

# Run Summary

## riboHMM Validation Report

Run Timestamp: 2025-07-30T16:08:50.758253

Test Data File: /home/kai/Documents/00\_RNA/01\_riboHMM\_simple\_prod/02\_ProCESSED\_Data/processed\_top1000\_raw\_nosplit.npz

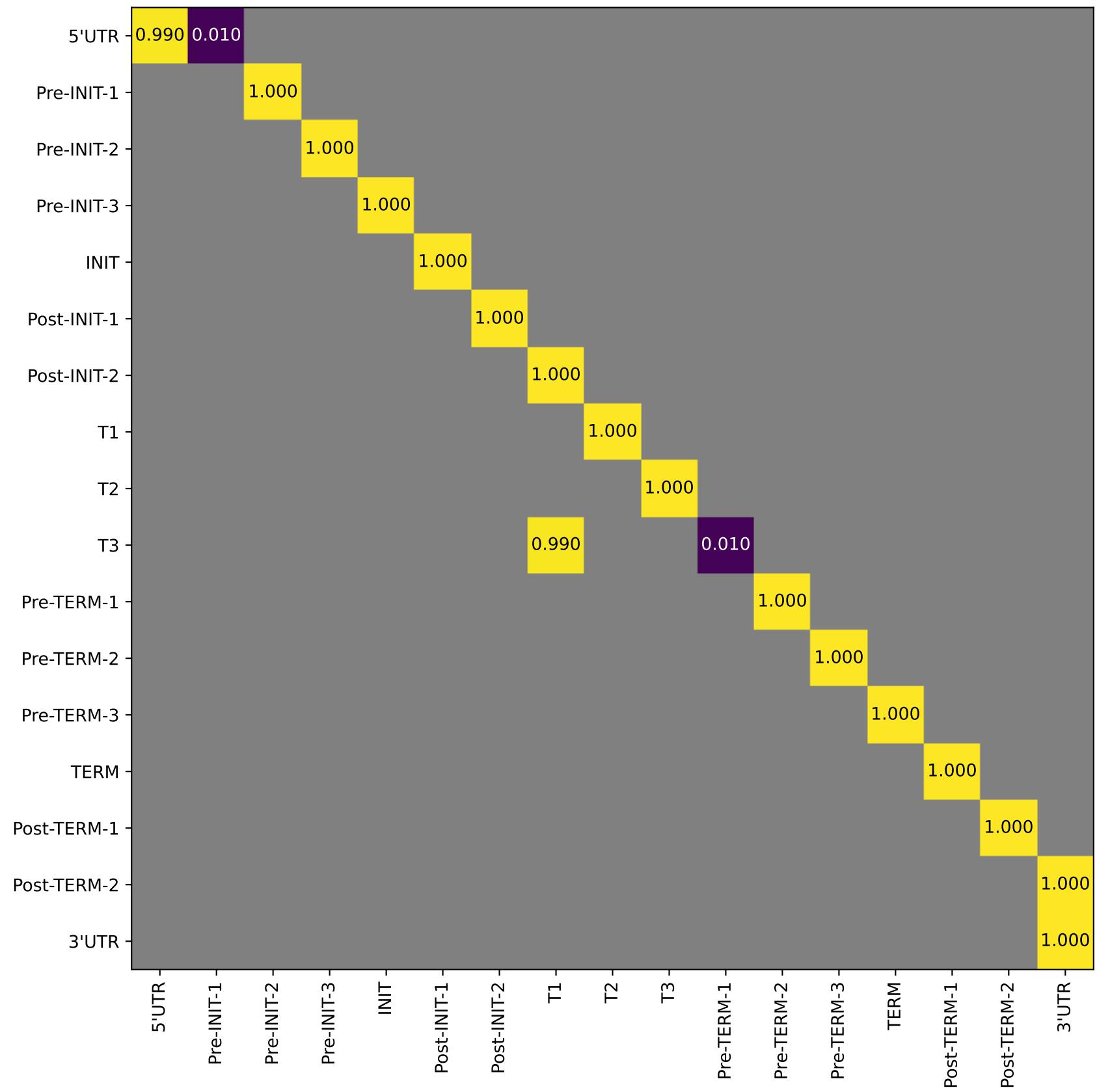
Trained Model File: /home/kai/Documents/00\_RNA/01\_riboHMM\_simple\_prod/04\_Models/model\_top1000\_raw\_nosplit.joblib

Model Config File: /home/kai/Documents/00\_RNA/01\_riboHMM\_simple\_prod/model\_config.json

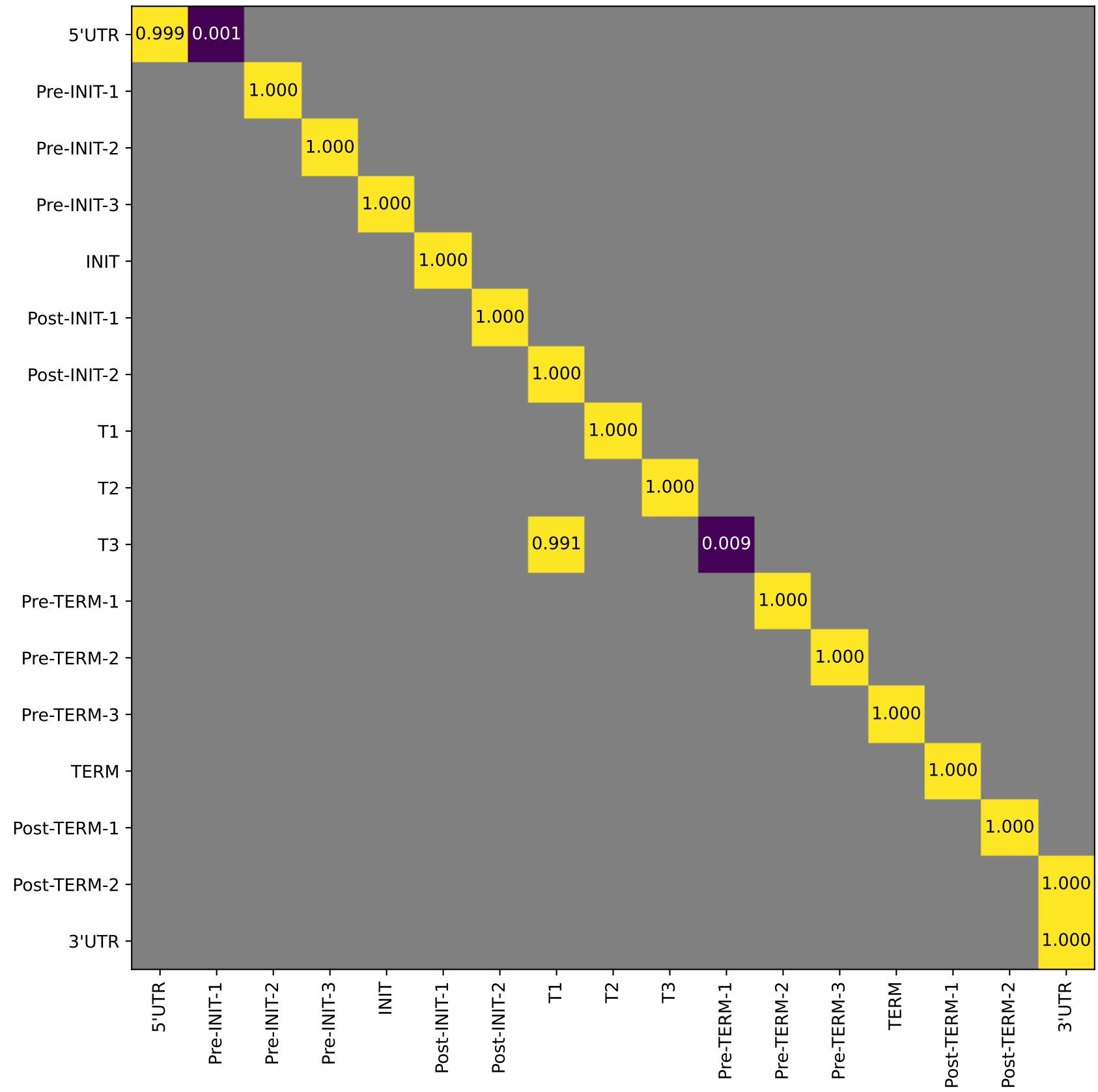
ORF Annotations File: /home/kai/Documents/00\_RNA/01\_riboHMM\_simple\_prod/01\_Reference\_Files/MANE\_CDS\_coordinates.csv

Number of Transcripts in Test Set: 1000

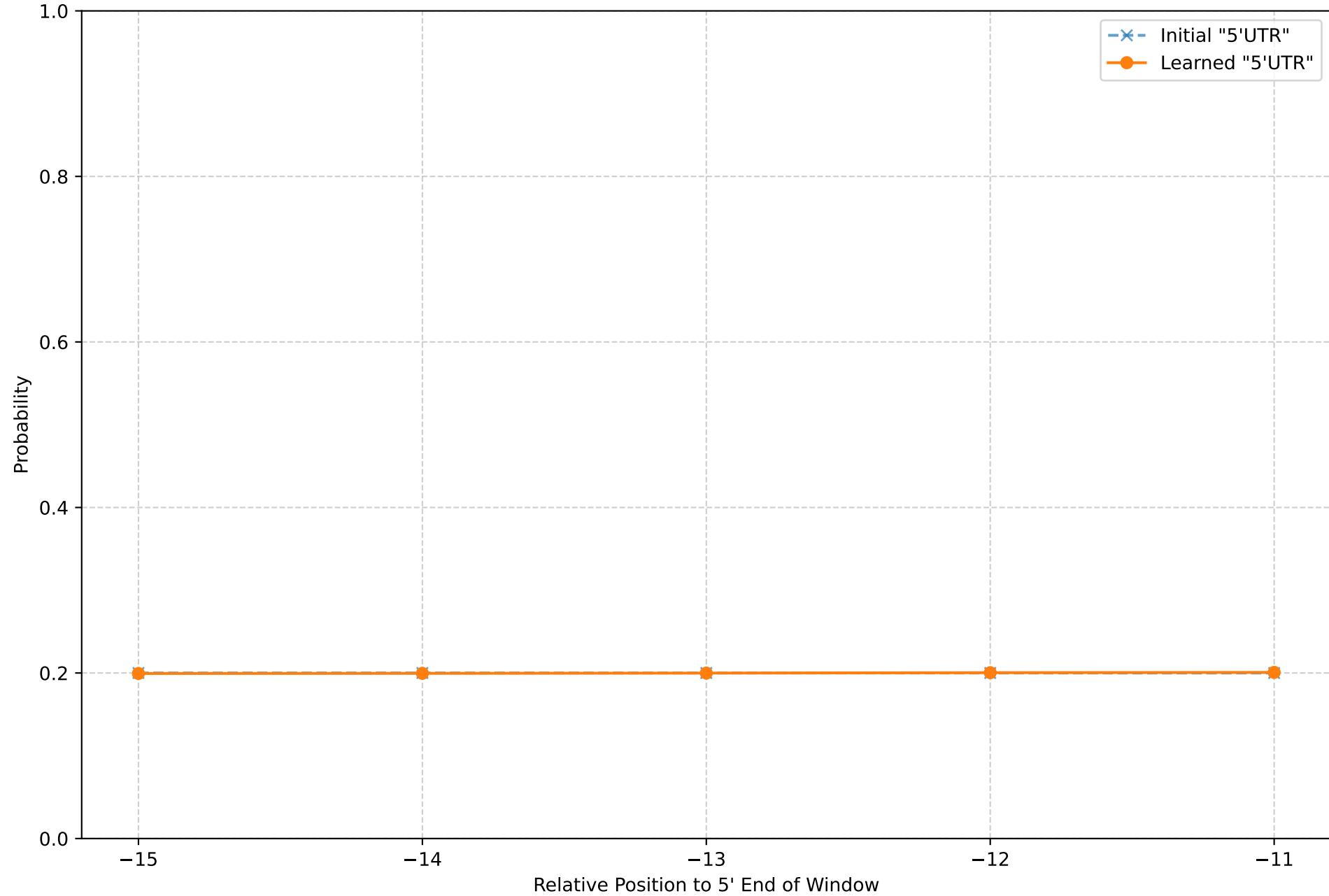
## Initial Transition Matrix



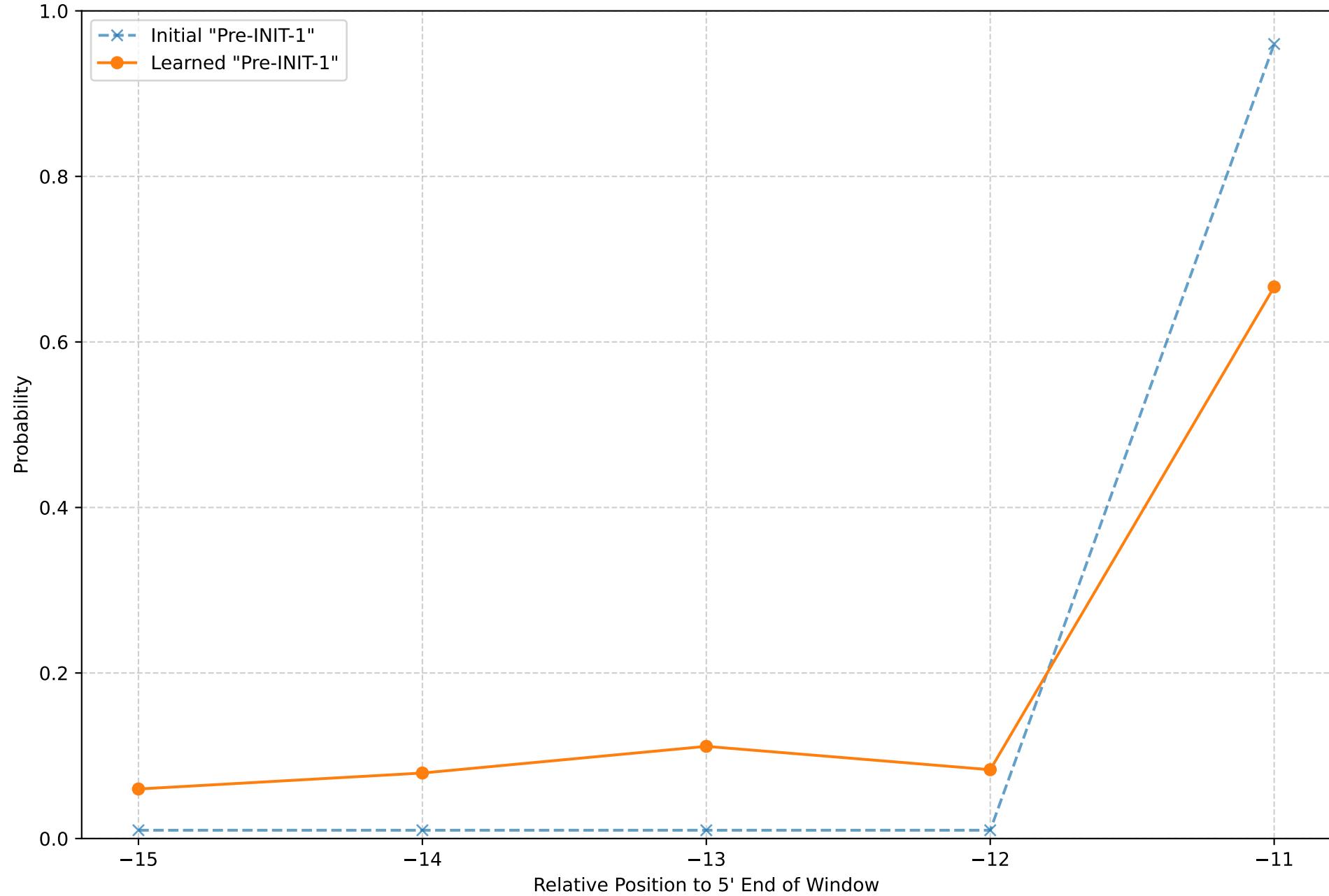
Learned Transition Matrix



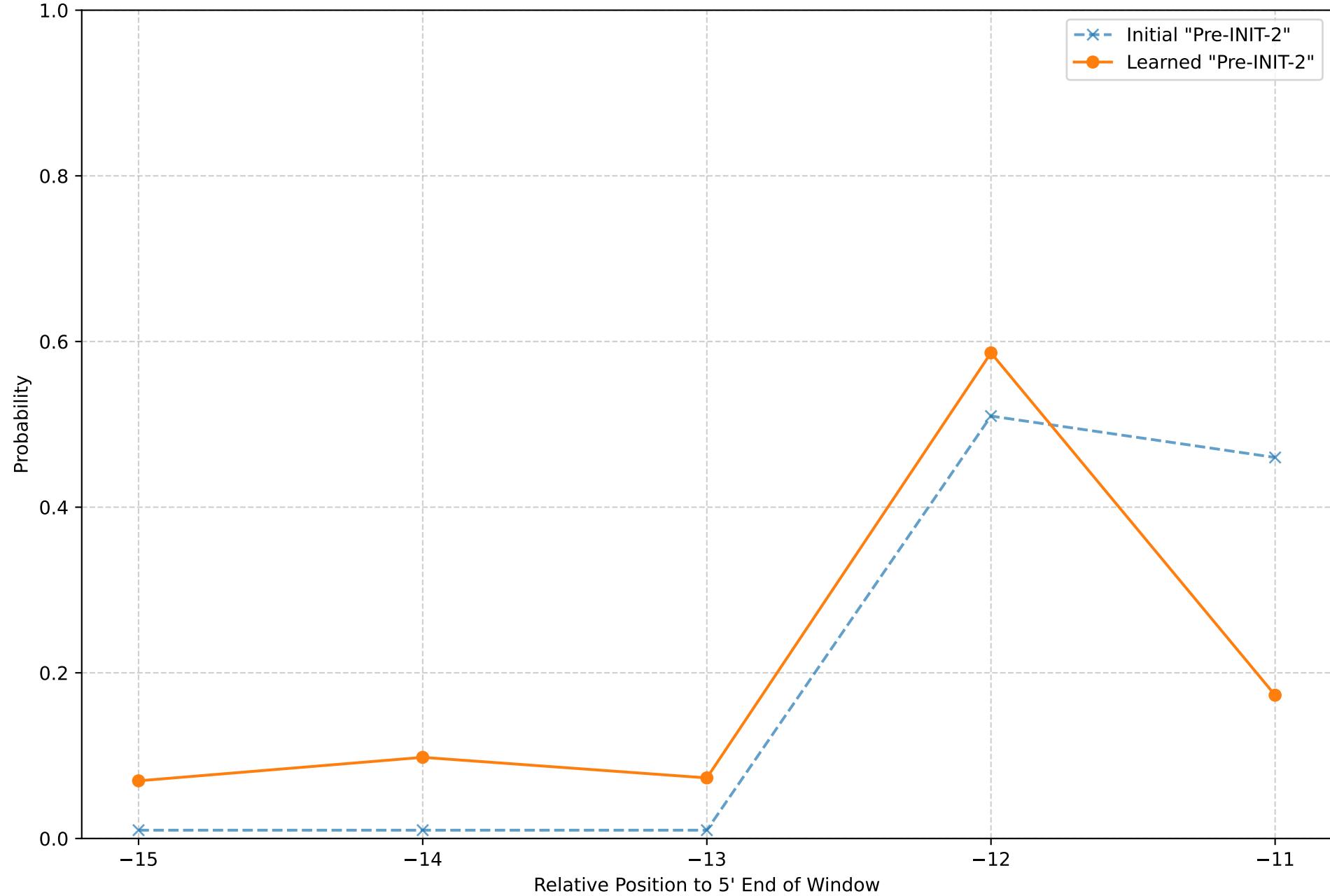
### Emission Probabilities: State "5'UTR"



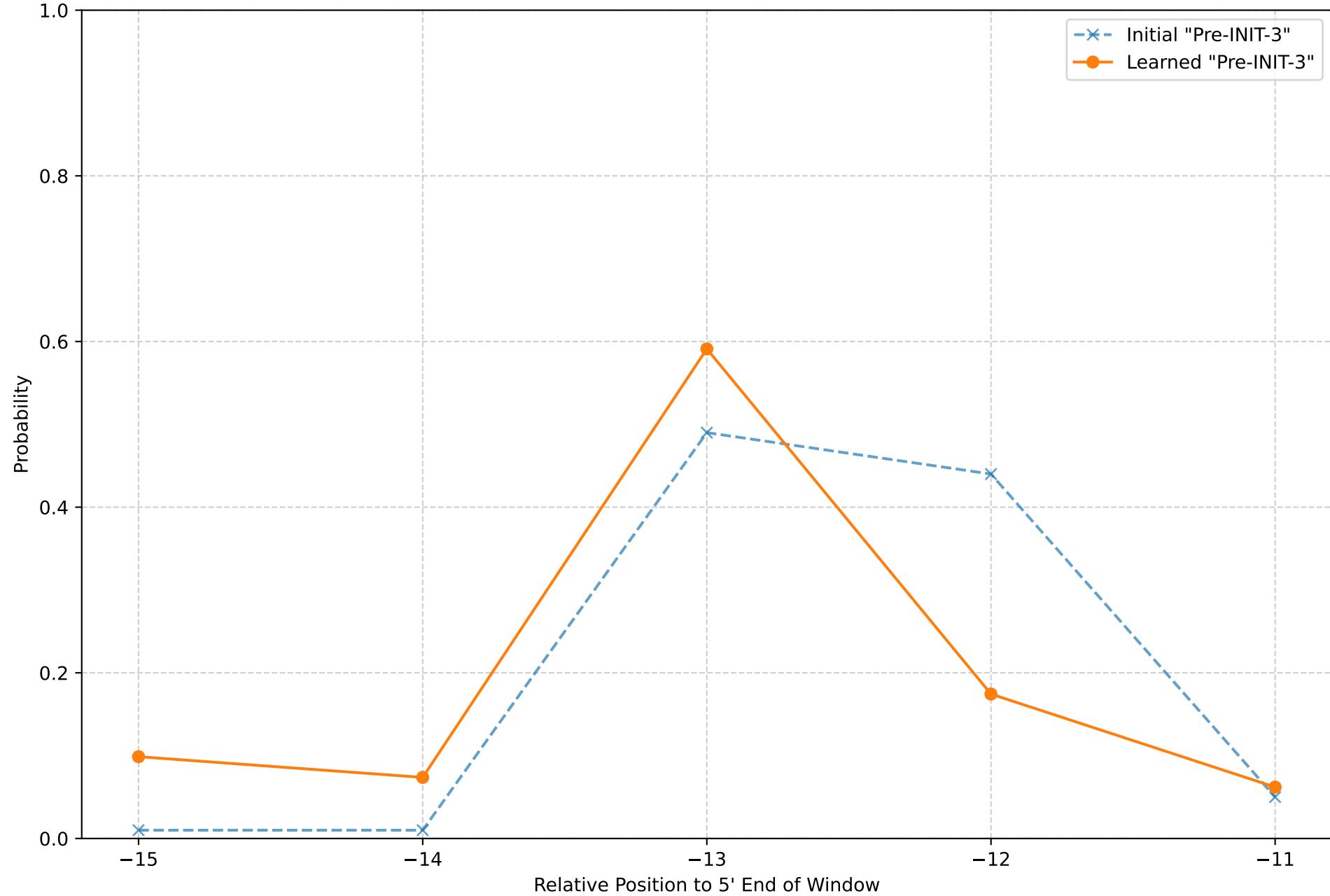
### Emission Probabilities: State "Pre-INIT-1"



