and RIcomparelengthsMouse[[2]]
## t = 0, df = 4996, p-value = 1
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -93.71087 93.71087
## sample estimates:
## mean of x mean of y
## 3041.2 3041.2
```

```
## T-test between split-ORF encoding and coding transcripts:

##
## Welch Two Sample t-test
##
## data: RcomparelengthsMouse[[1]] and RcomparelengthsMouse[[2]]
## t = 0, df = 4996, p-value = 1
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -93.71087 93.71087
## sample estimates:
## mean of x mean of y
## 3041.2 3041.2
```

Methionine density Distribution and two sided t-test between split-ORF encoding RI transcripts and coding transcripts



```
## T-test between split-ORF encoding and remaining RI transcripts:

##
## Welch Two Sample t-test
##
## data: RIdensitiesCompareMouse[[1]] and RIdensitiesCompareMouse[[2]]
## t = 0, df = 11012, p-value = 1
```

```

## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.0005792996 0.0005792996
## sample estimates:
## mean of x mean of y
## 0.02757616 0.02757616

## T-test between split-ORF encoding and coding transcripts:

##
## Welch Two Sample t-test
##
## data: RIdensitiesCompareMouse[[1]] and RIdensitiesCompareMouse[[3]]
## t = 6.2103, df = 7657.5, p-value = 5.564e-10
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.0009652271 0.0018556220
## sample estimates:
## mean of x mean of y
## 0.02757616 0.02616573

```