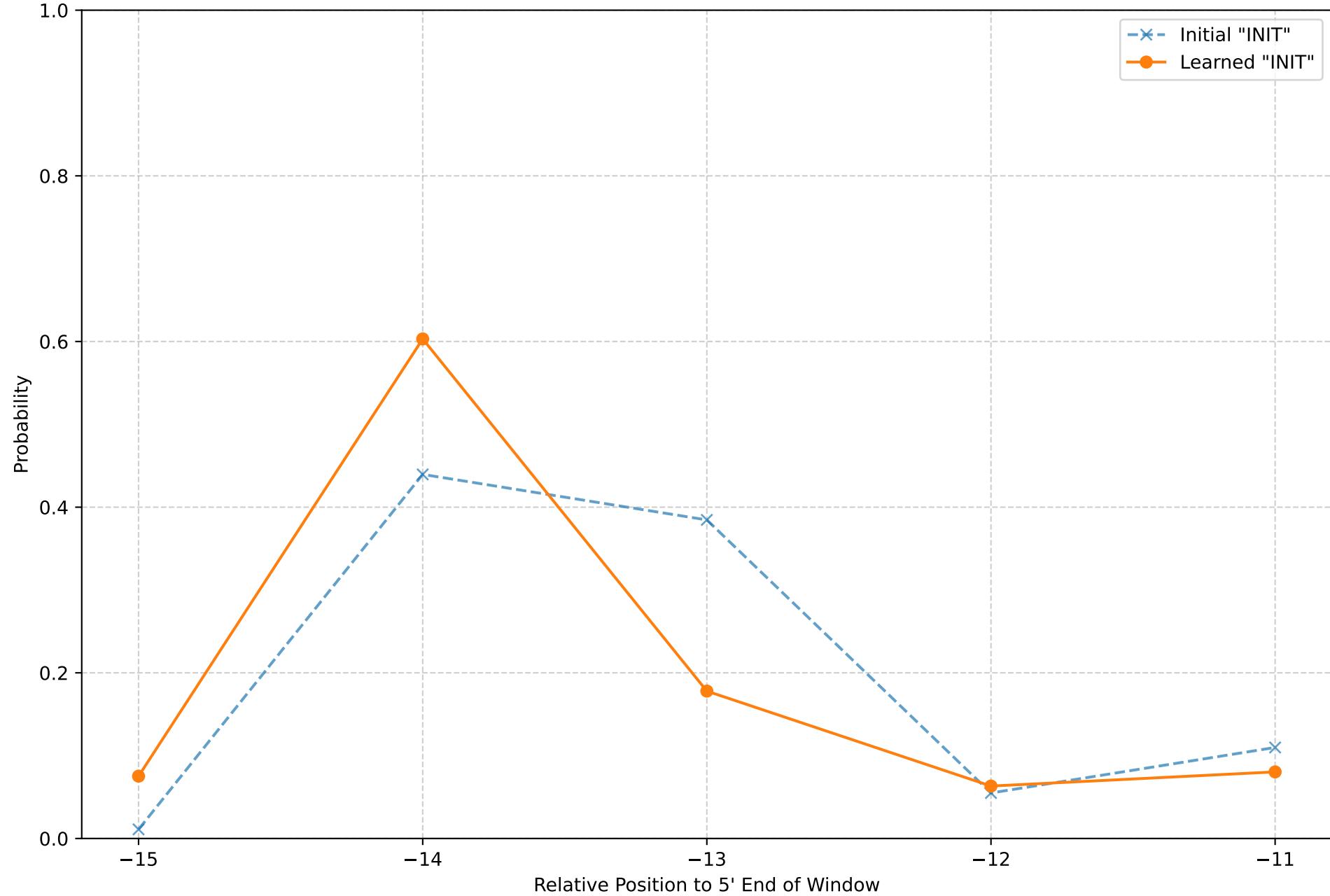
### Emission Probabilities: State "Pre-INIT-2"



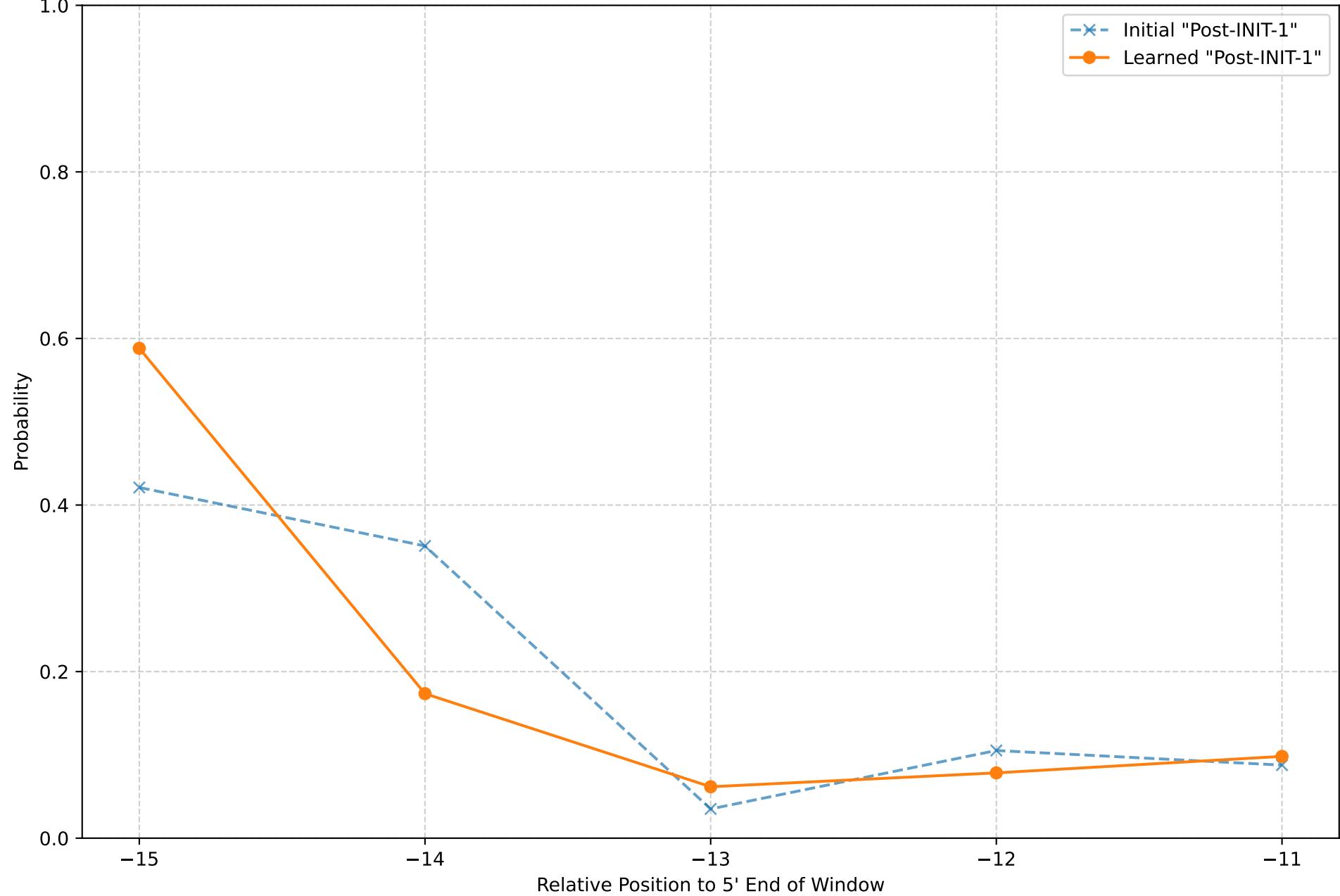
### Emission Probabilities: State "Pre-INIT-3"



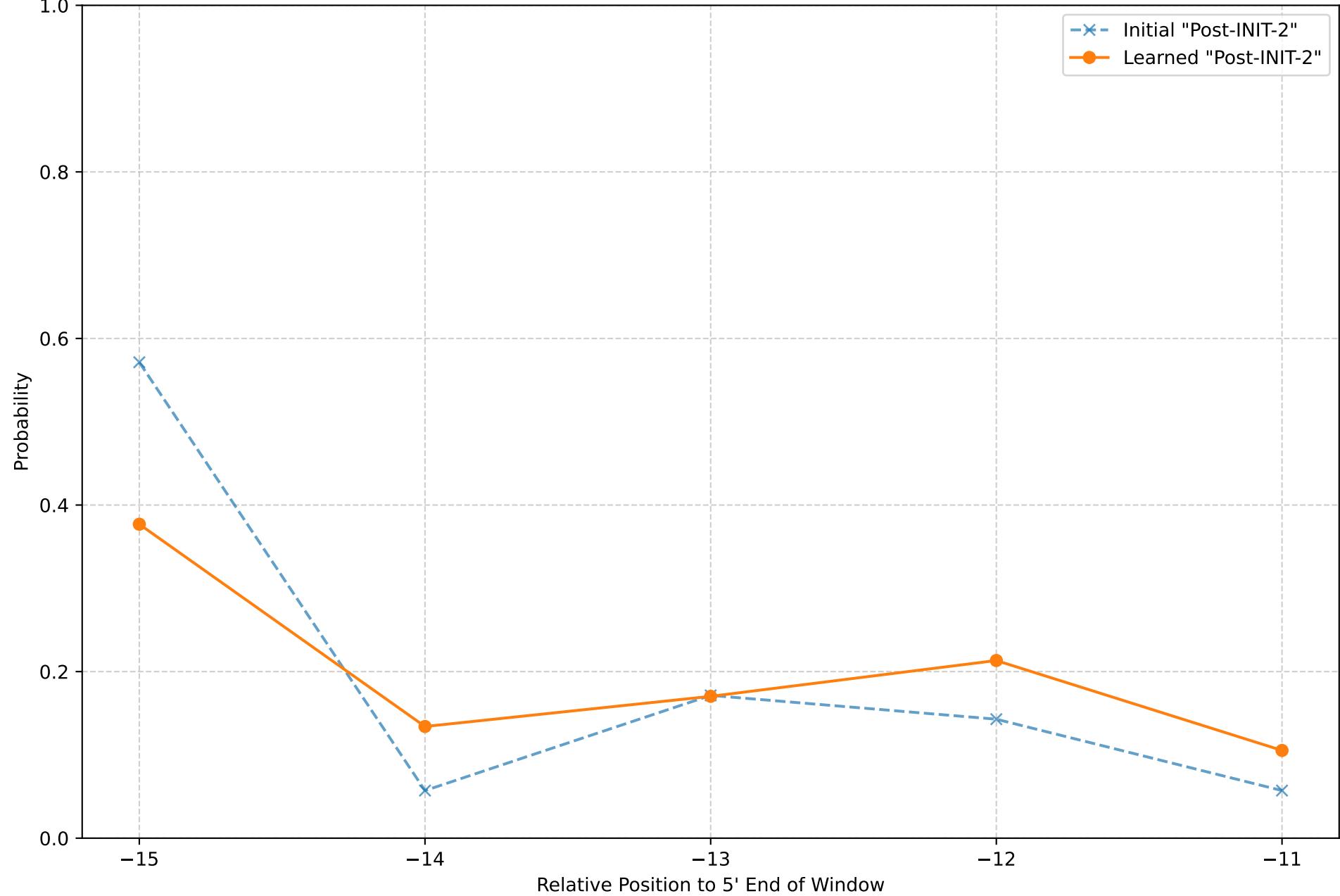
### Emission Probabilities: State "INIT"



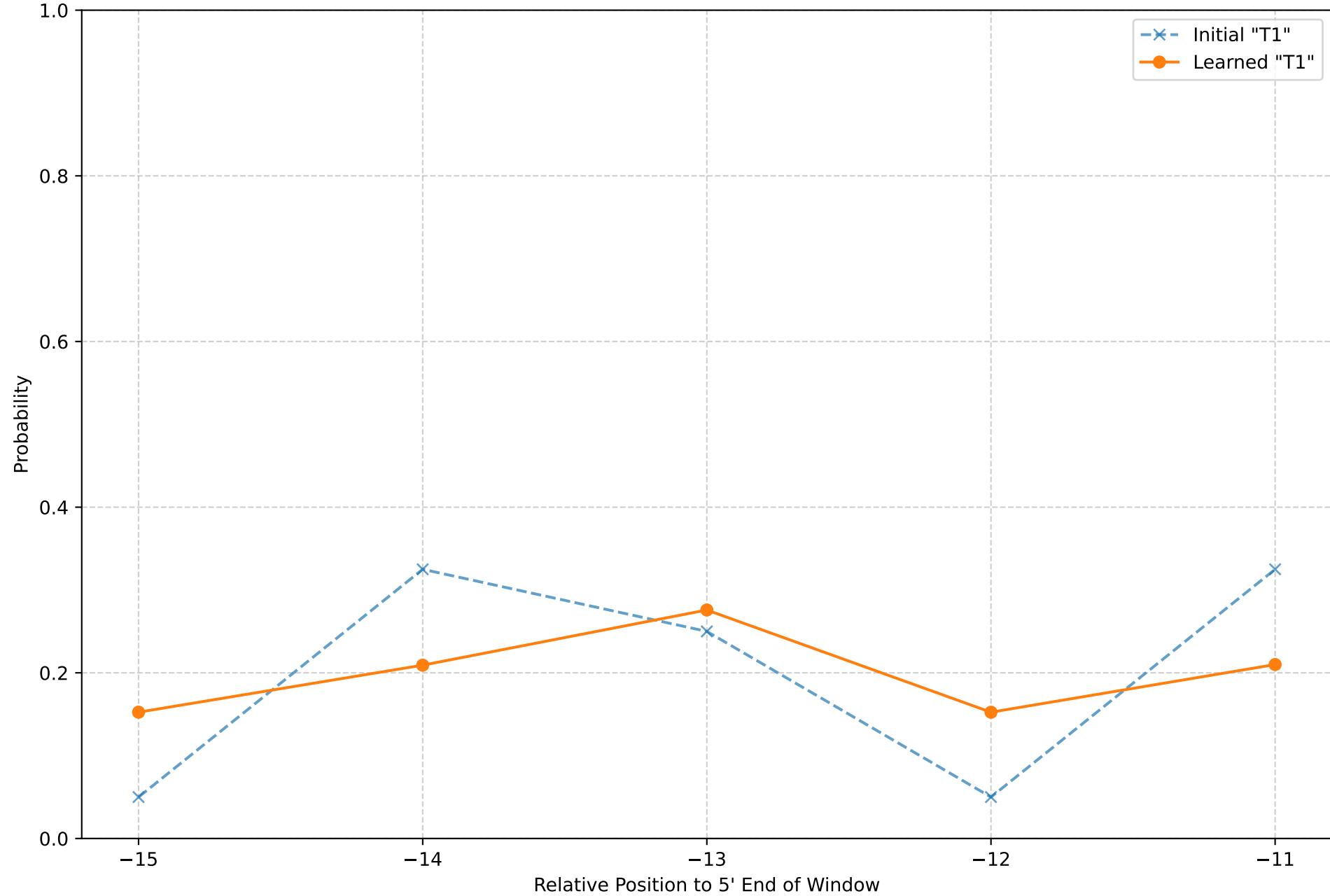
### Emission Probabilities: State "Post-INIT-1"



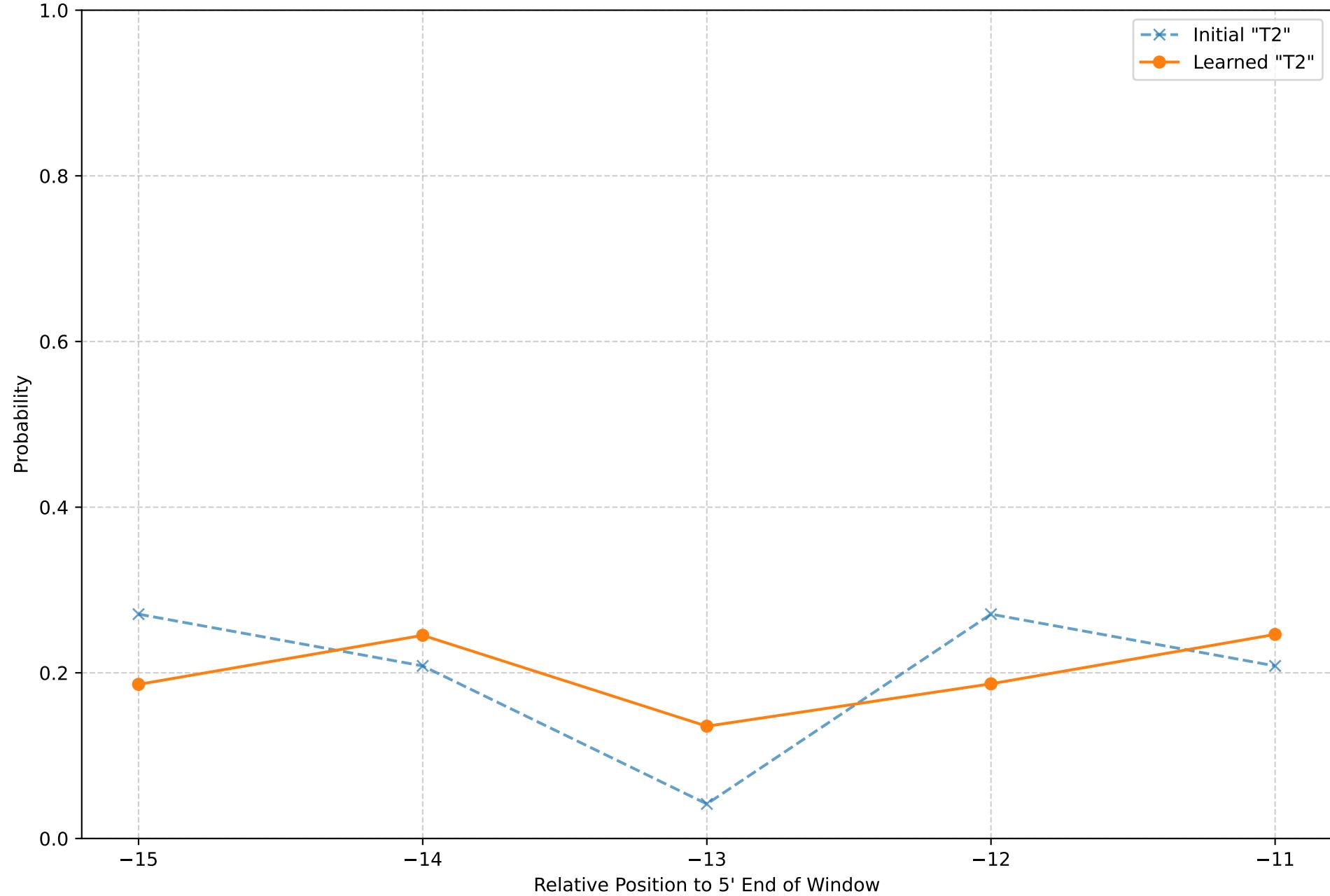
### Emission Probabilities: State "Post-INIT-2"



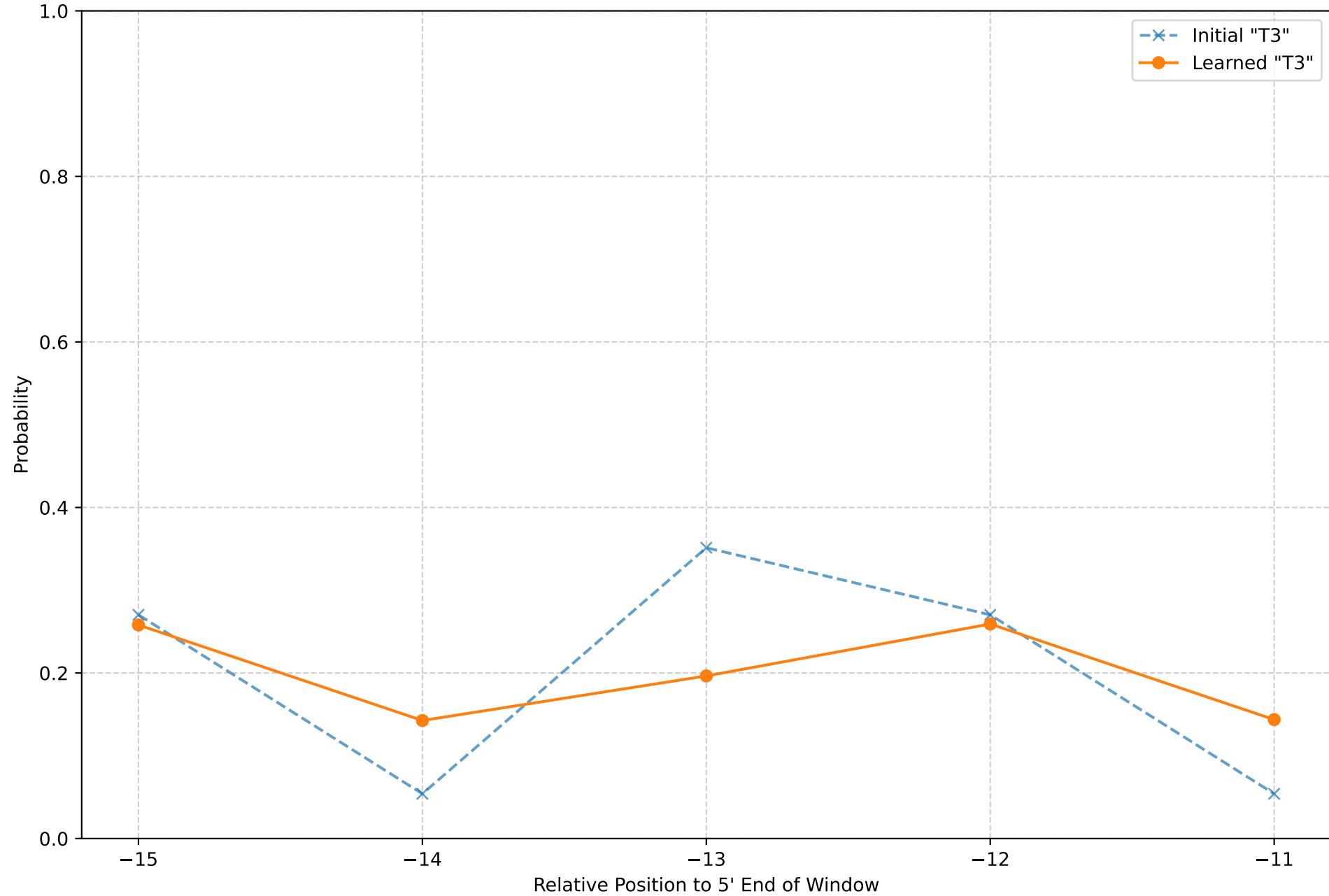
# Emission Probabilities: State "T1"



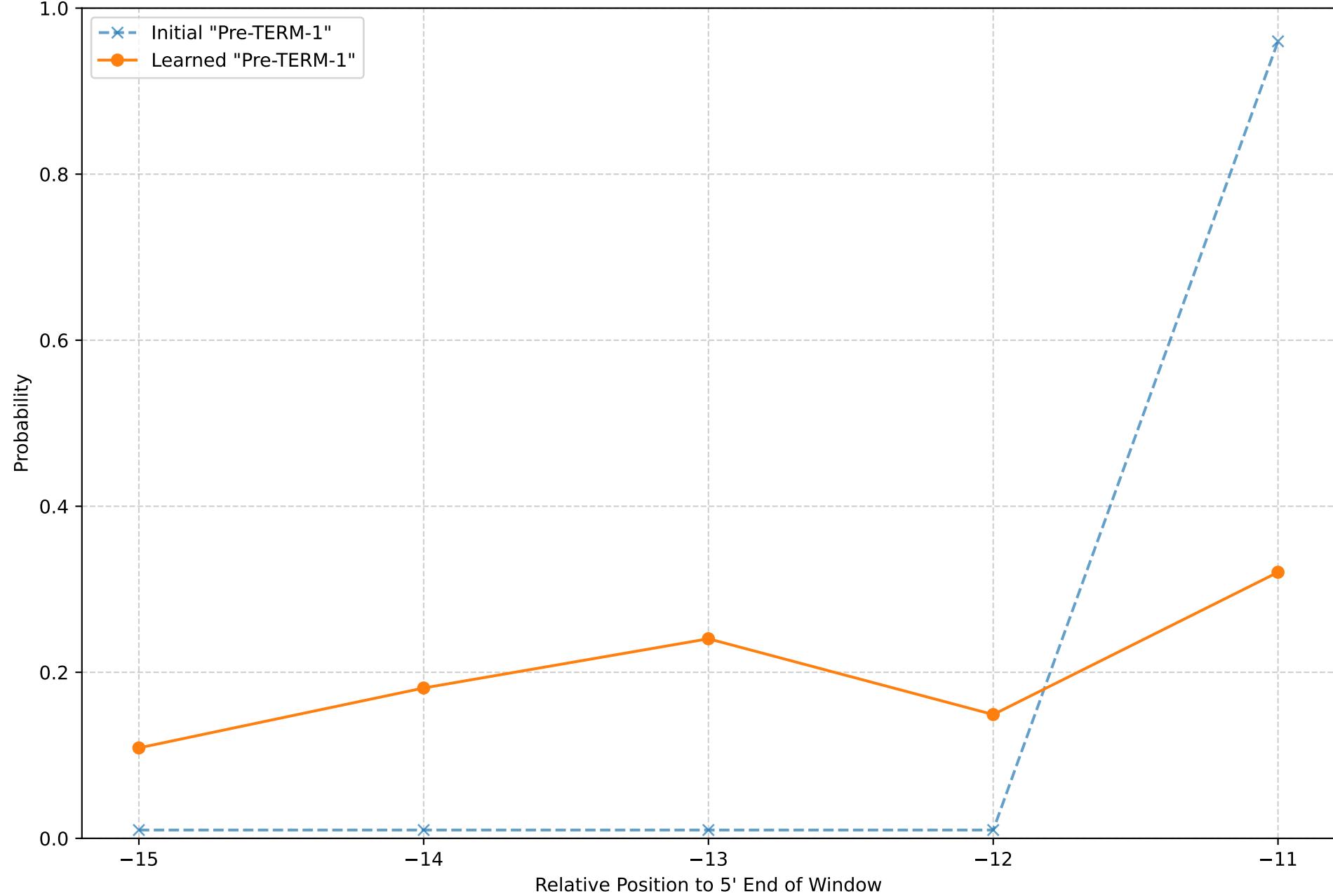
# Emission Probabilities: State "T2"



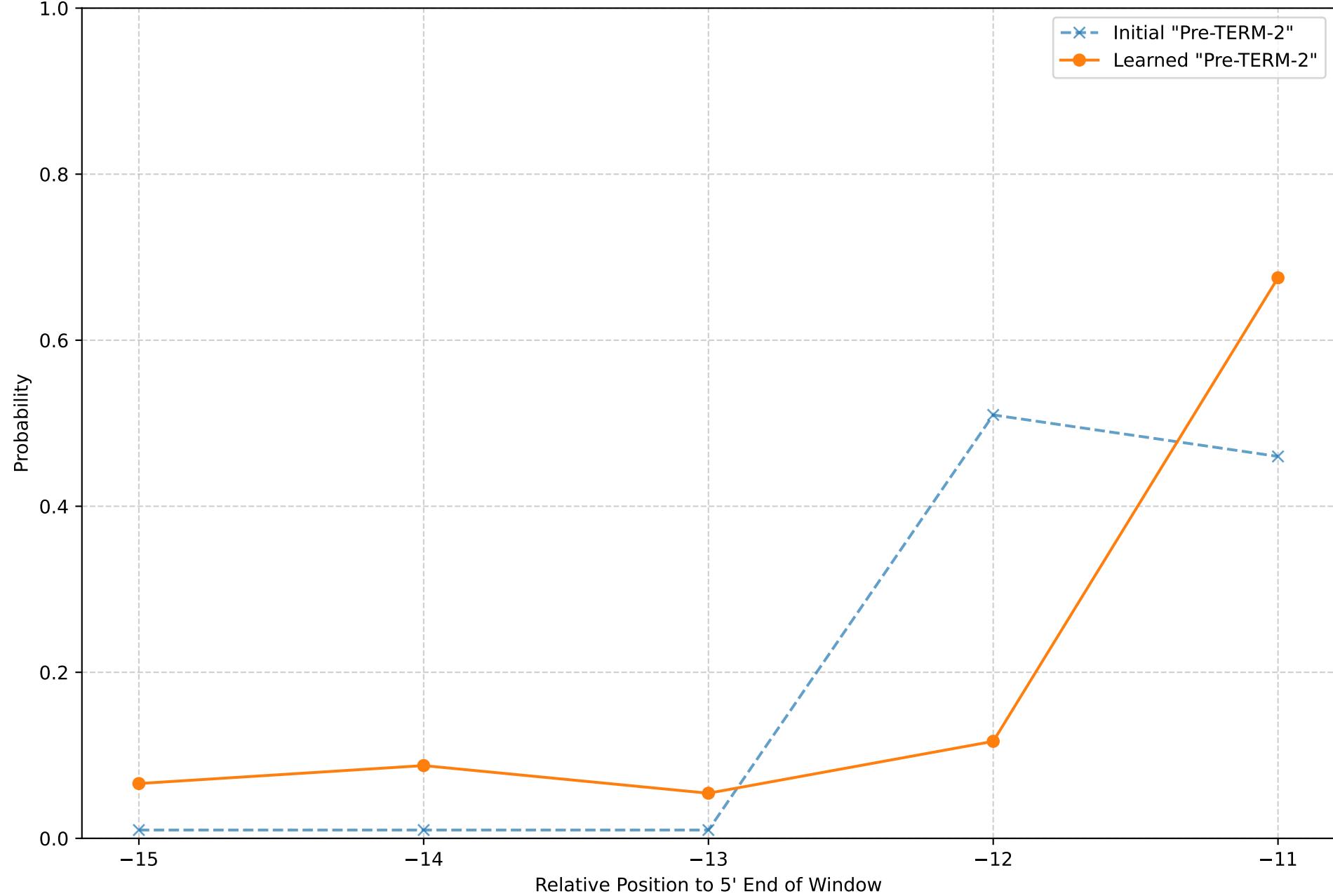
### Emission Probabilities: State "T3"



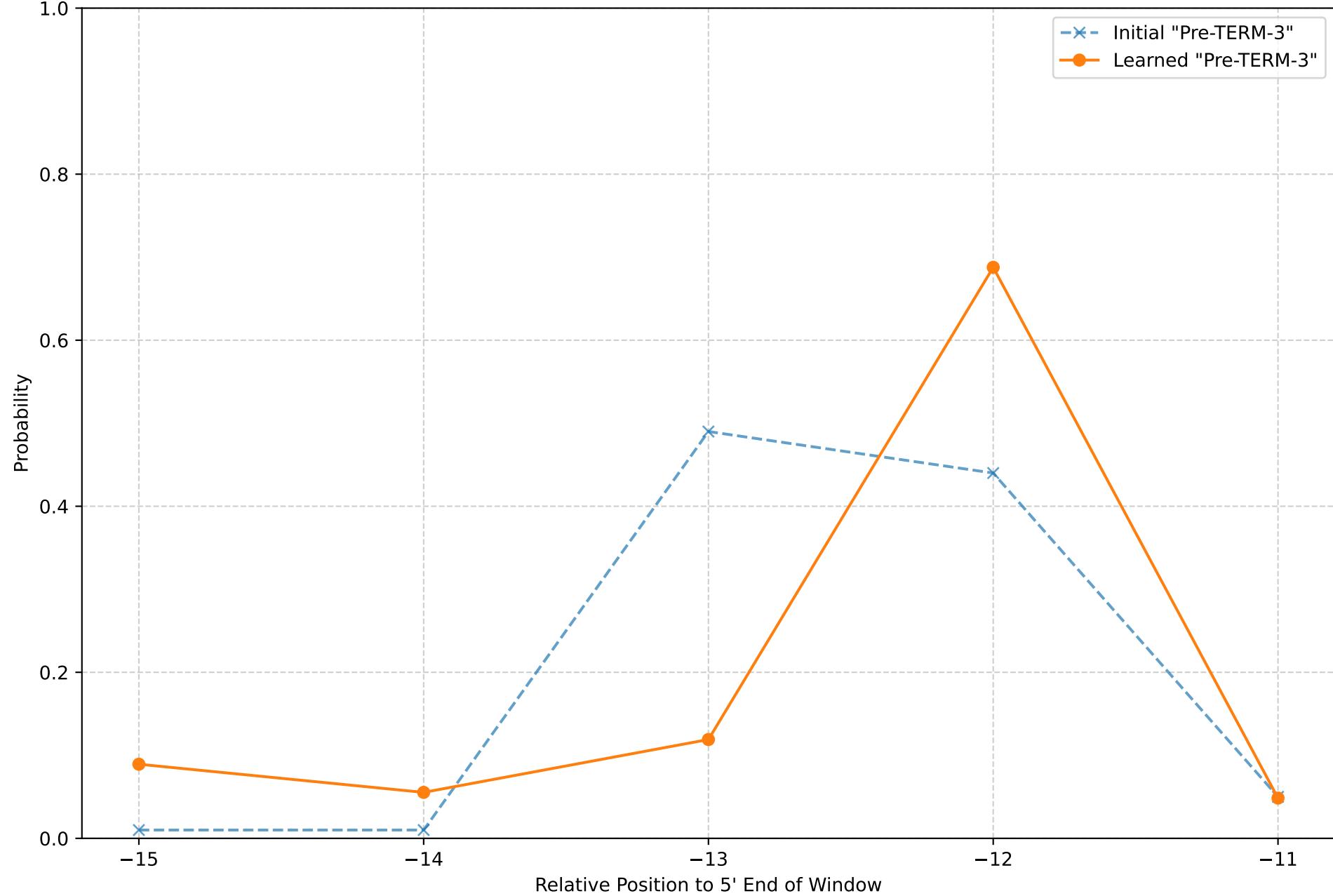
### Emission Probabilities: State "Pre-TERM-1"



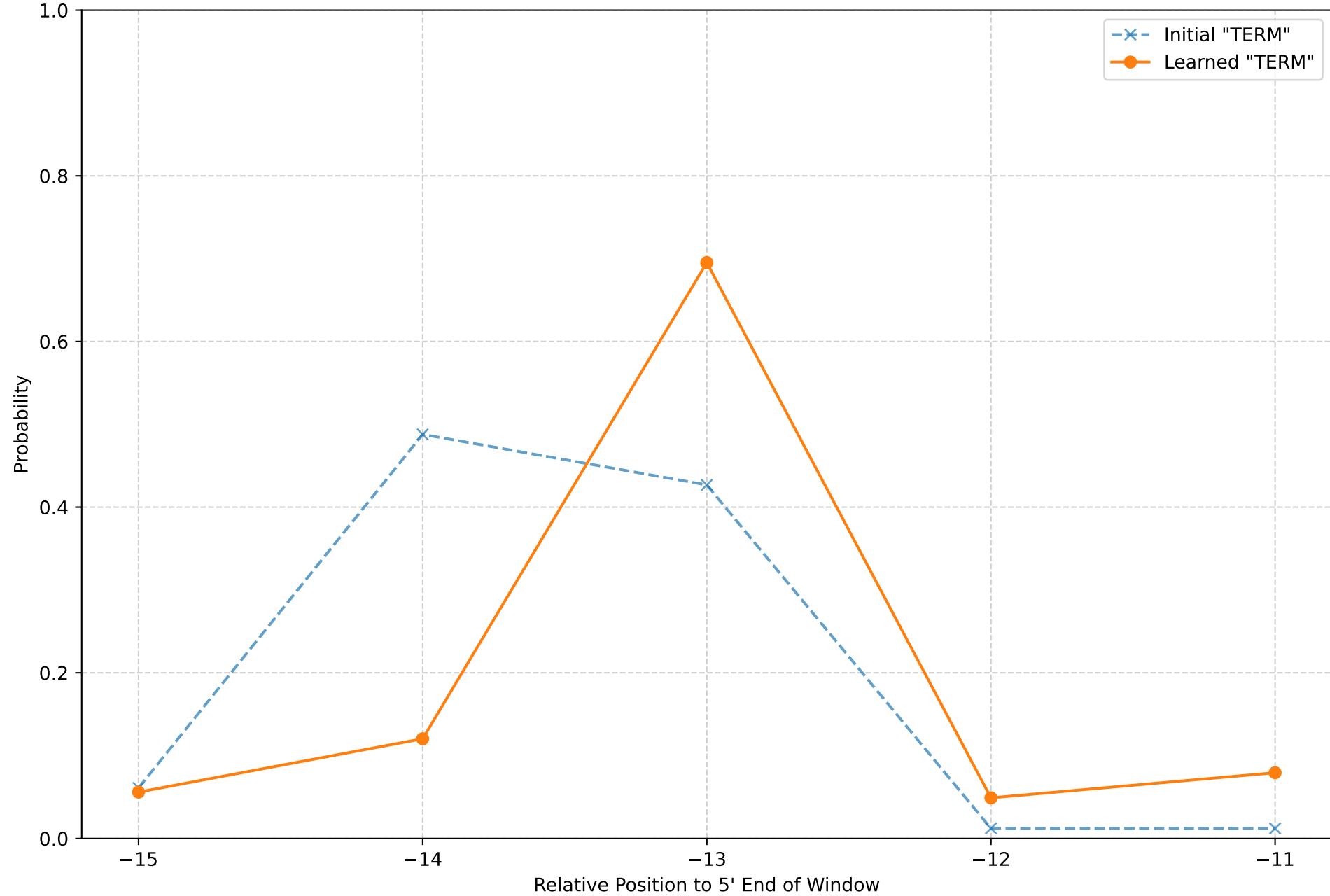
### Emission Probabilities: State "Pre-TERM-2"



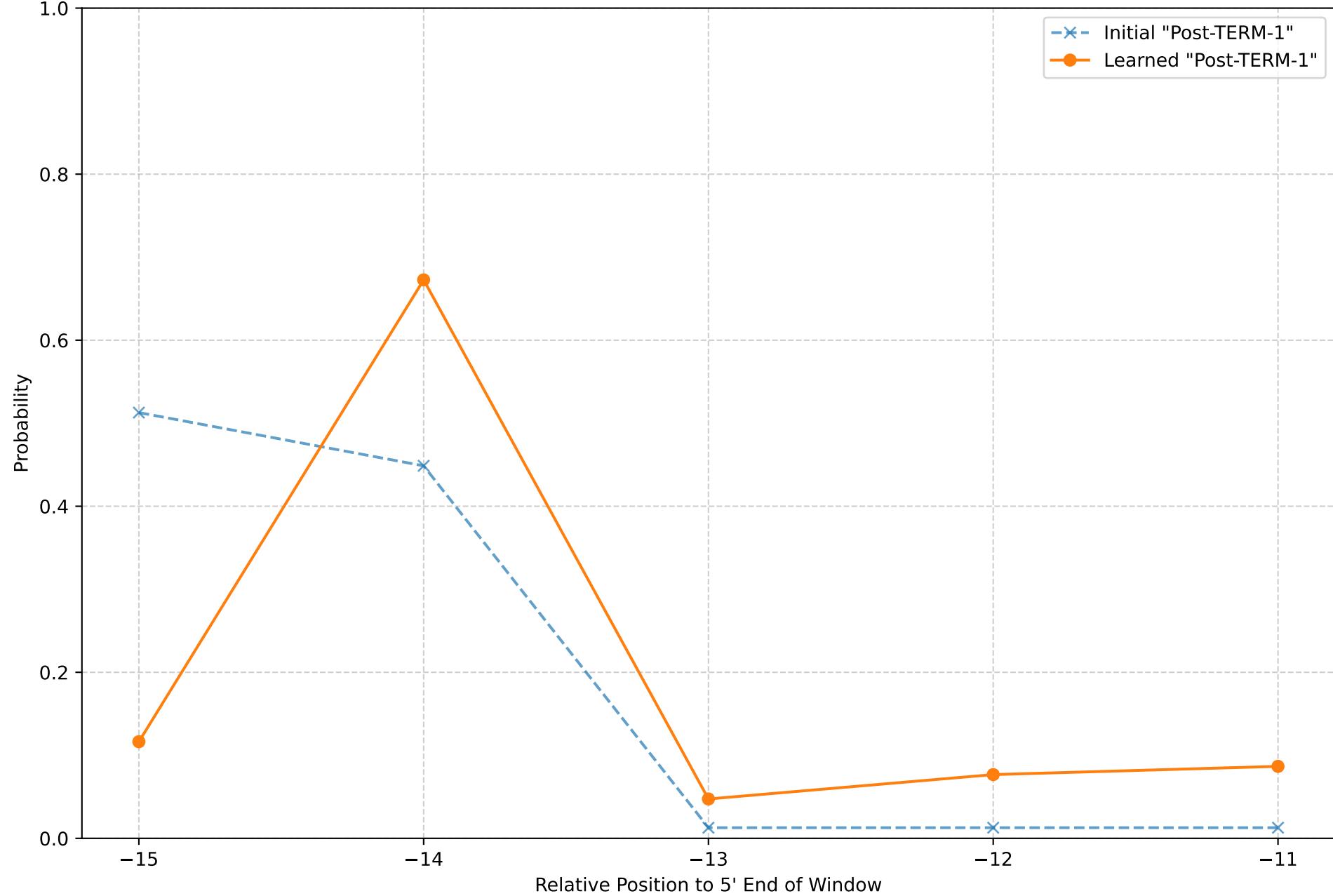
### Emission Probabilities: State "Pre-TERM-3"



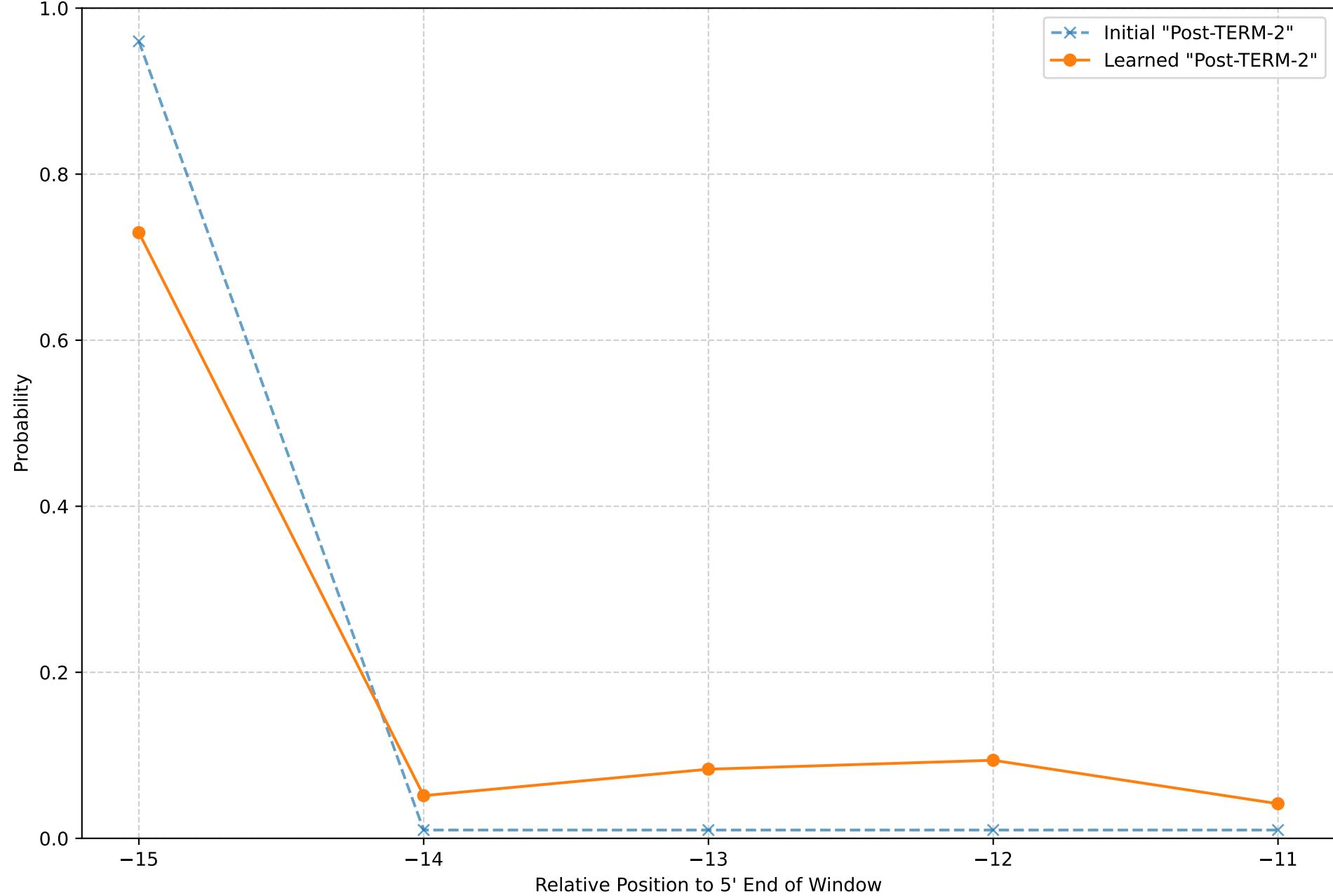
# Emission Probabilities: State "TERM"



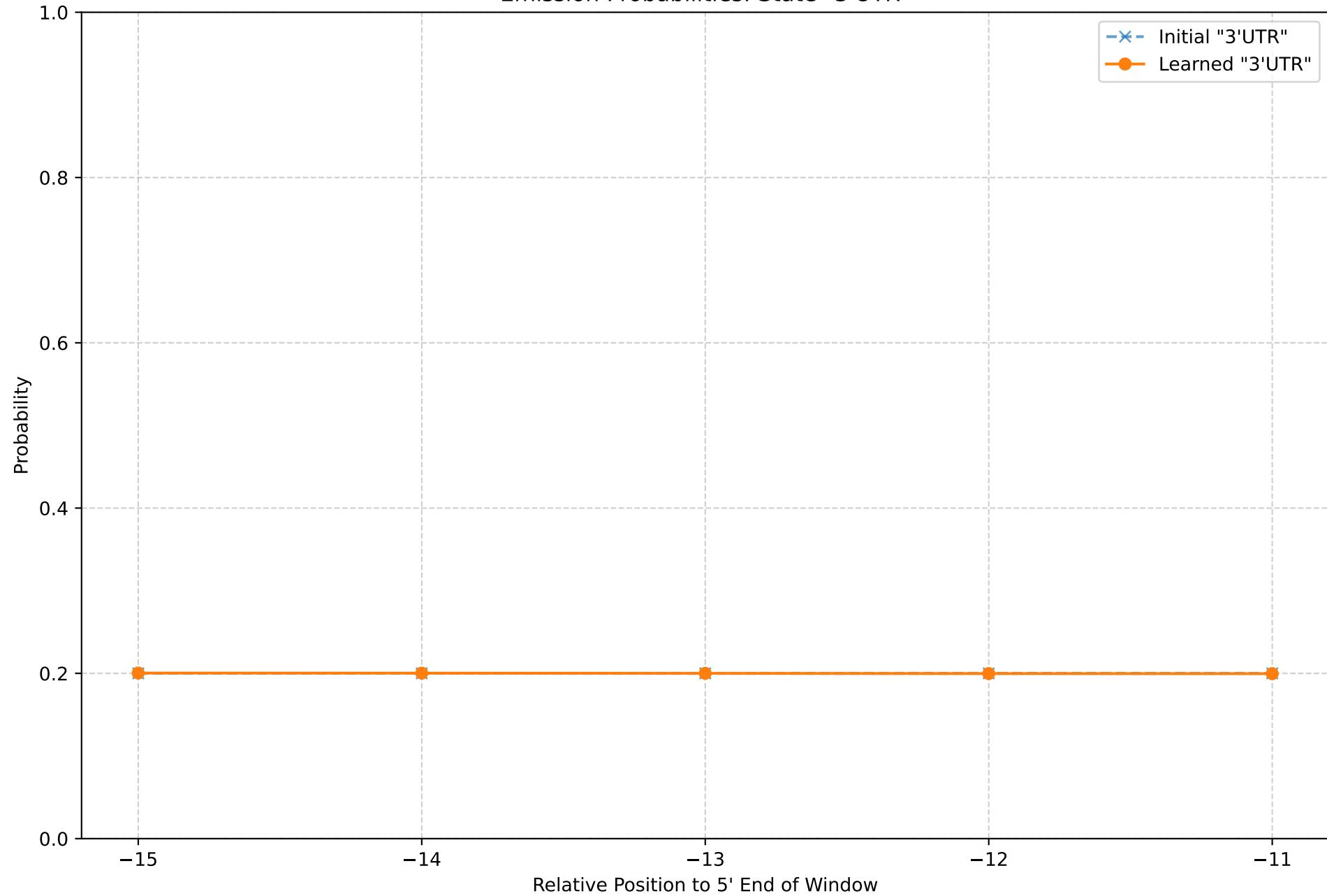
# Emission Probabilities: State "Post-TERM-1"



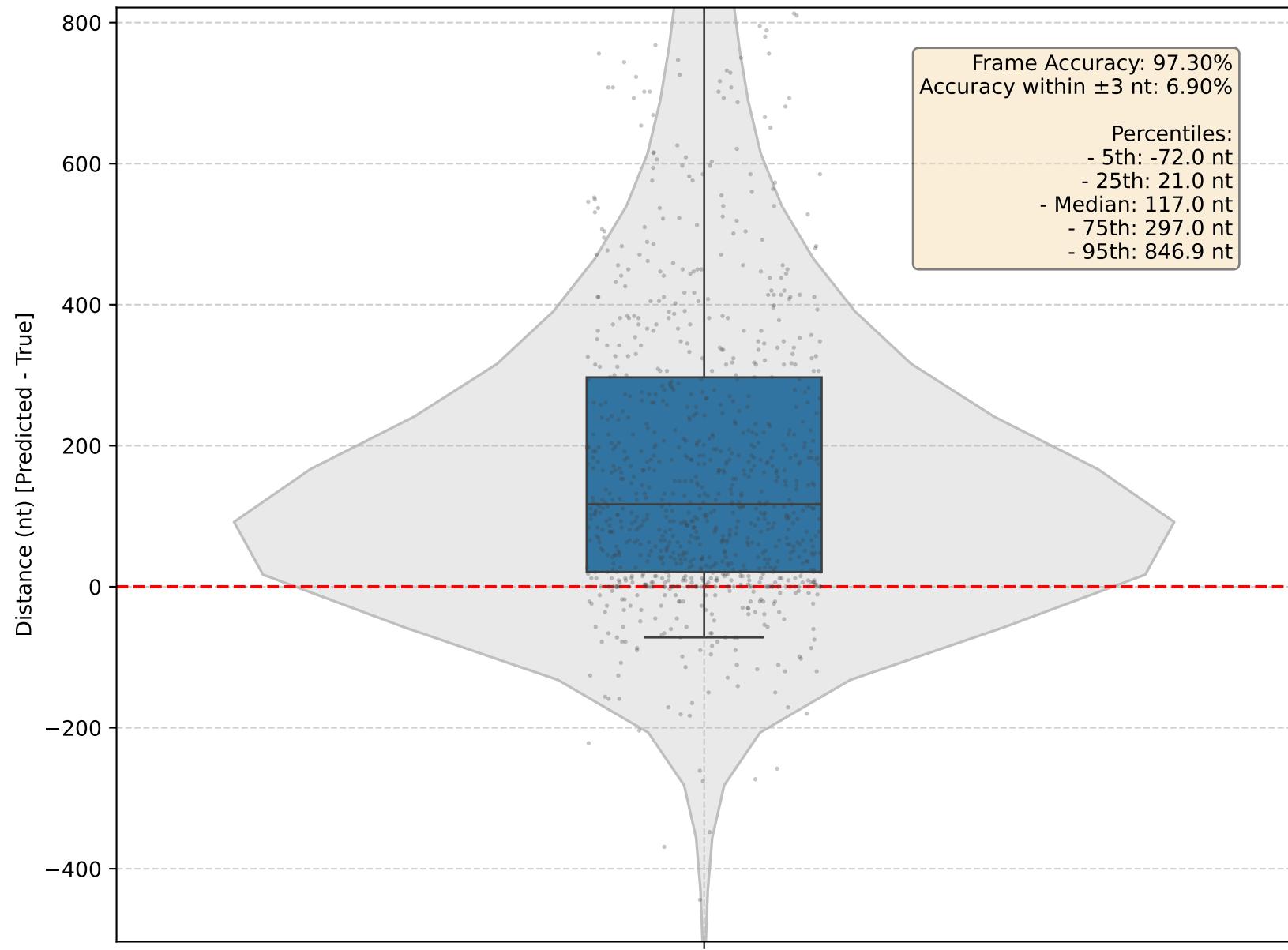
### Emission Probabilities: State "Post-TERM-2"



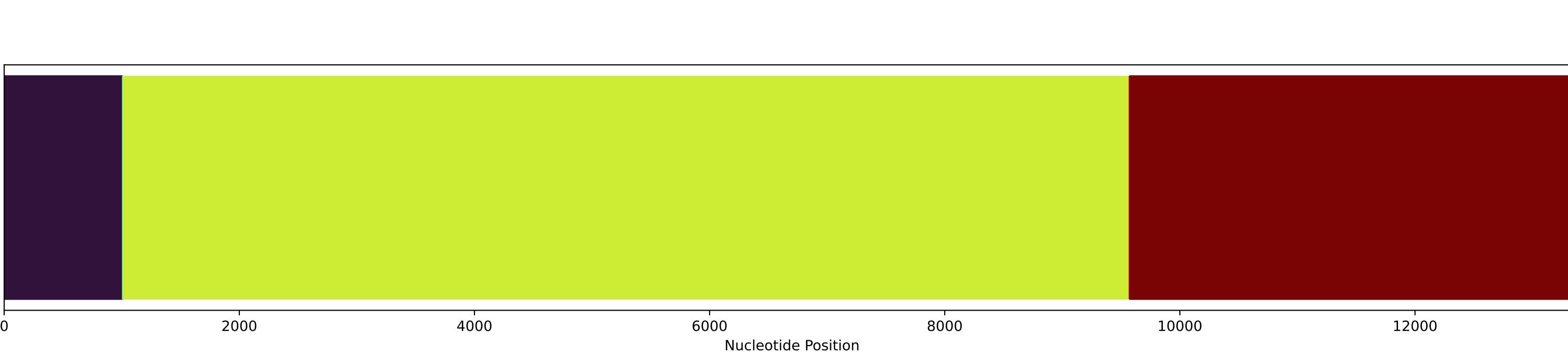
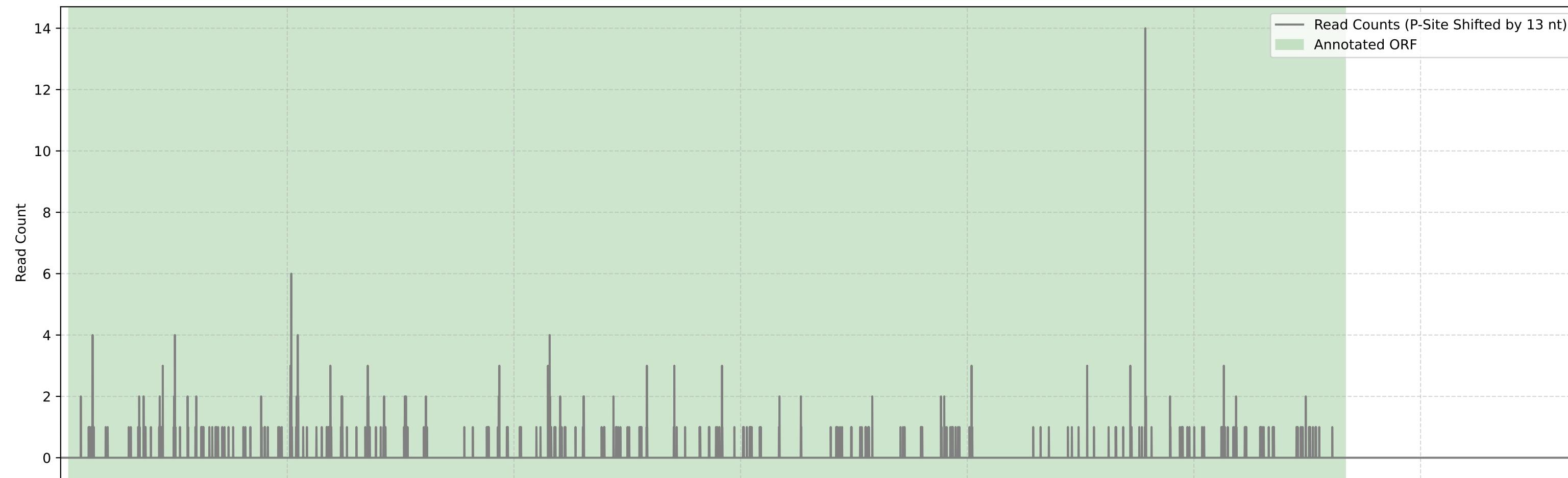
### Emission Probabilities: State "3'UTR"



# Distance: Predicted INIT State vs. True Start Codon

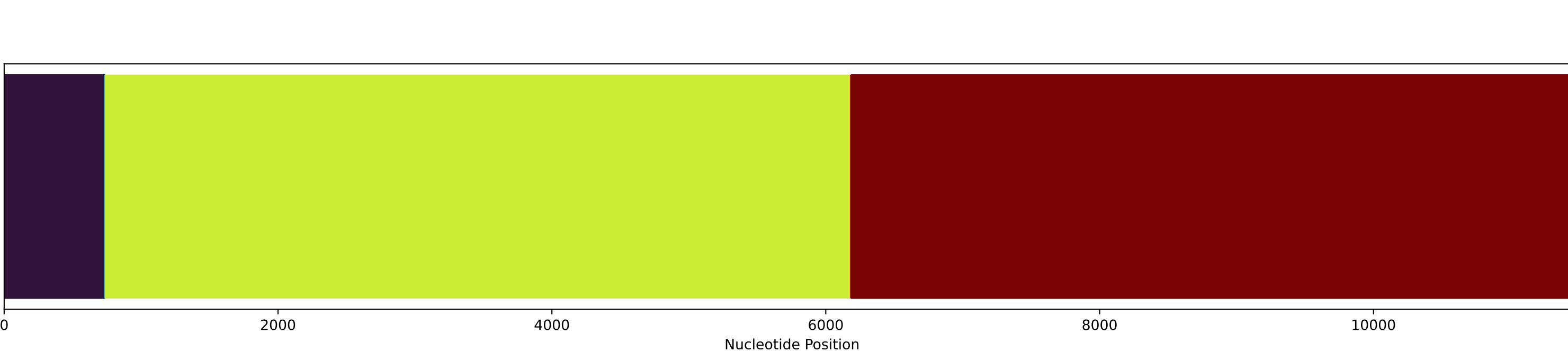
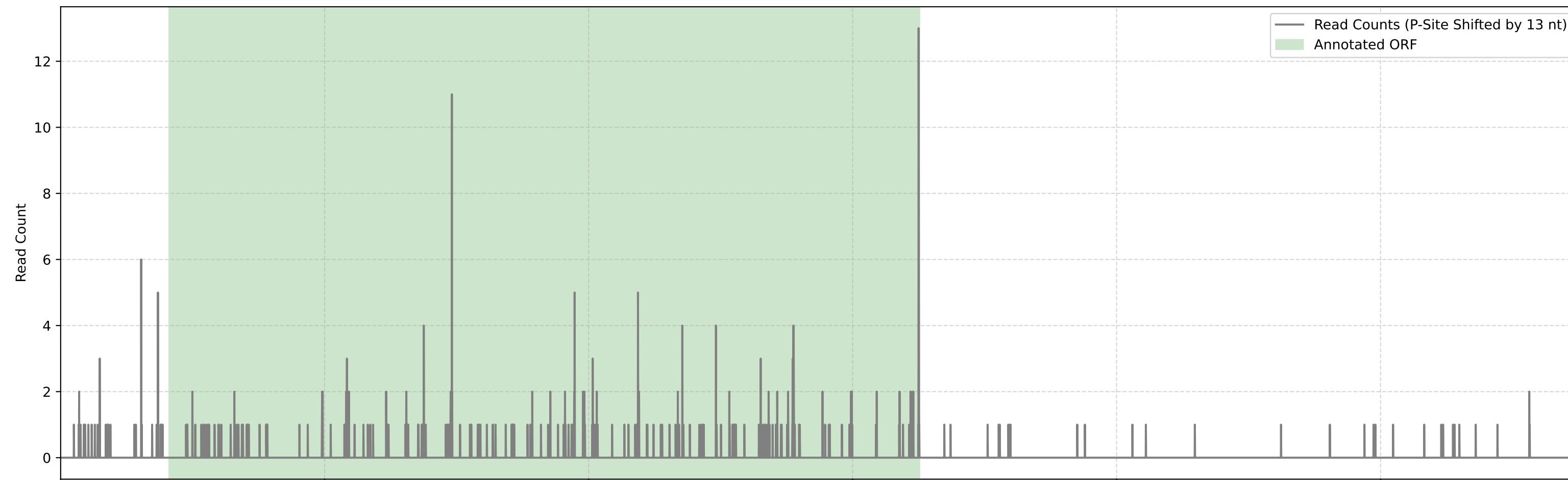


Example: 1th Percentile (by TPM) Transcript (ENST00000644861.2)  
Total Reads: 463 | TPM: 79.07



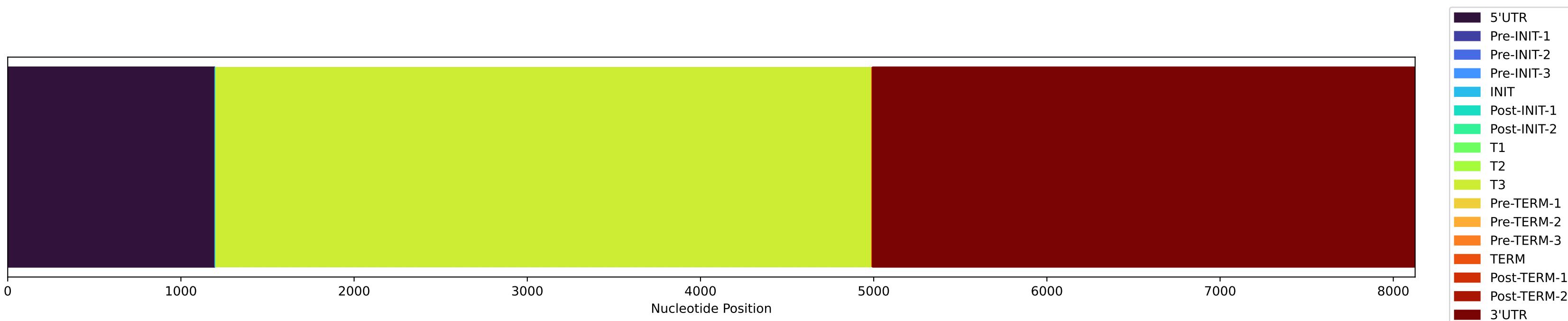
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 2th Percentile (by TPM) Transcript (ENST00000367033.4)  
Total Reads: 452 | TPM: 89.90

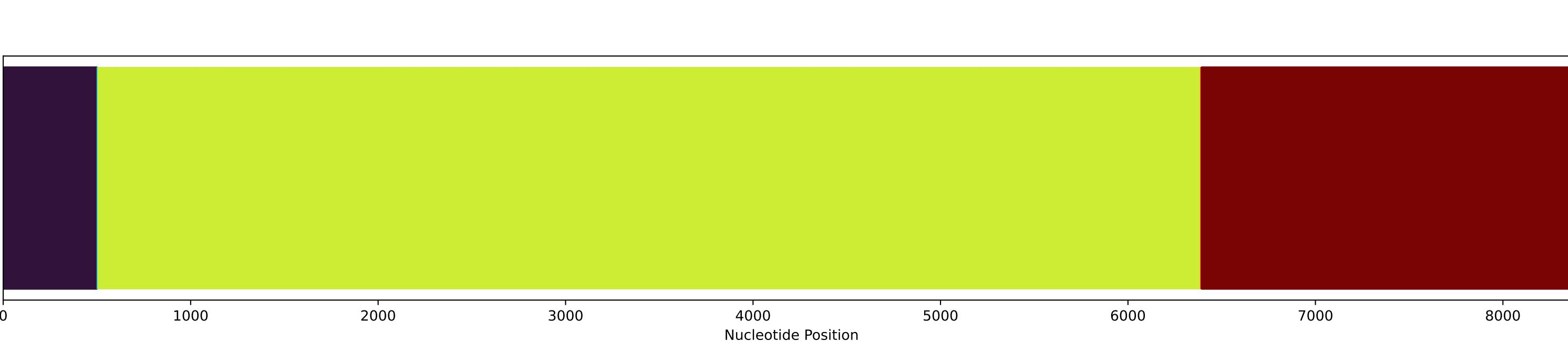
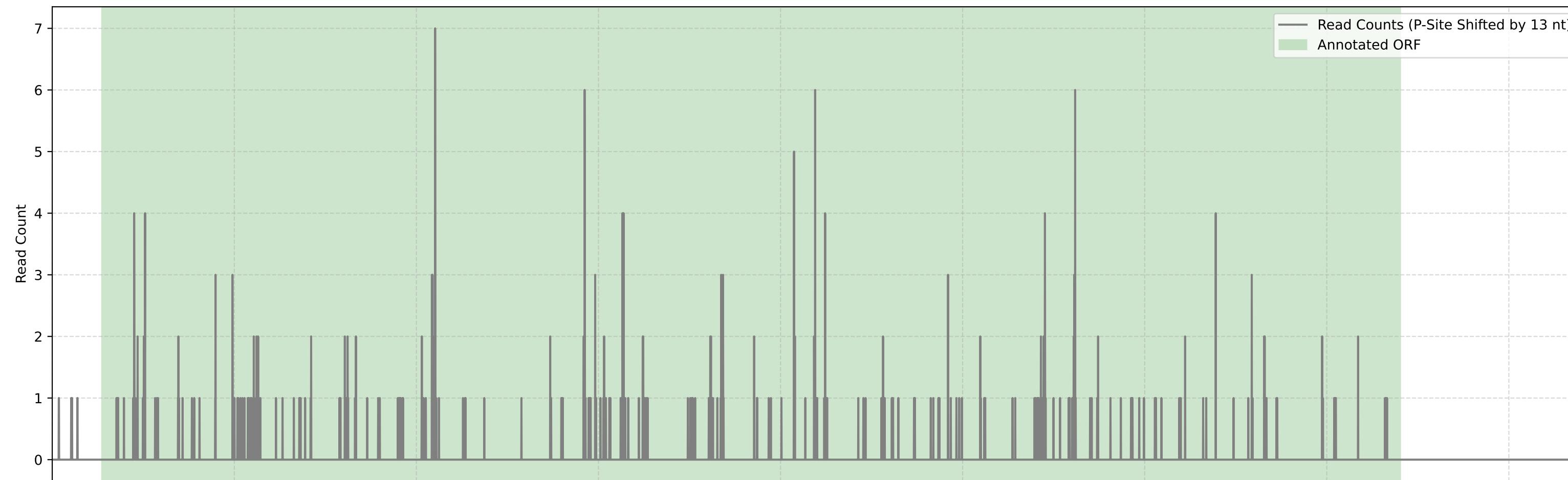


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

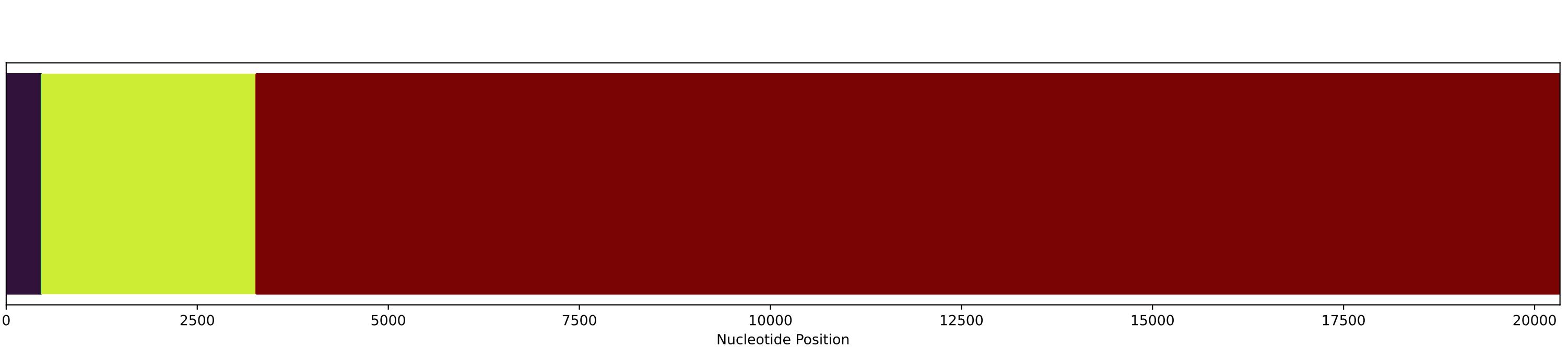
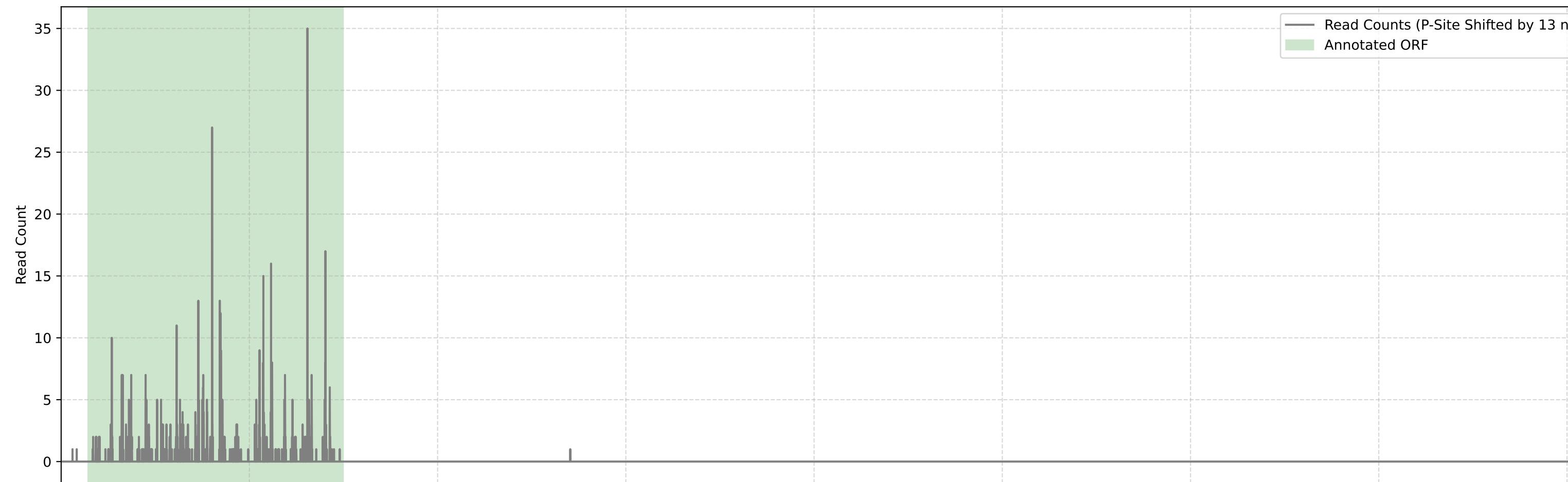
Example: 3th Percentile (by TPM) Transcript (ENST00000344922.10)  
Total Reads: 374 | TPM: 105.35



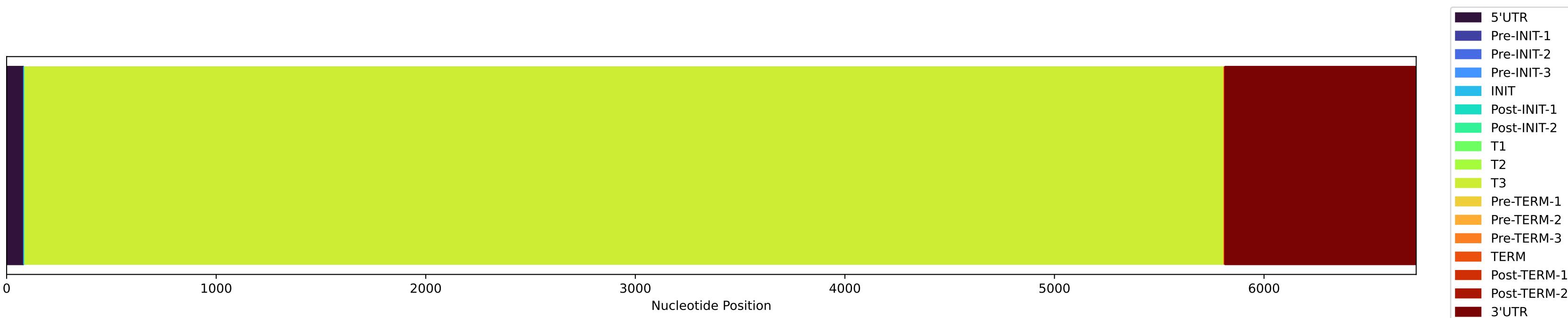
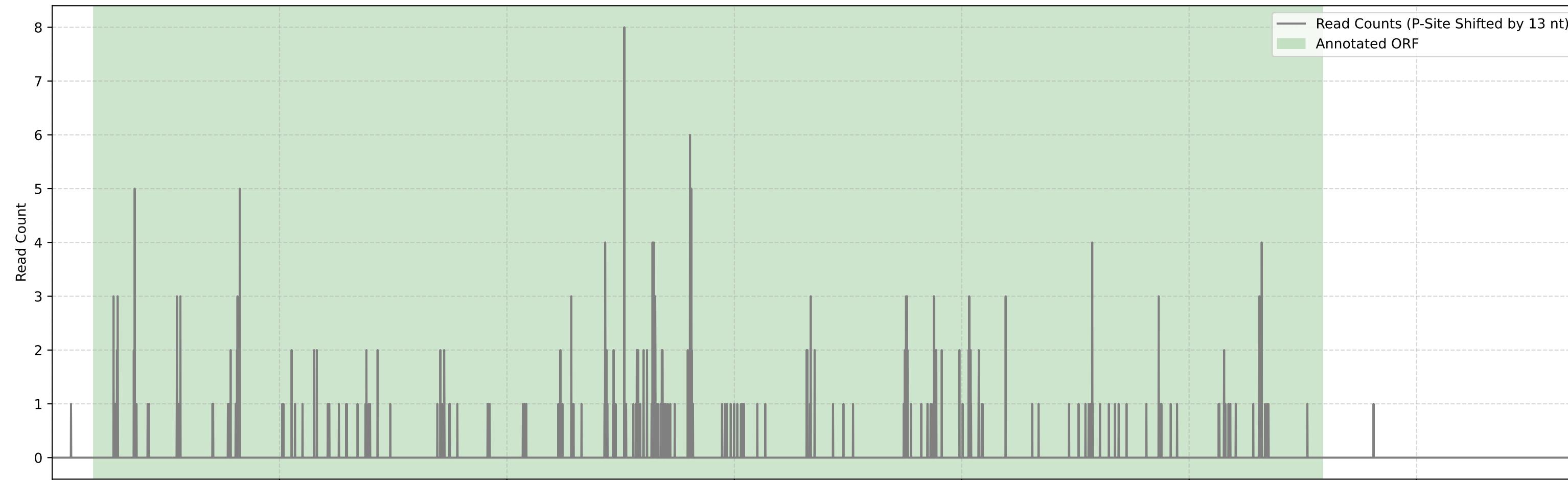
Example: 4th Percentile (by TPM) Transcript (ENST00000317147.10)  
Total Reads: 417 | TPM: 113.48



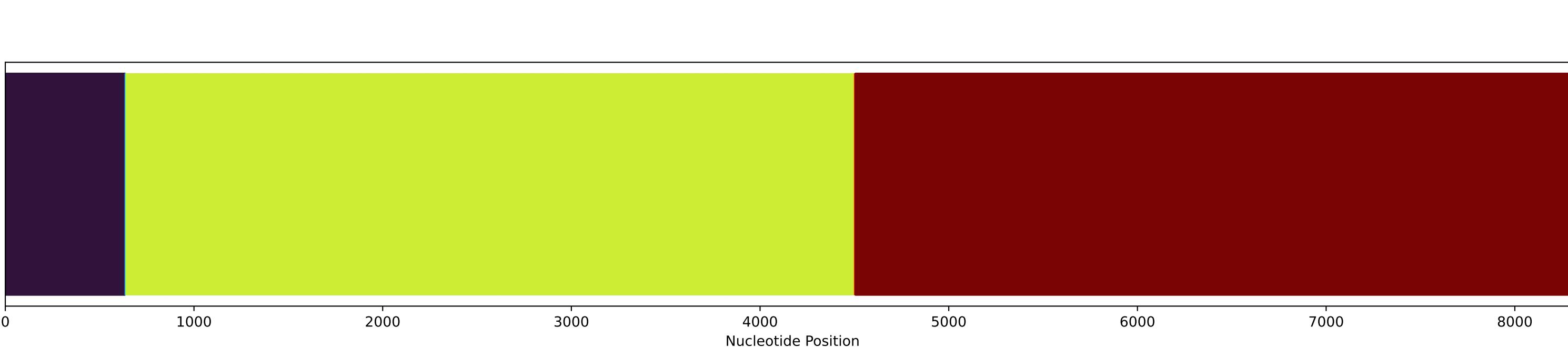
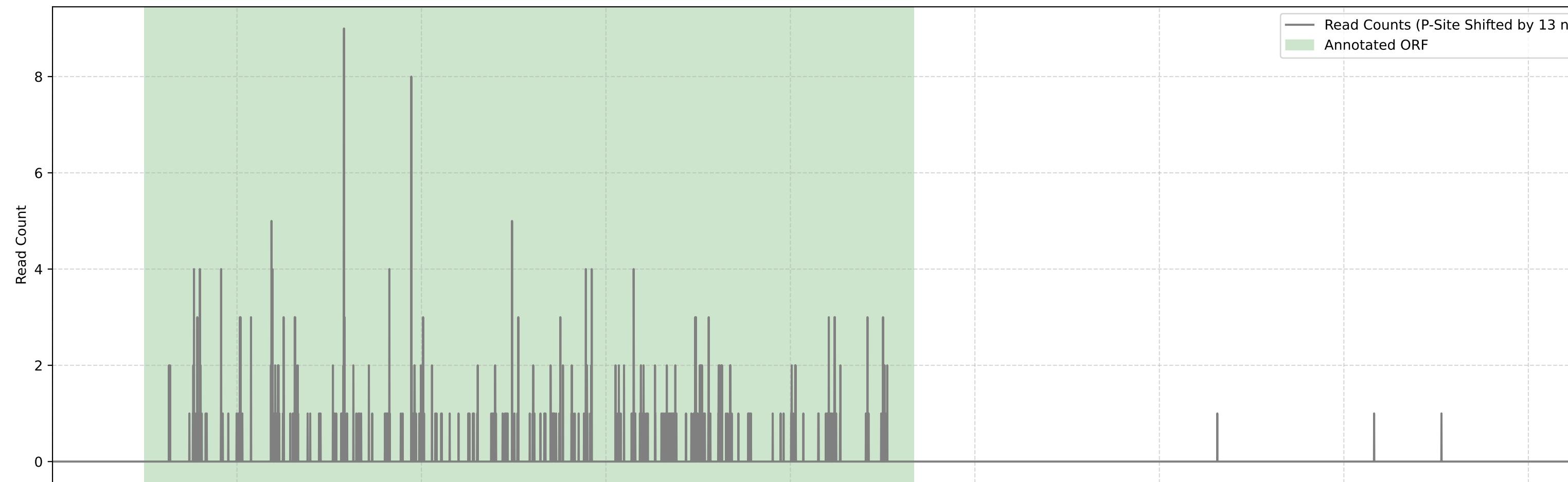
Example: 5th Percentile (by TPM) Transcript (ENST00000361354.9)  
Total Reads: 1,057 | TPM: 118.99



Example: 6th Percentile (by TPM) Transcript (ENST00000324932.12)  
Total Reads: 371 | TPM: 126.25

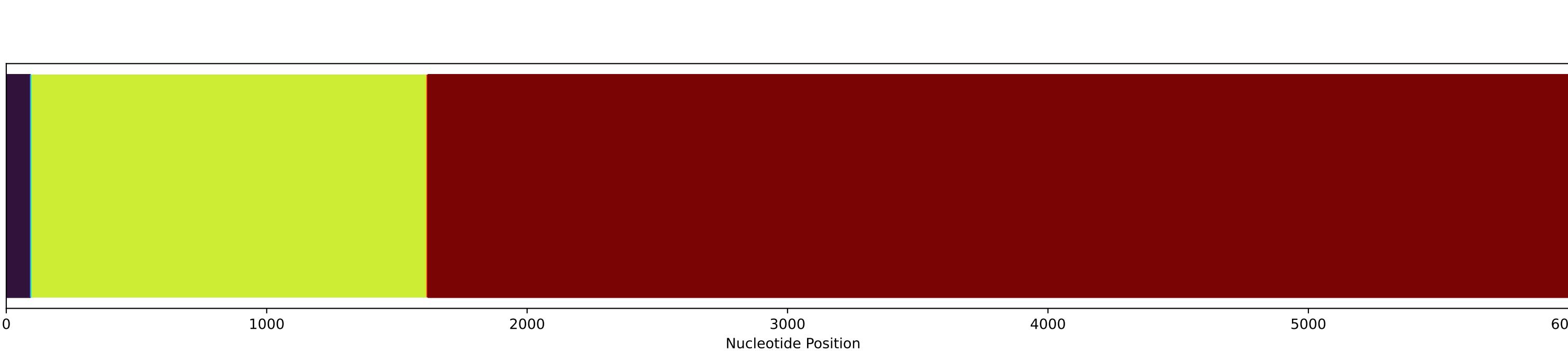
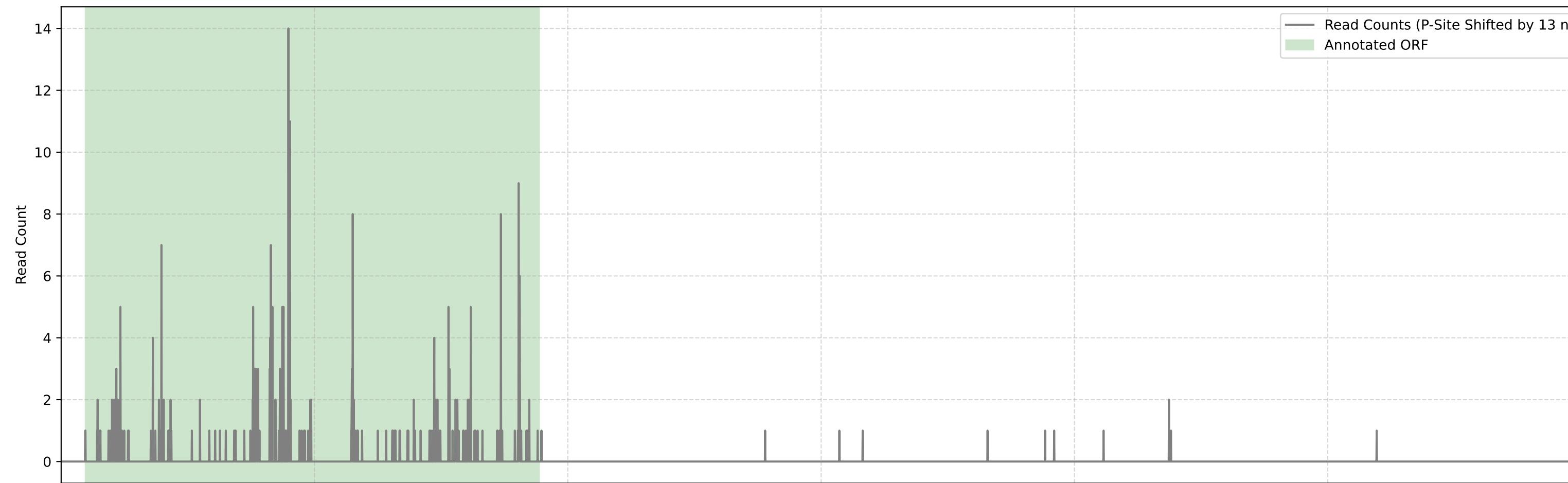


Example: 7th Percentile (by TPM) Transcript (ENST00000315872.11)  
Total Reads: 480 | TPM: 131.66

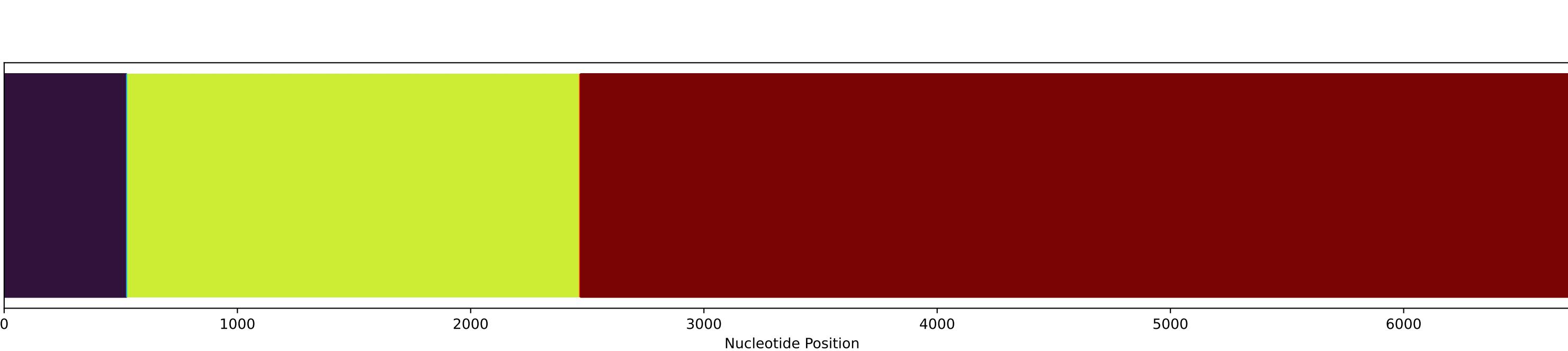
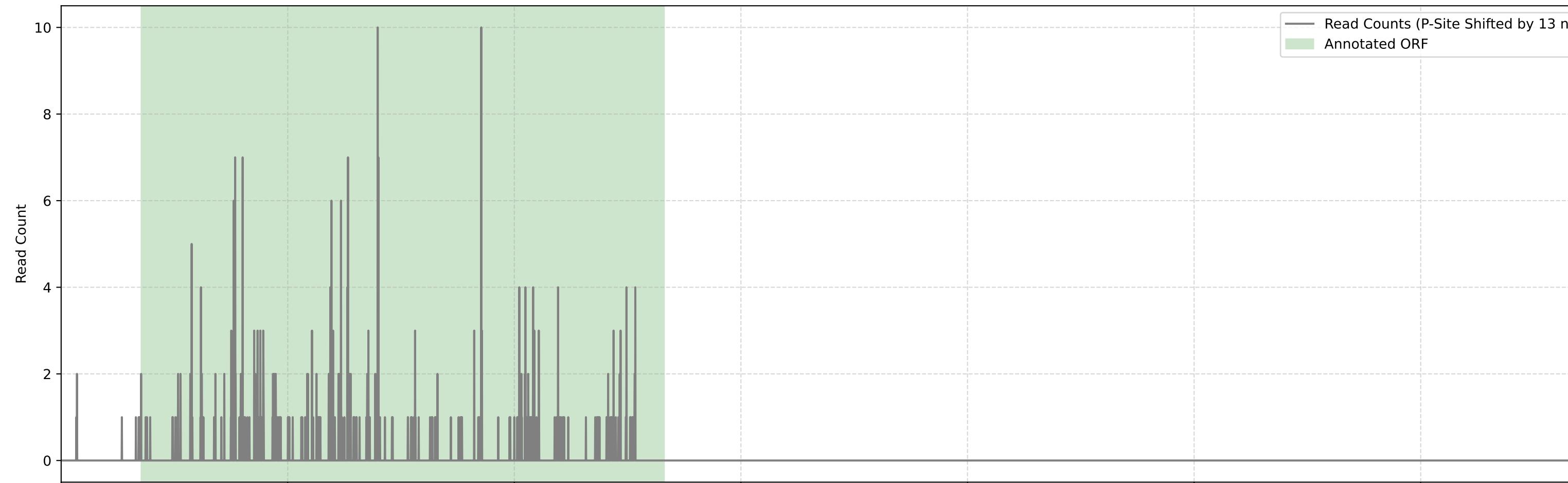


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

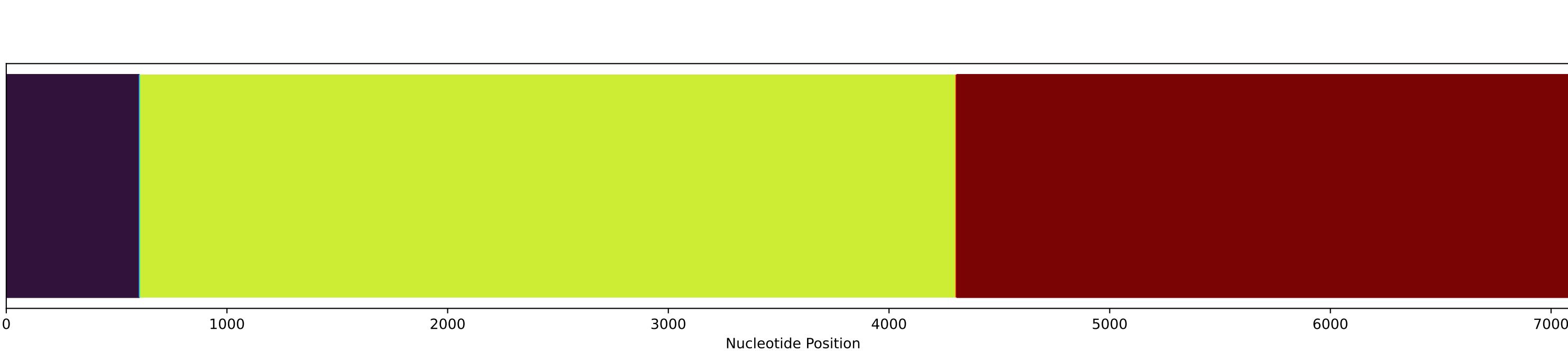
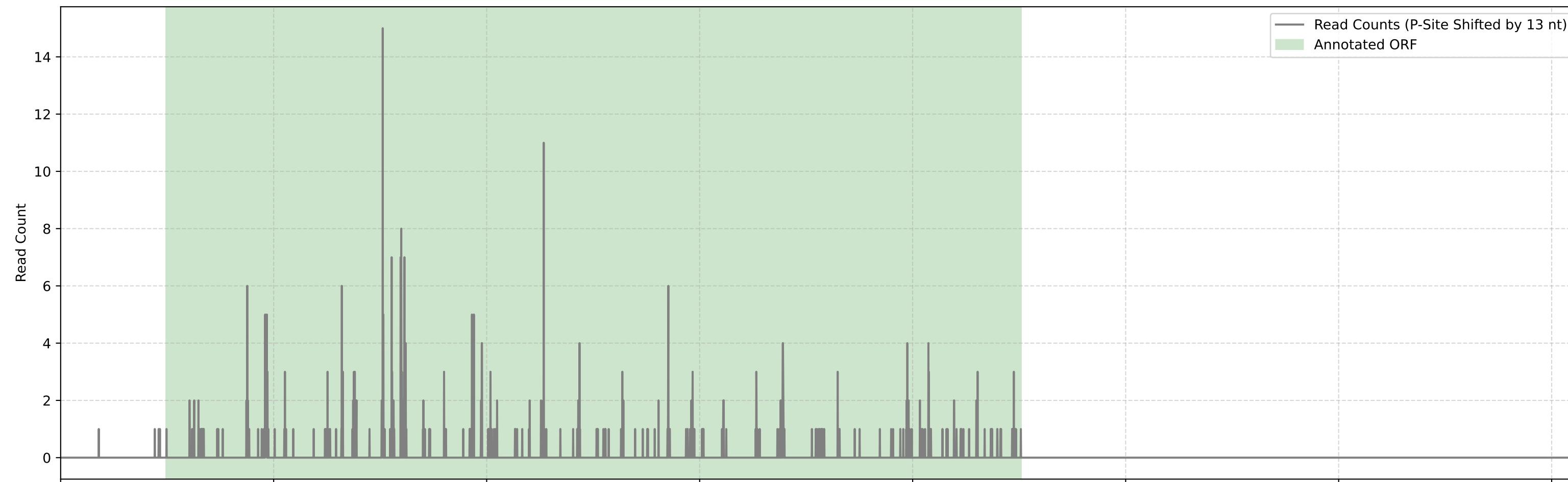
Example: 8th Percentile (by TPM) Transcript (ENST00000317968.9)  
Total Reads: 368 | TPM: 139.39



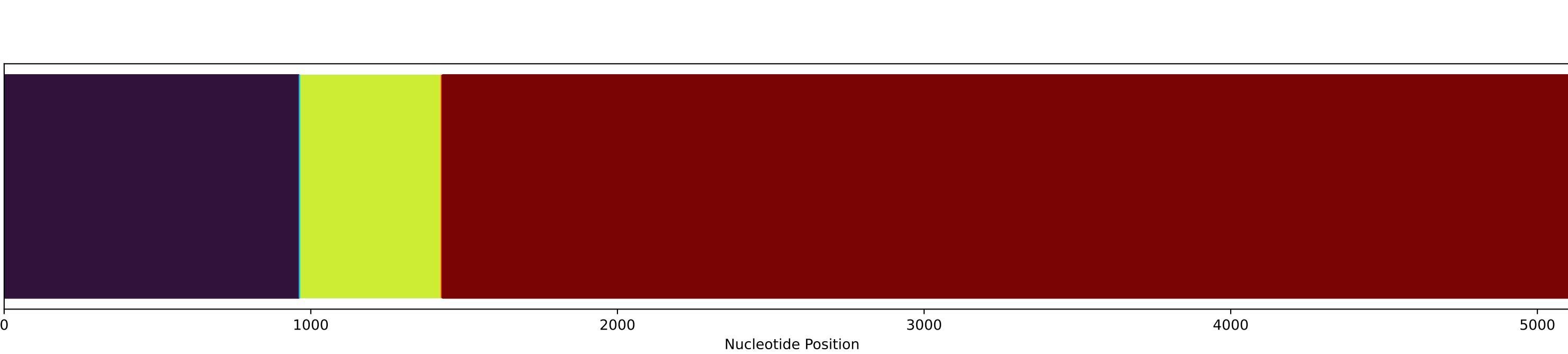
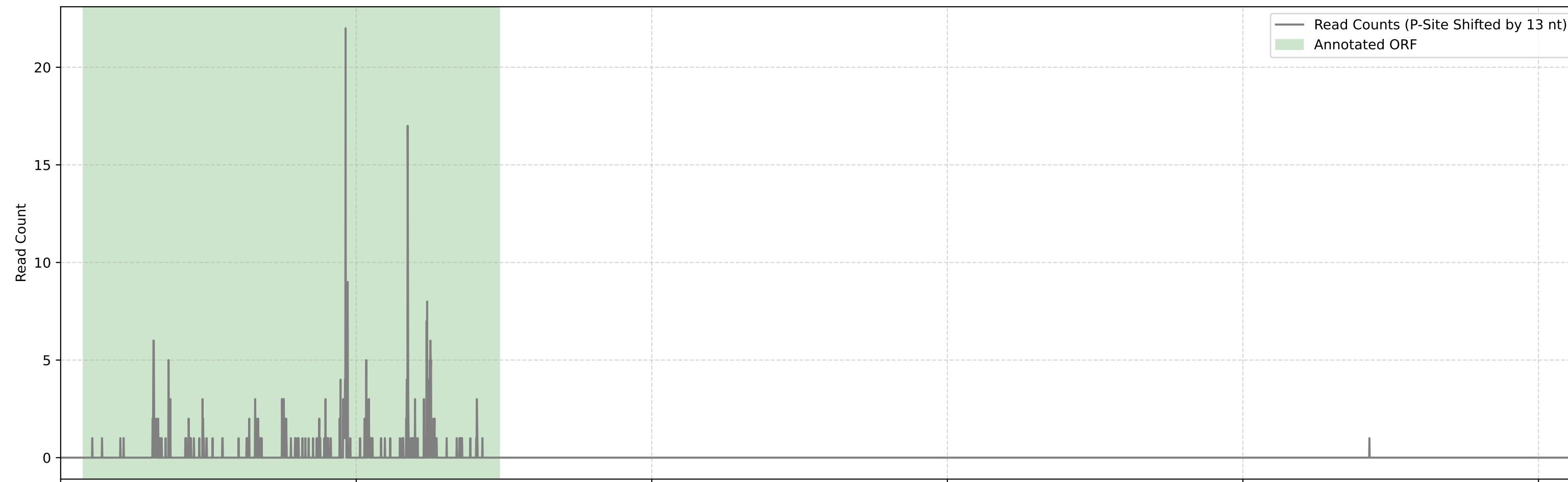
Example: 9th Percentile (by TPM) Transcript (ENST00000264414.9)  
Total Reads: 435 | TPM: 147.38



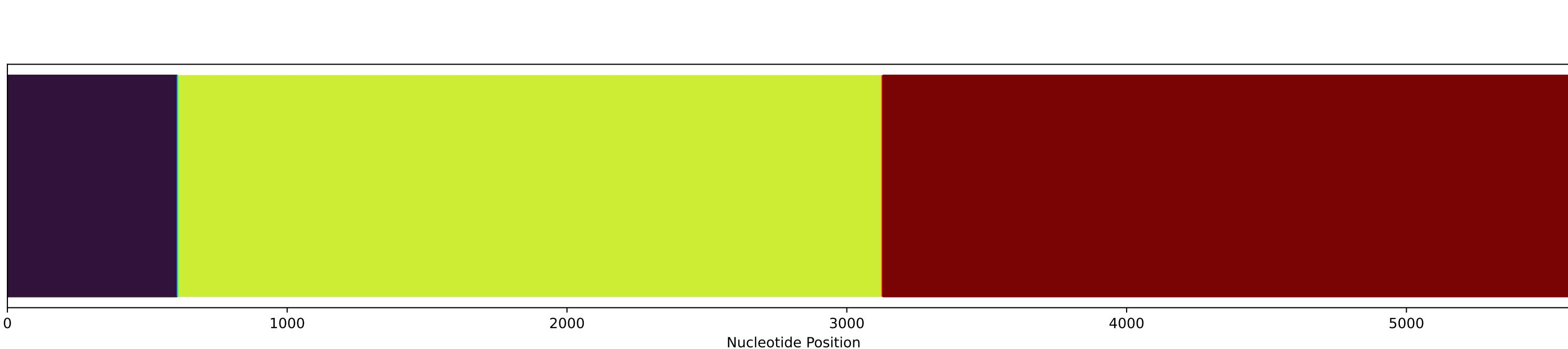
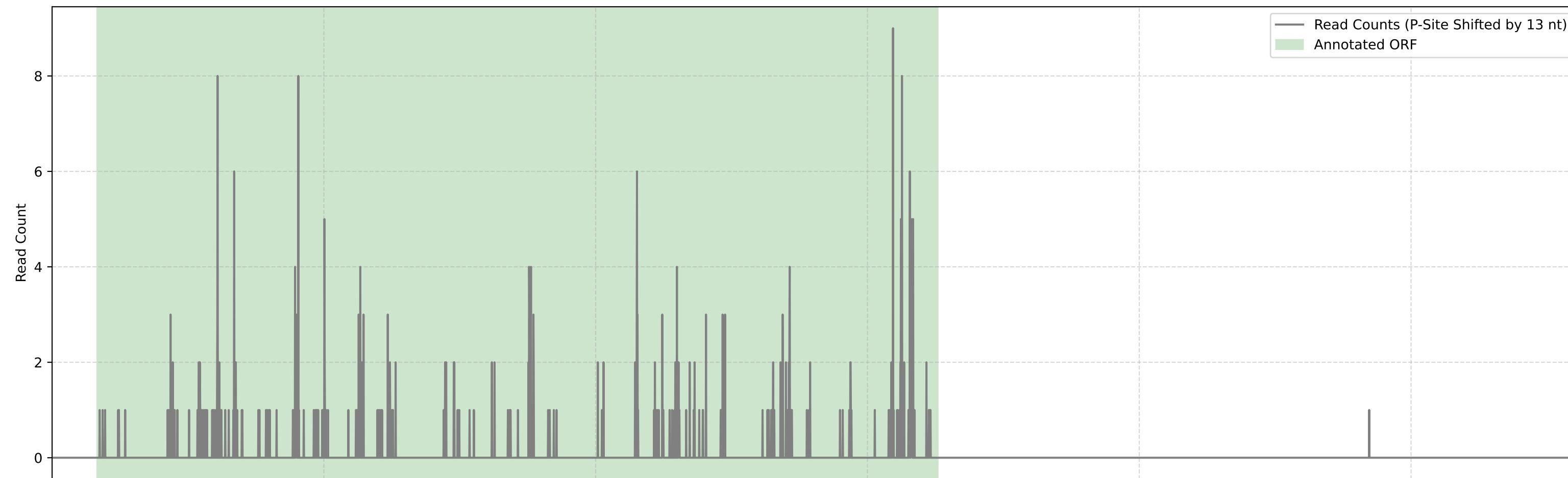
Example: 10th Percentile (by TPM) Transcript (ENST00000303538.13)  
Total Reads: 484 | TPM: 155.35



Example: 11th Percentile (by TPM) Transcript (ENST00000395686.8)  
Total Reads: 365 | TPM: 162.57

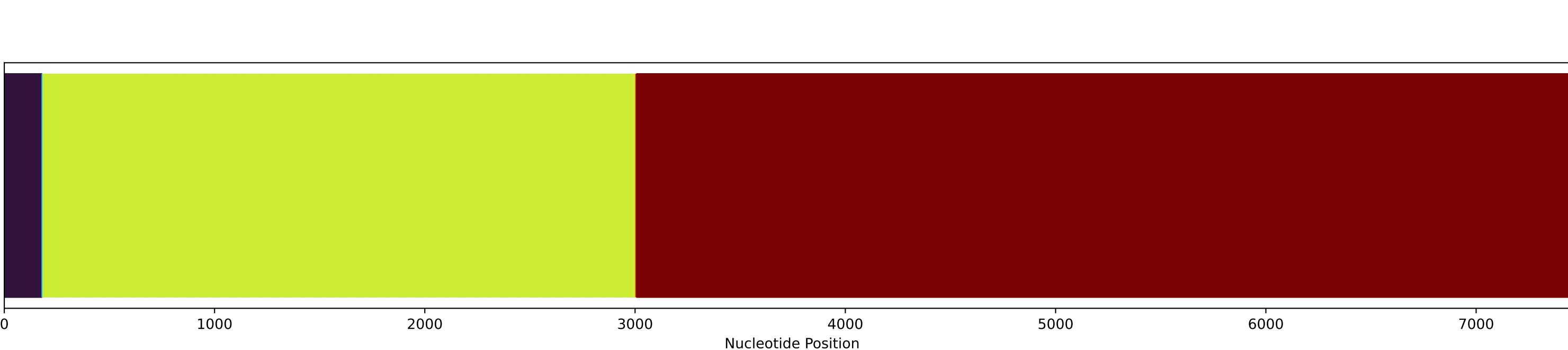
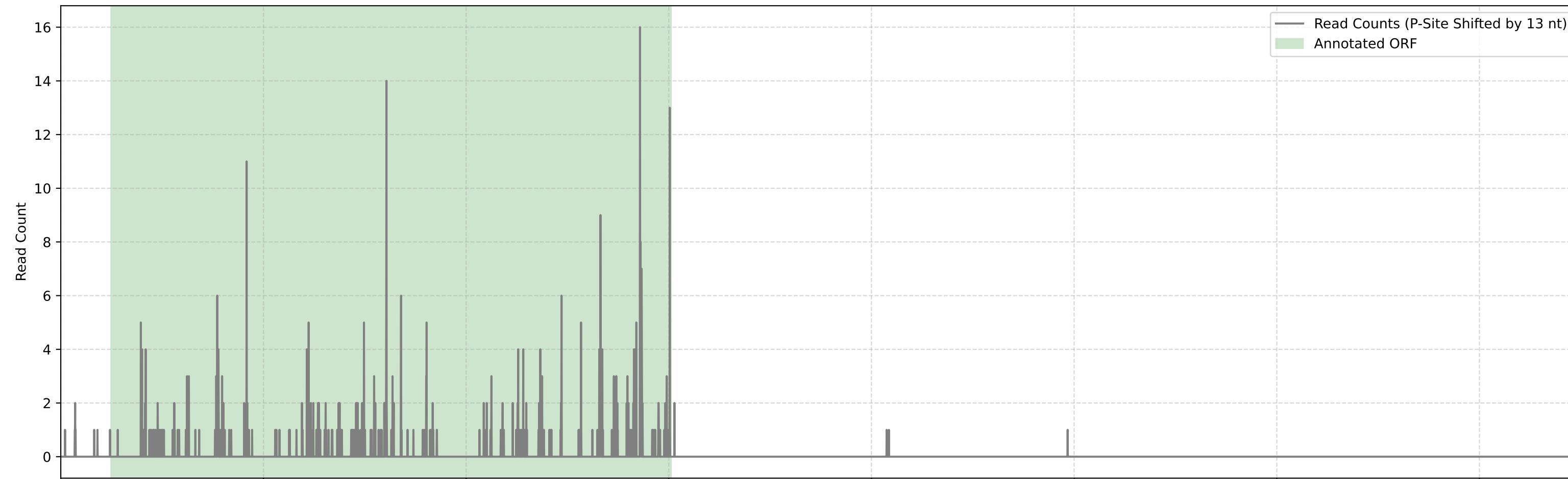


Example: 12th Percentile (by TPM) Transcript (ENST00000450142.7)  
Total Reads: 414 | TPM: 168.61

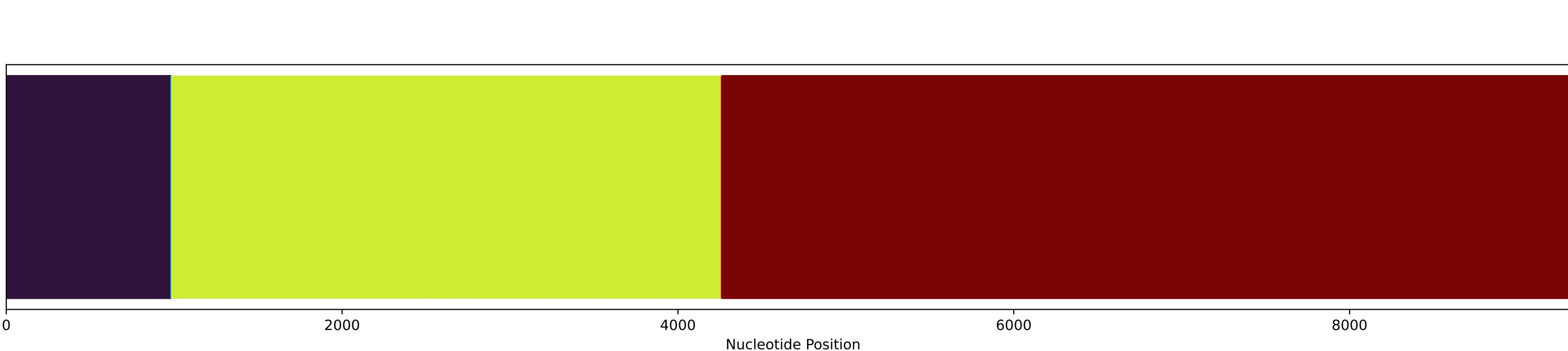
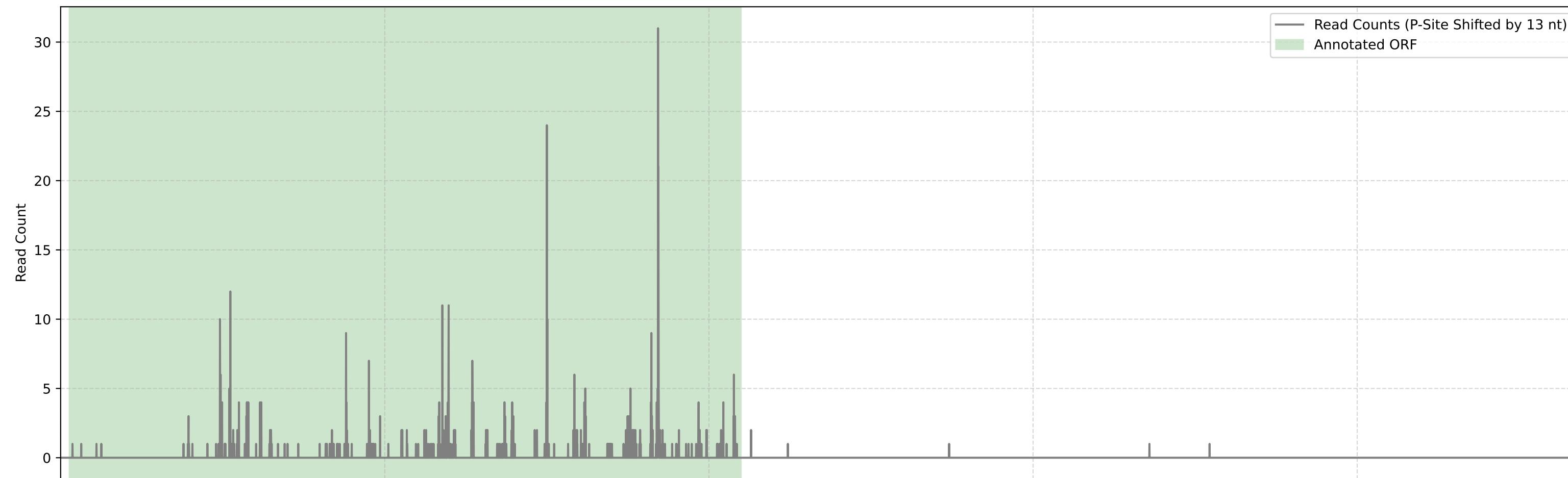


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 13th Percentile (by TPM) Transcript (ENST00000531224.6)  
Total Reads: 568 | TPM: 173.48

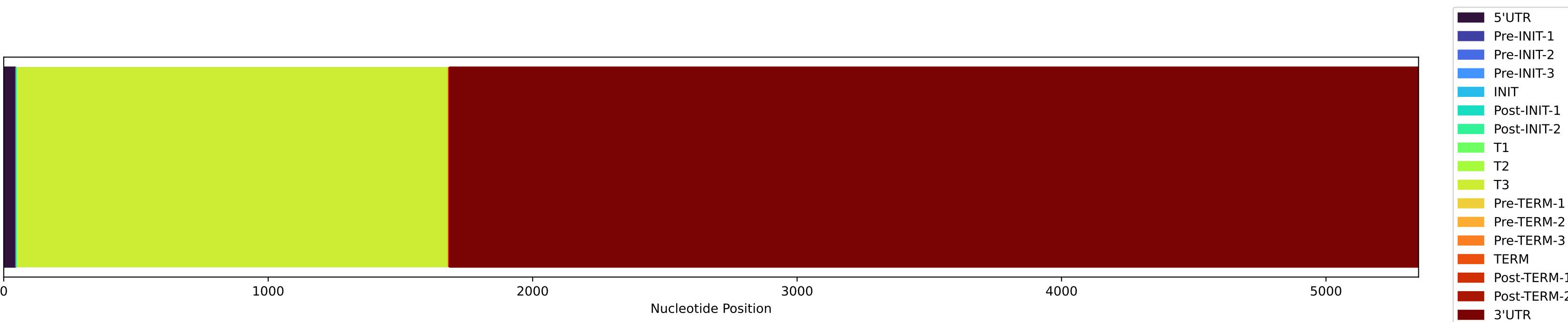
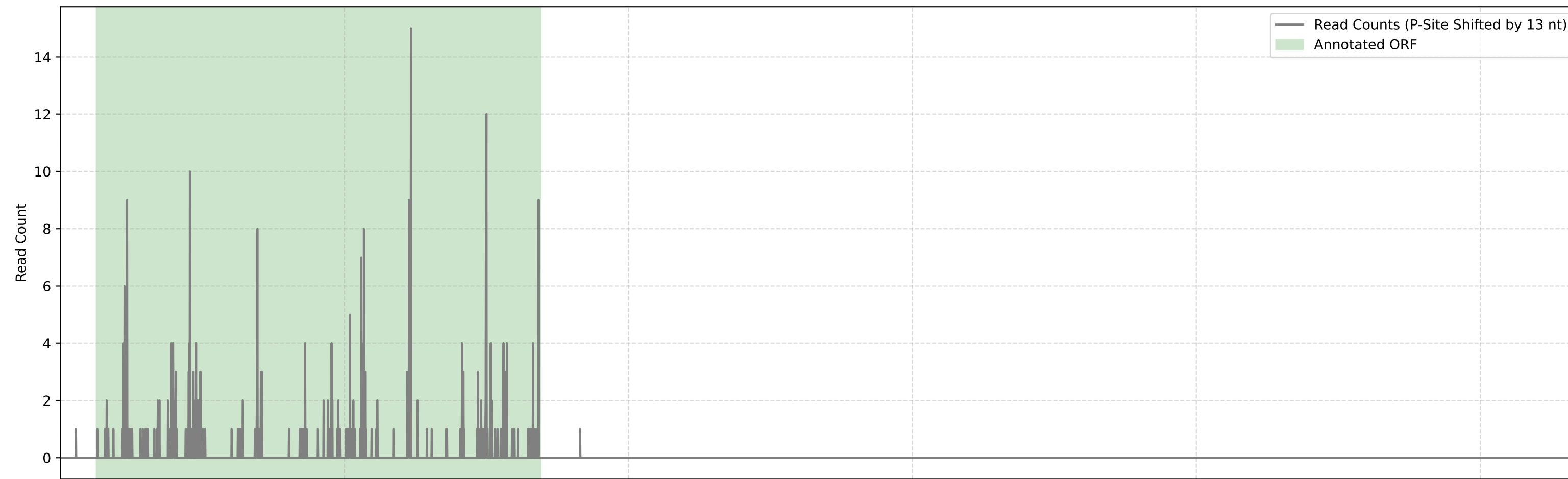


Example: 14th Percentile (by TPM) Transcript (ENST00000225719.9)  
Total Reads: 756 | TPM: 184.64

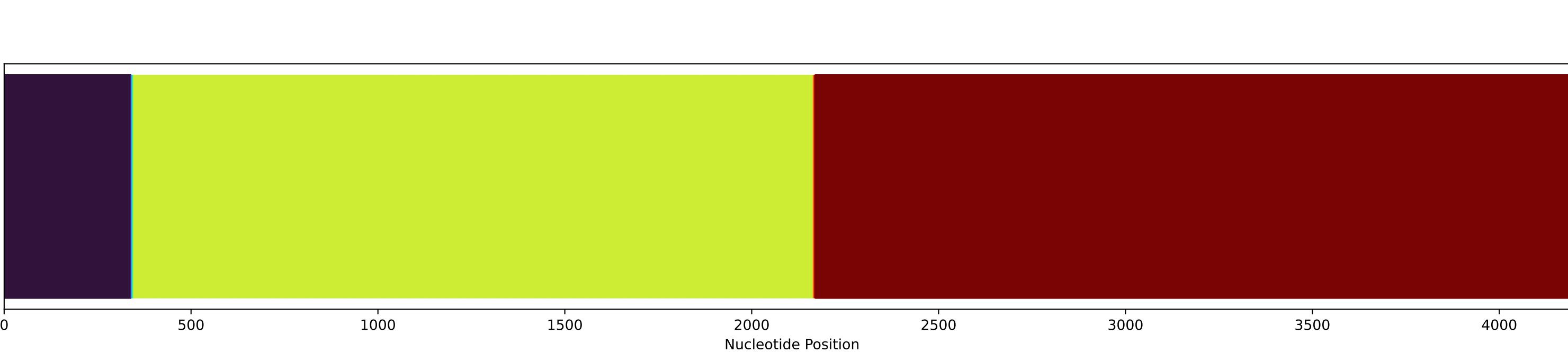
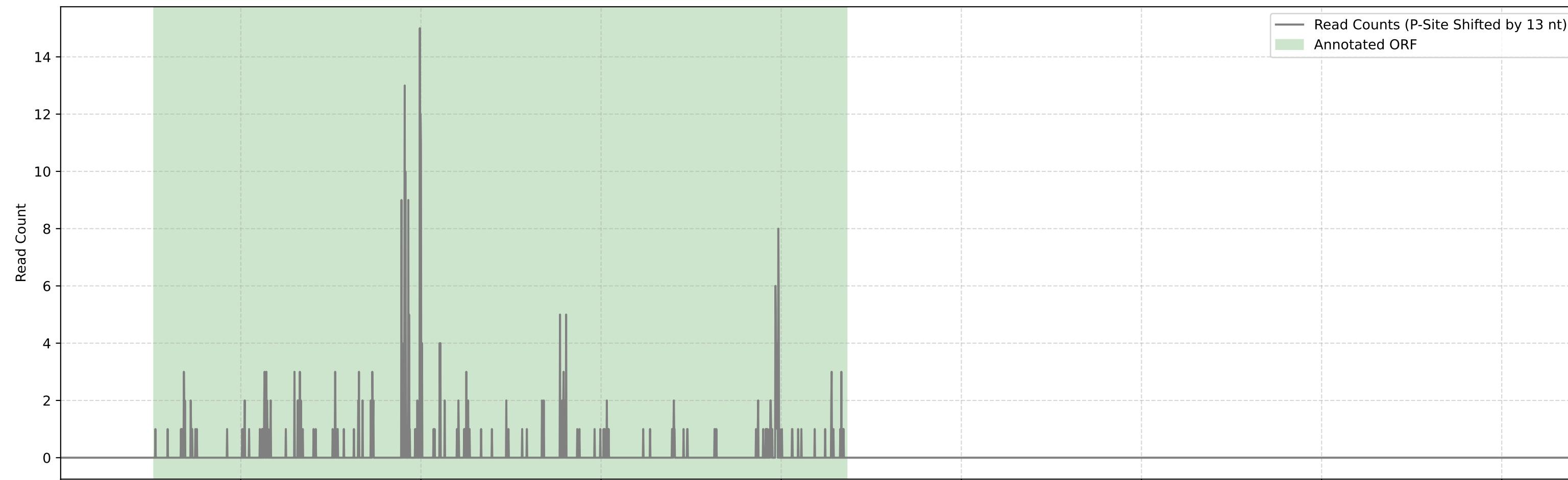


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 15th Percentile (by TPM) Transcript (ENST00000325110.11)  
Total Reads: 444 | TPM: 189.96

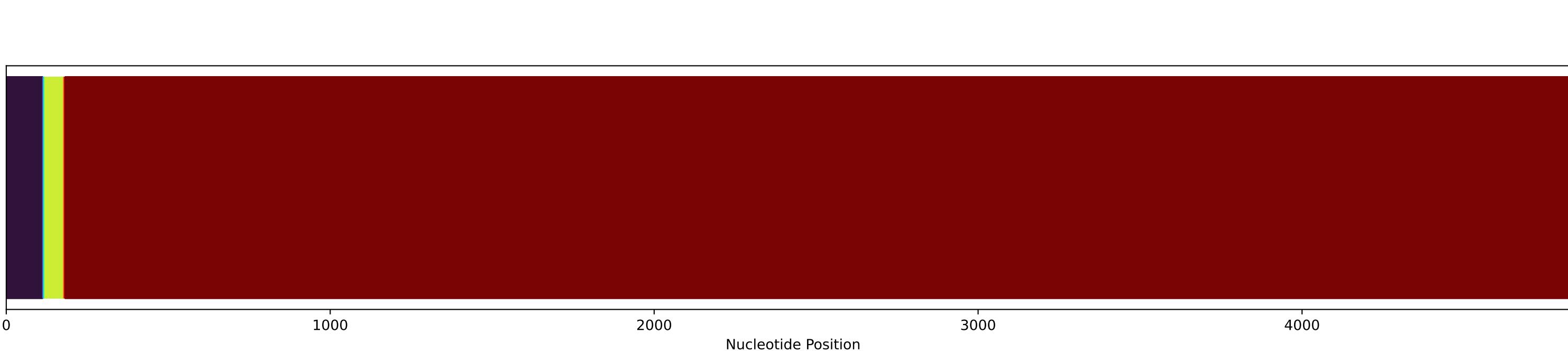
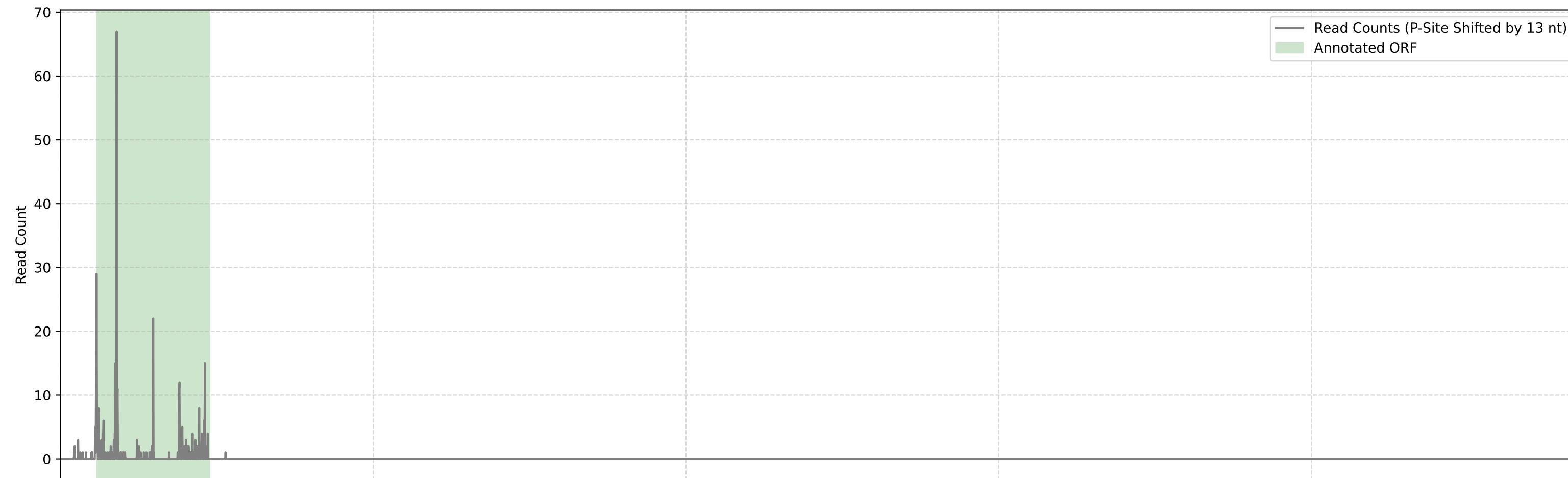


Example: 16th Percentile (by TPM) Transcript (ENST00000369077.4)  
Total Reads: 363 | TPM: 197.08



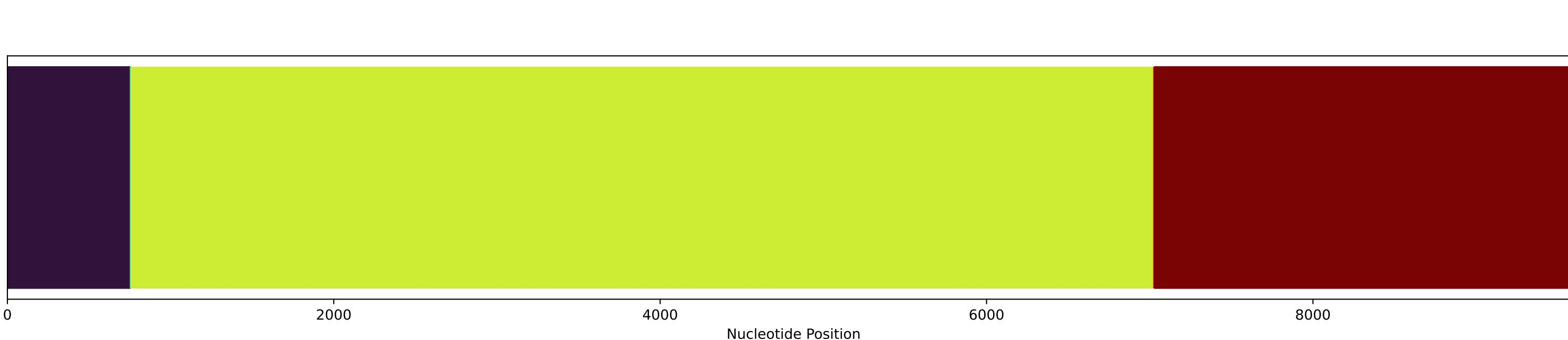
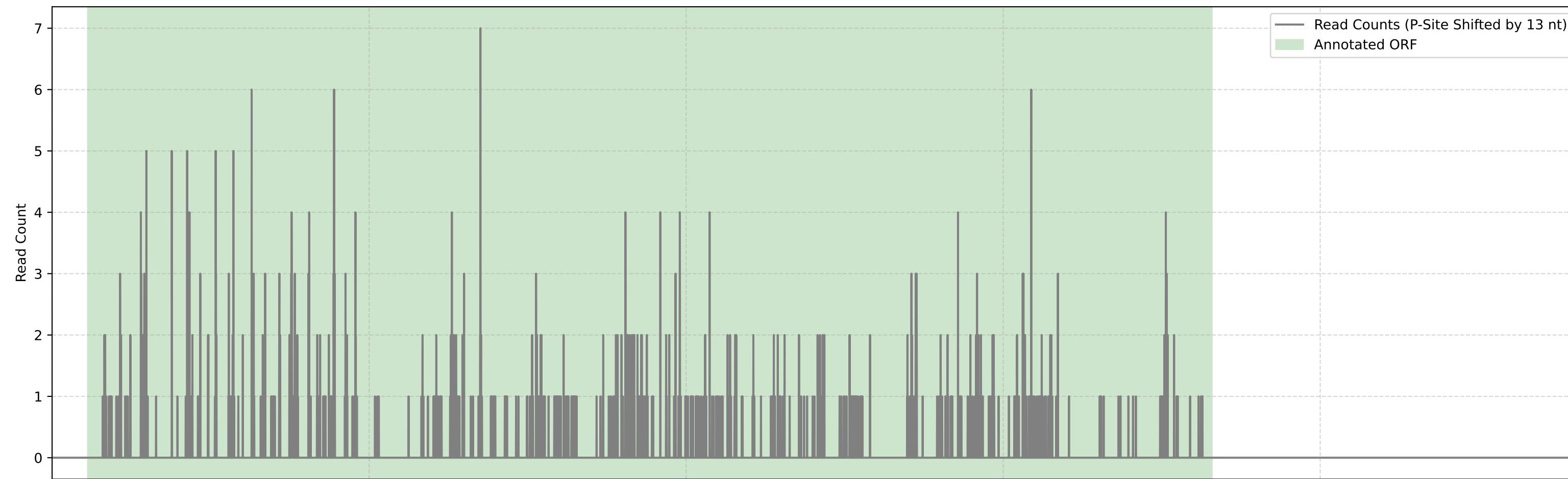
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 17th Percentile (by TPM) Transcript (ENST00000300413.10)  
Total Reads: 431 | TPM: 203.07

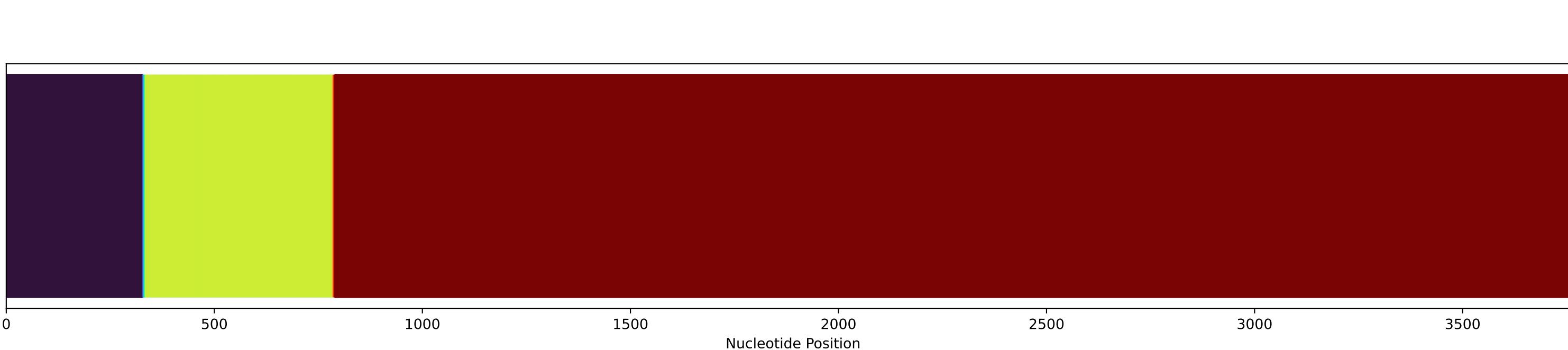
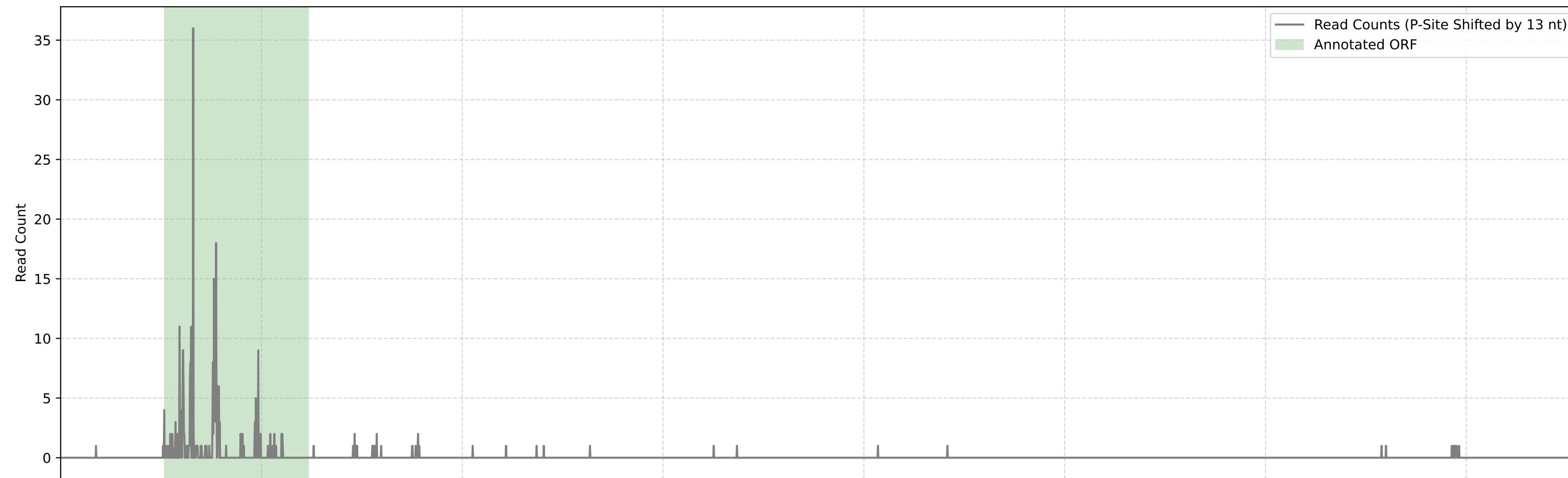


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

Example: 18th Percentile (by TPM) Transcript (ENST00000367478.9)  
Total Reads: 872 | TPM: 207.13

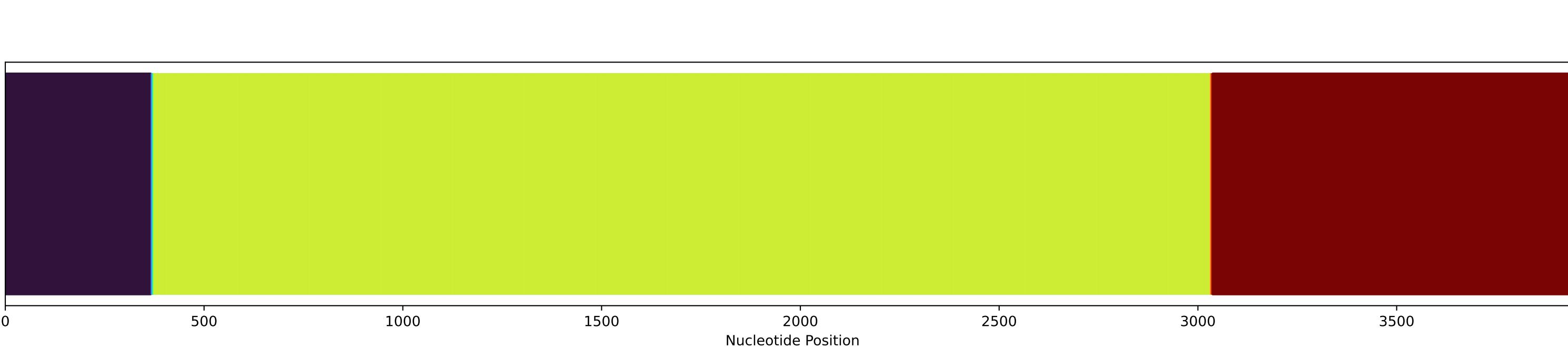
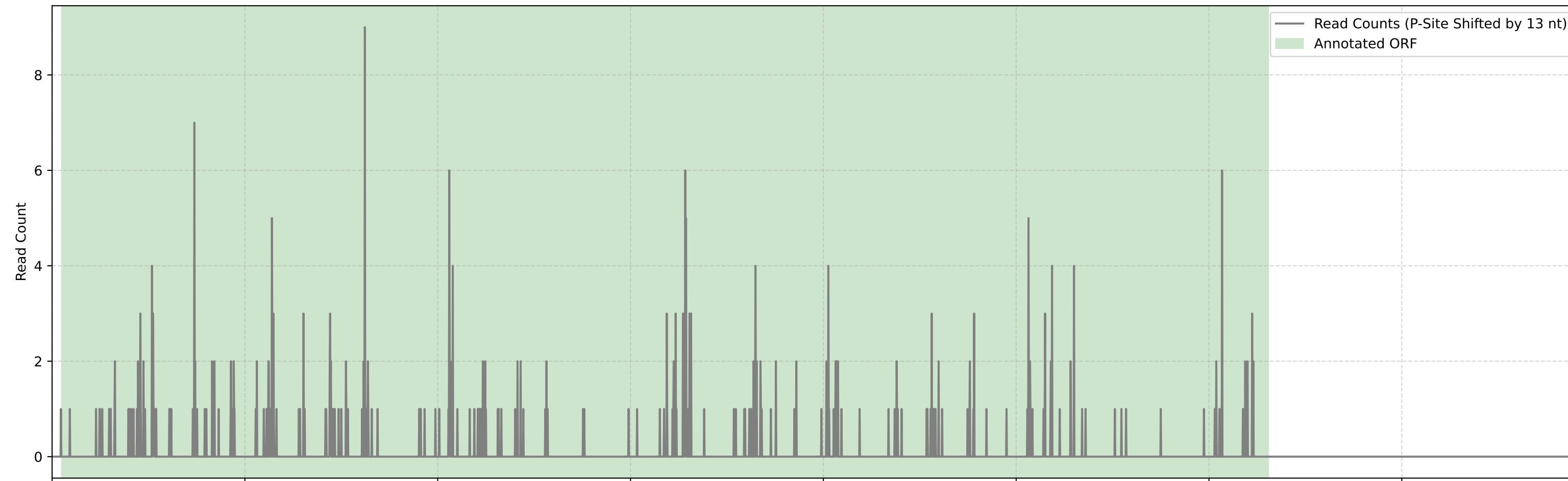


Example: 19th Percentile (by TPM) Transcript (ENST00000393085.4)  
Total Reads: 353 | TPM: 213.64

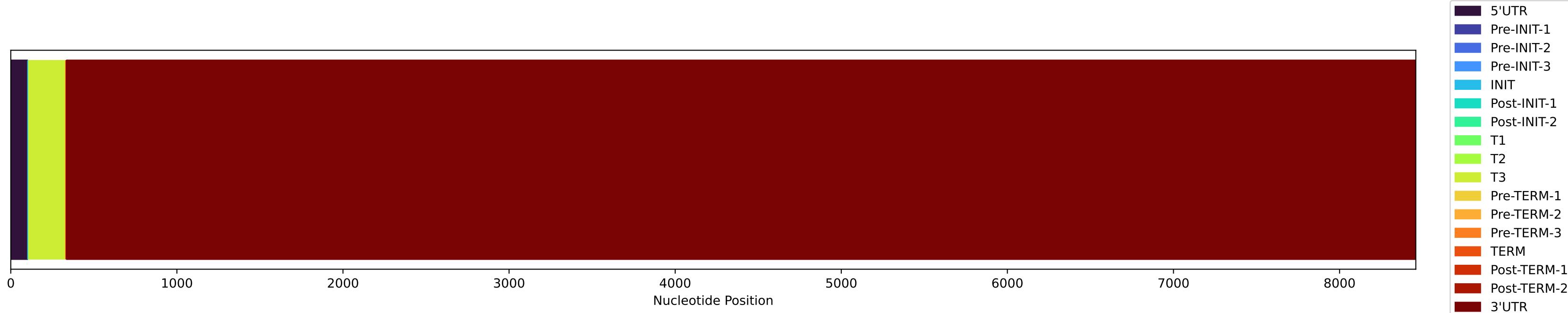
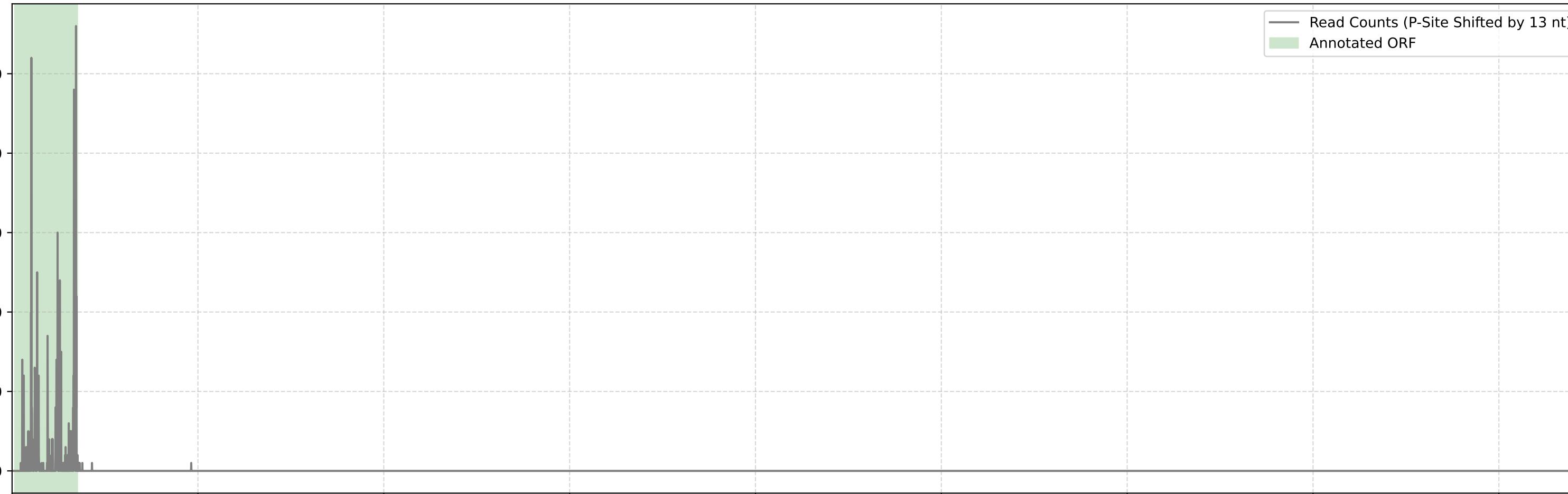


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

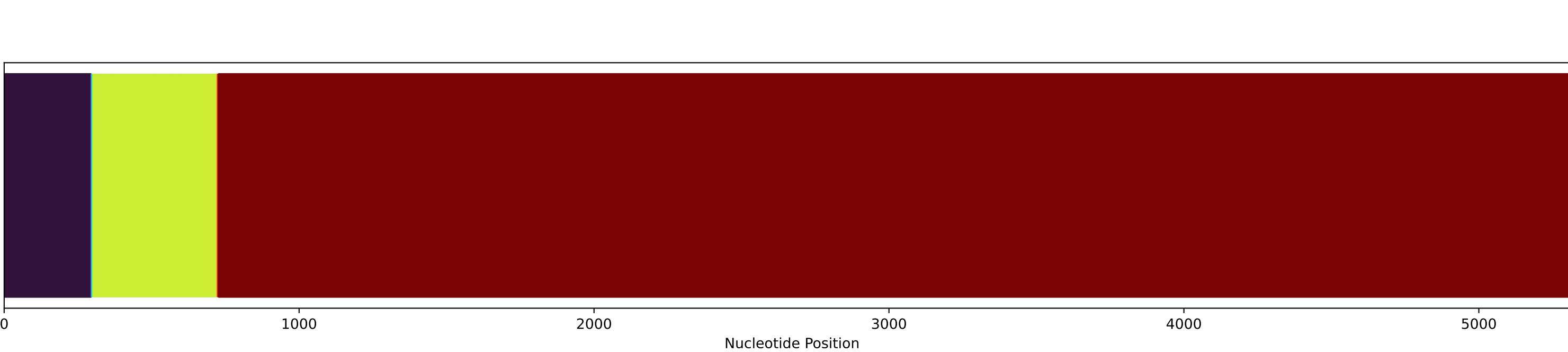
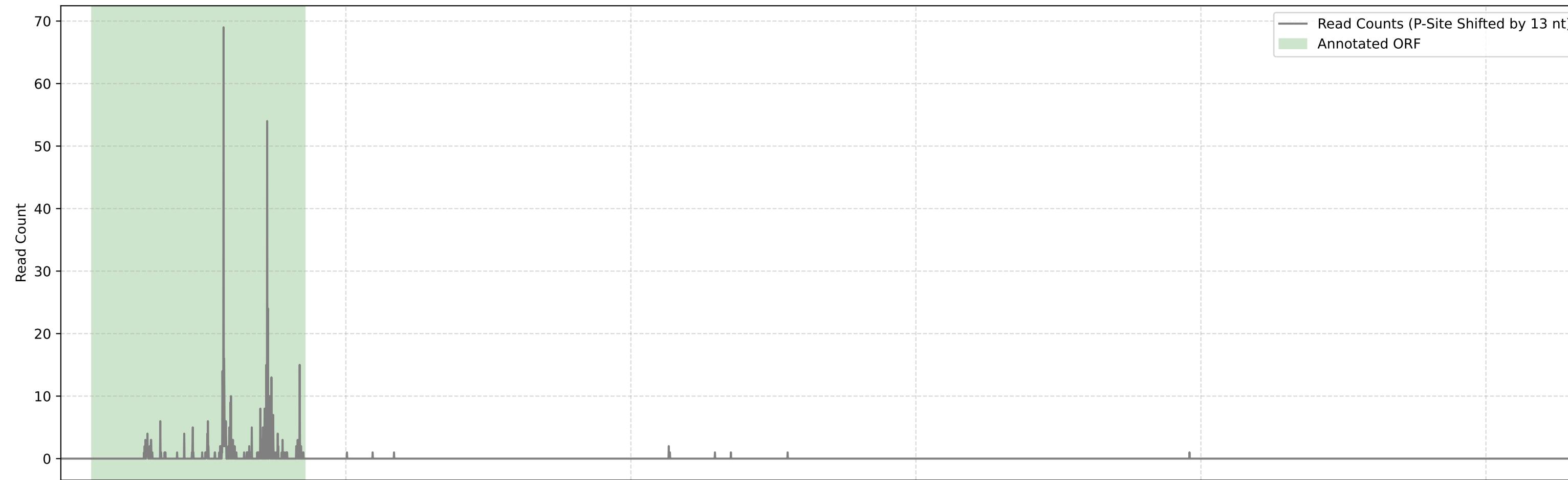
Example: 20th Percentile (by TPM) Transcript (ENST00000230640.10)  
Total Reads: 386 | TPM: 223.05



Example: 21th Percentile (by TPM) Transcript (ENST00000287022.10)  
Total Reads: 848 | TPM: 229.46

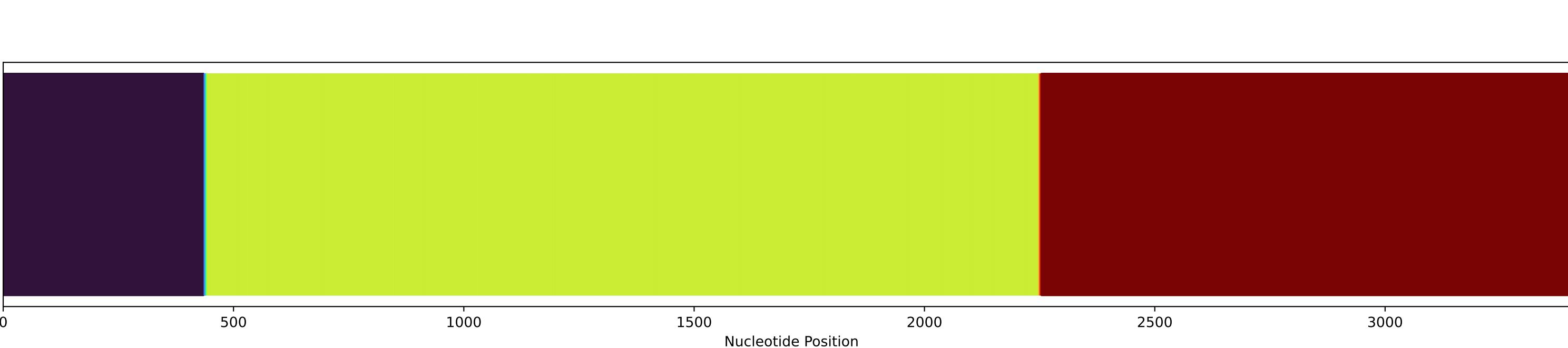
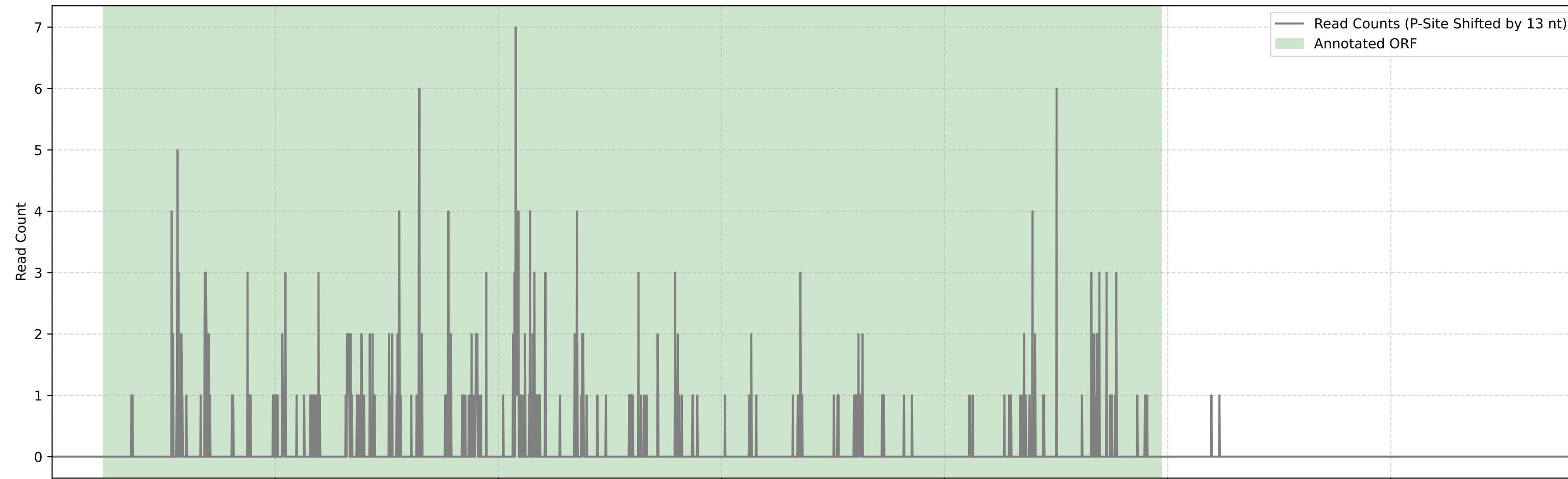


Example: 22th Percentile (by TPM) Transcript (ENST00000258962.5)  
Total Reads: 560 | TPM: 239.90



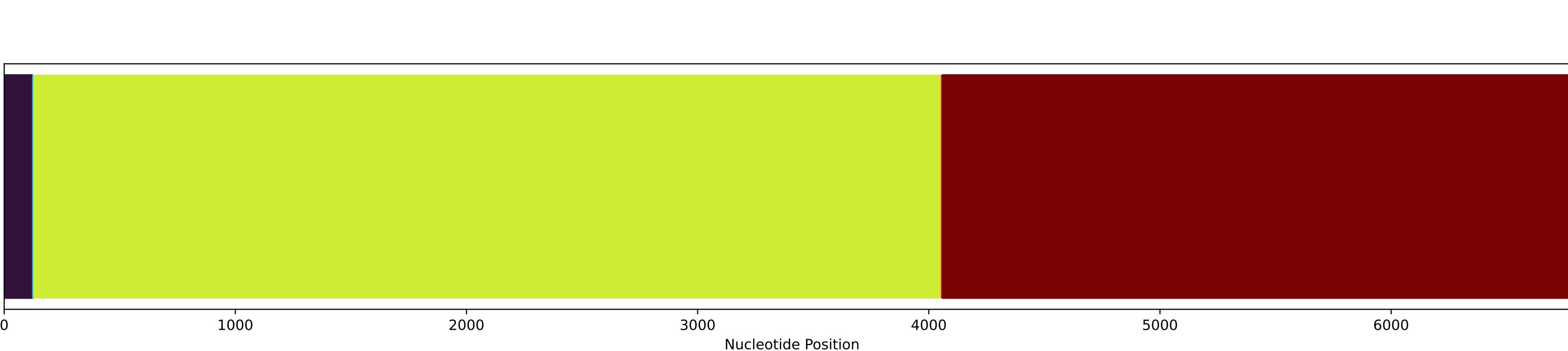
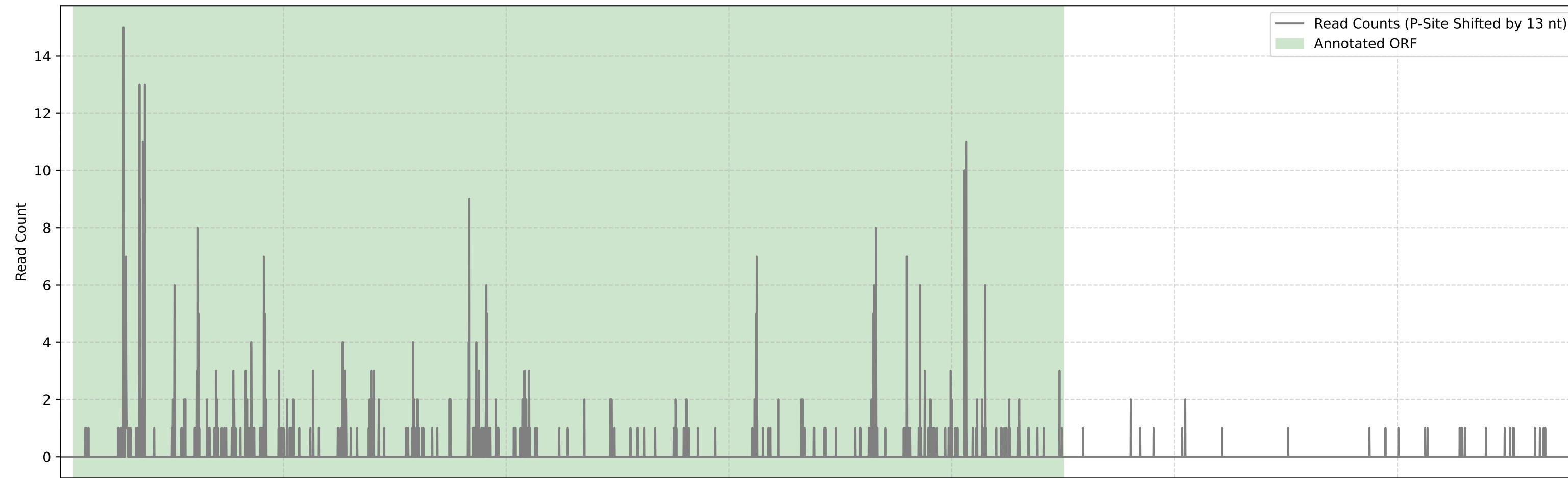
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 23th Percentile (by TPM) Transcript (ENST00000396319.7)  
Total Reads: 367 | TPM: 245.41

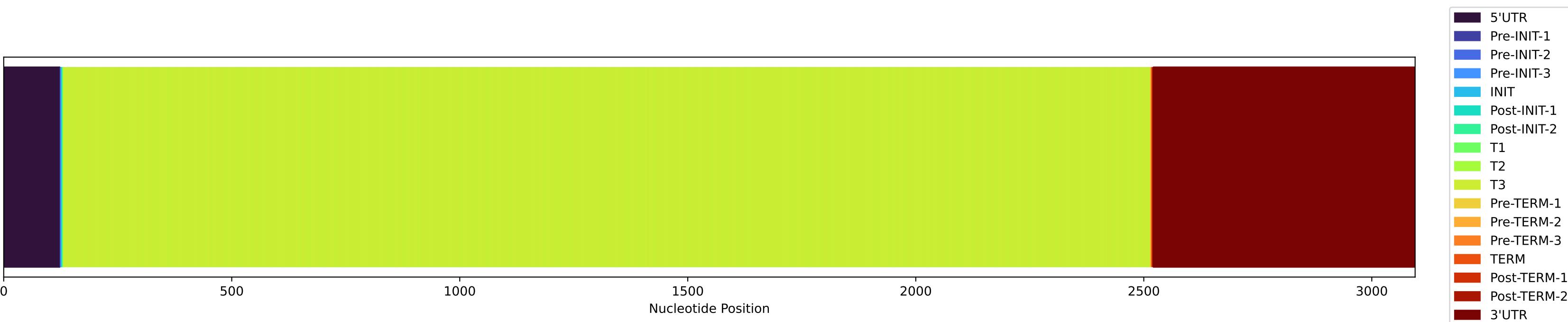
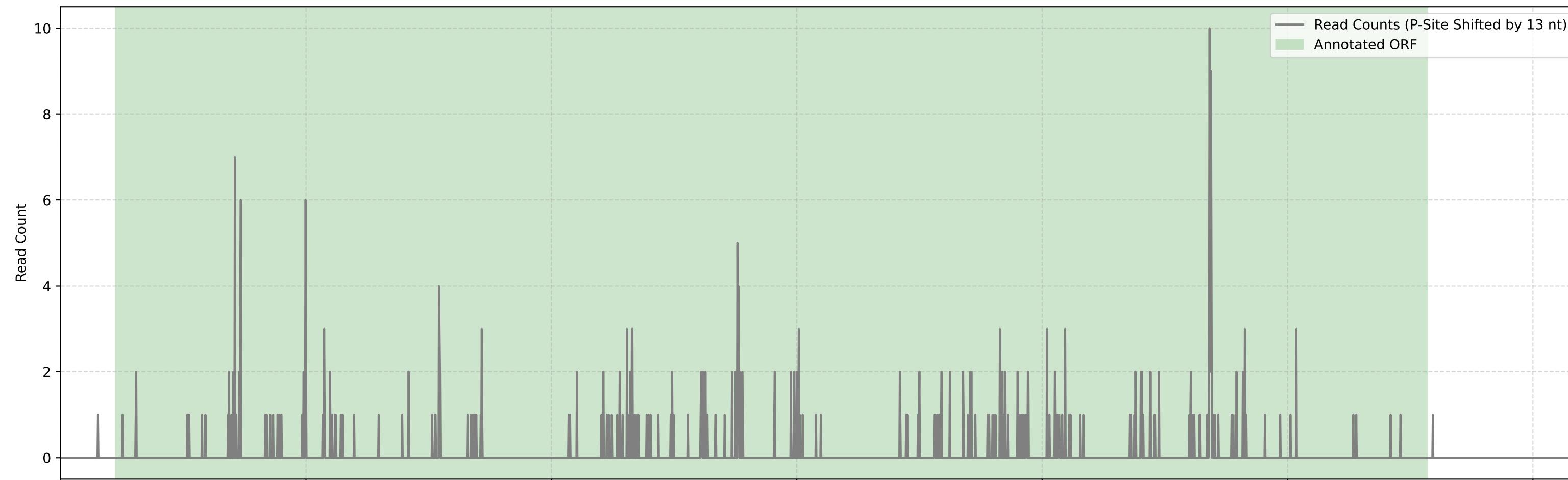


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

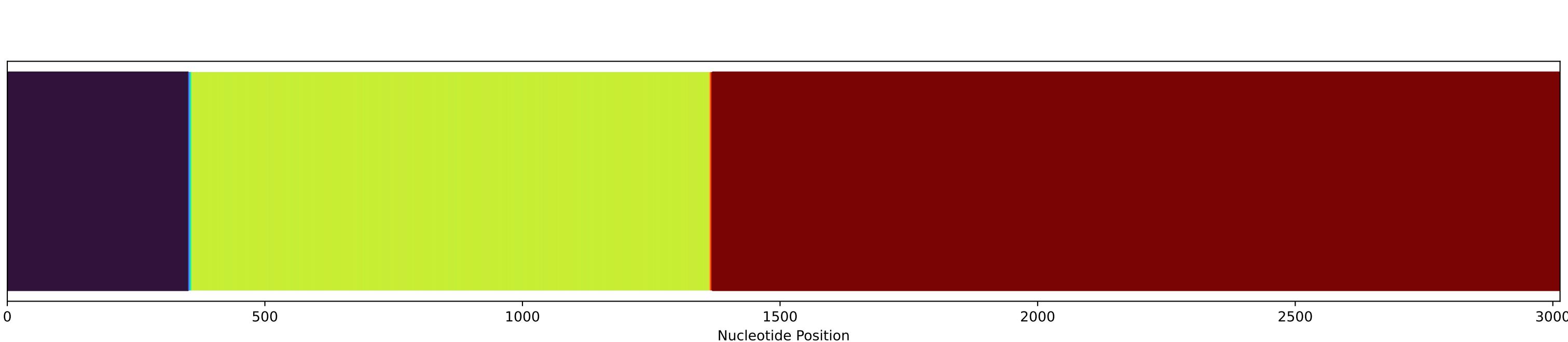
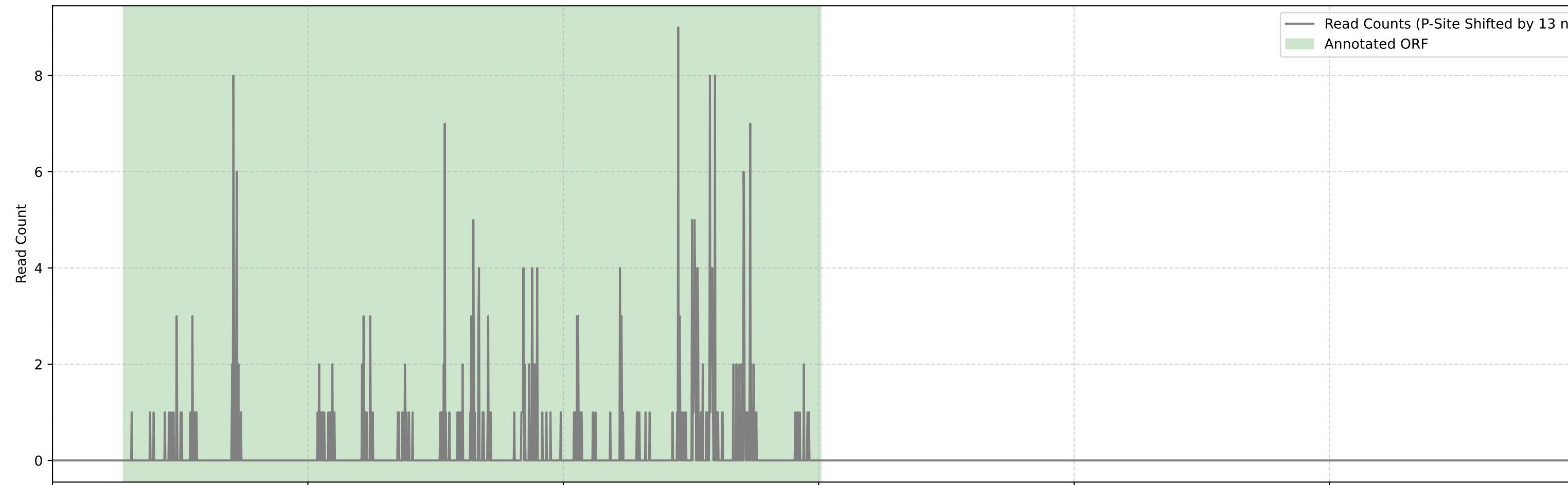
Example: 24th Percentile (by TPM) Transcript (ENST00000252804.9)  
Total Reads: 757 | TPM: 254.17



Example: 25th Percentile (by TPM) Transcript (ENST00000394894.8)  
Total Reads: 355 | TPM: 262.54

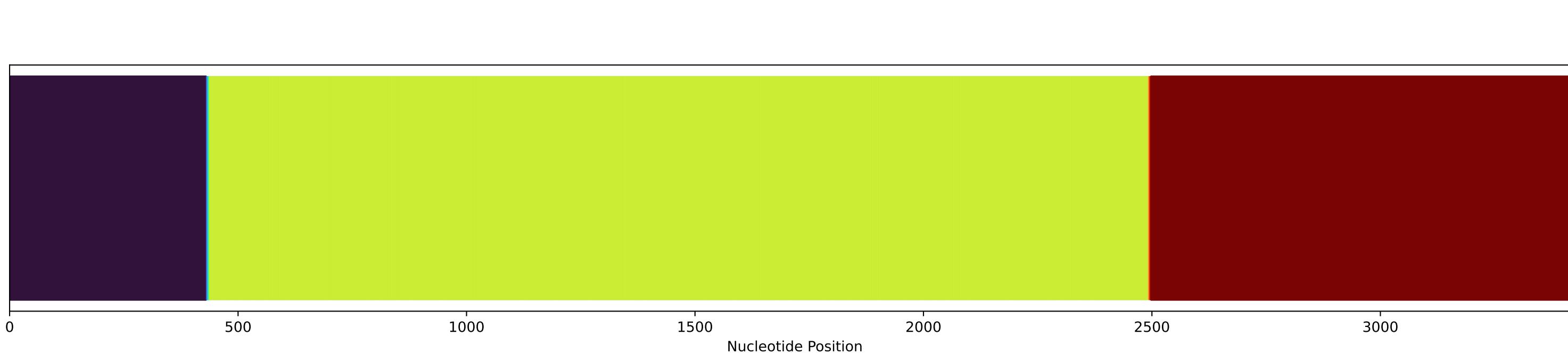
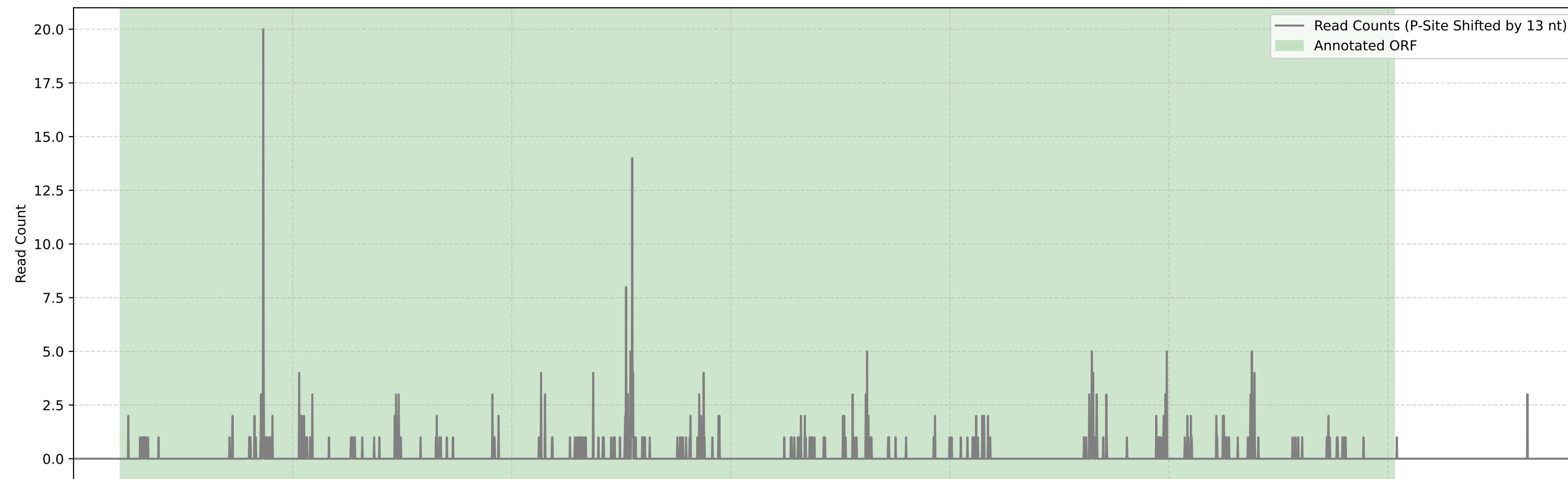


Example: 26th Percentile (by TPM) Transcript (ENST00000397712.7)  
Total Reads: 354 | TPM: 268.84



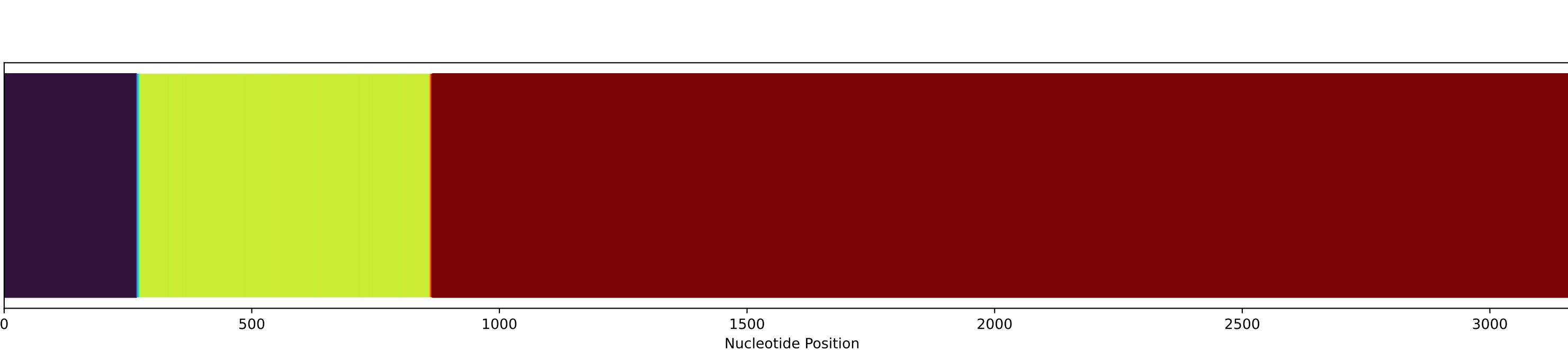
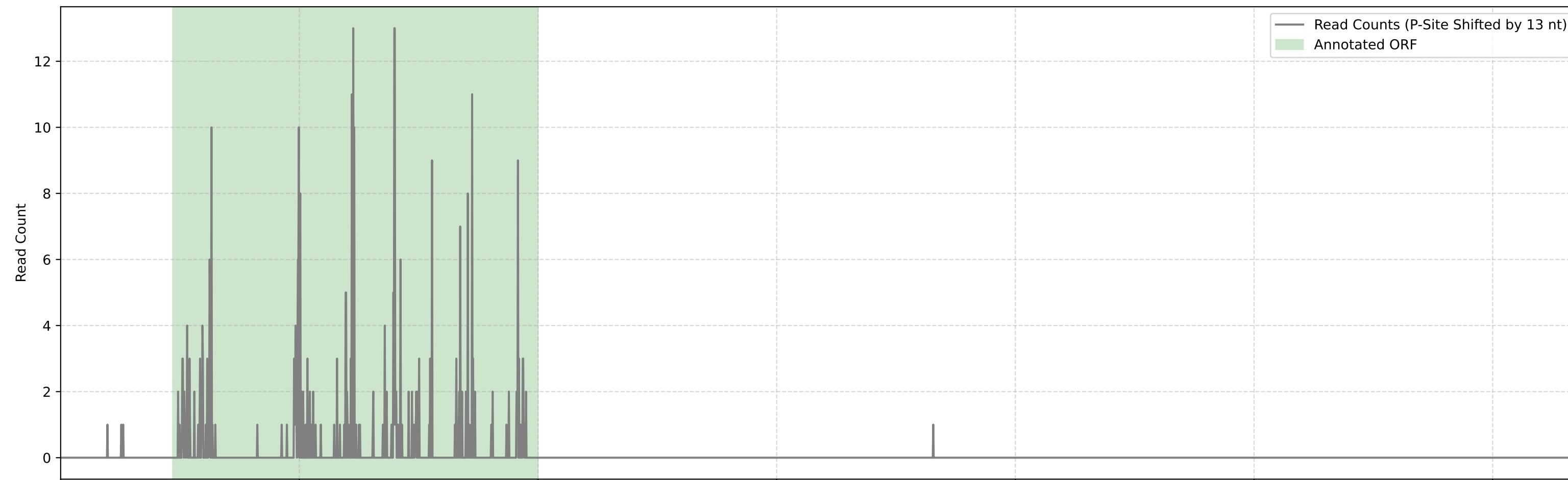
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 27th Percentile (by TPM) Transcript (ENST00000261772.13)  
Total Reads: 411 | TPM: 273.71



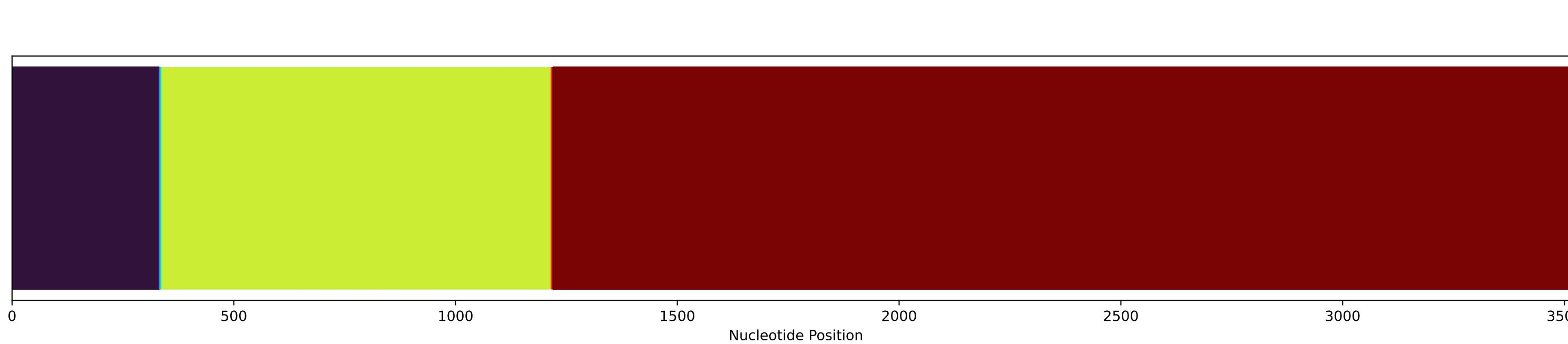
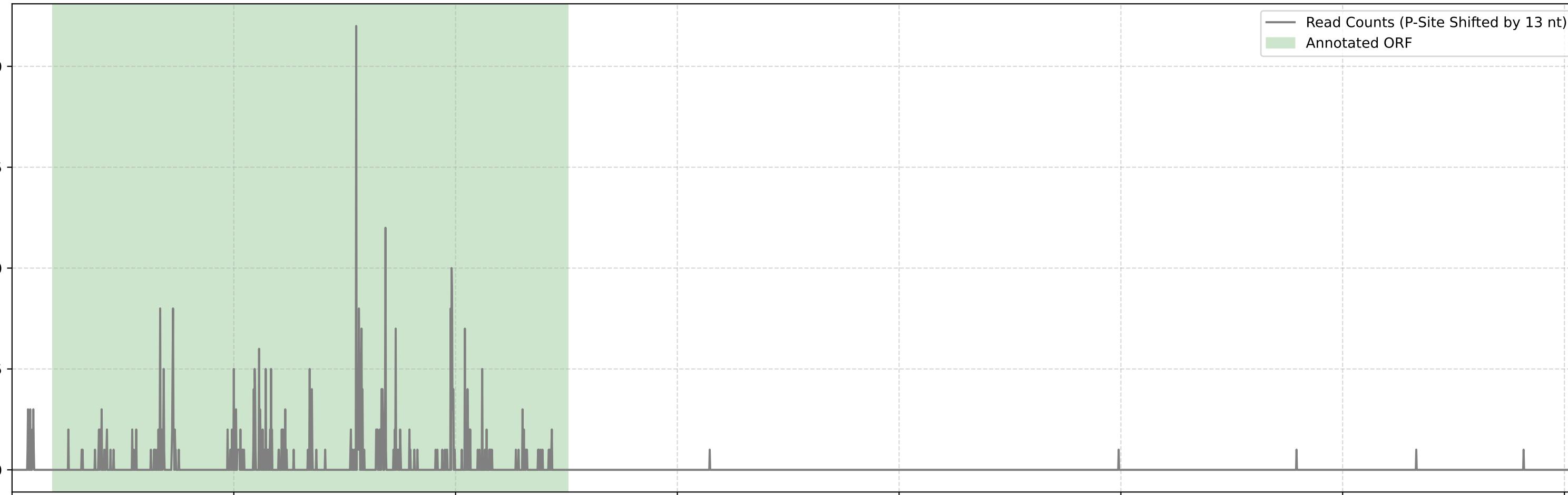
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 28th Percentile (by TPM) Transcript (ENST00000590720.6)  
Total Reads: 388 | TPM: 279.10



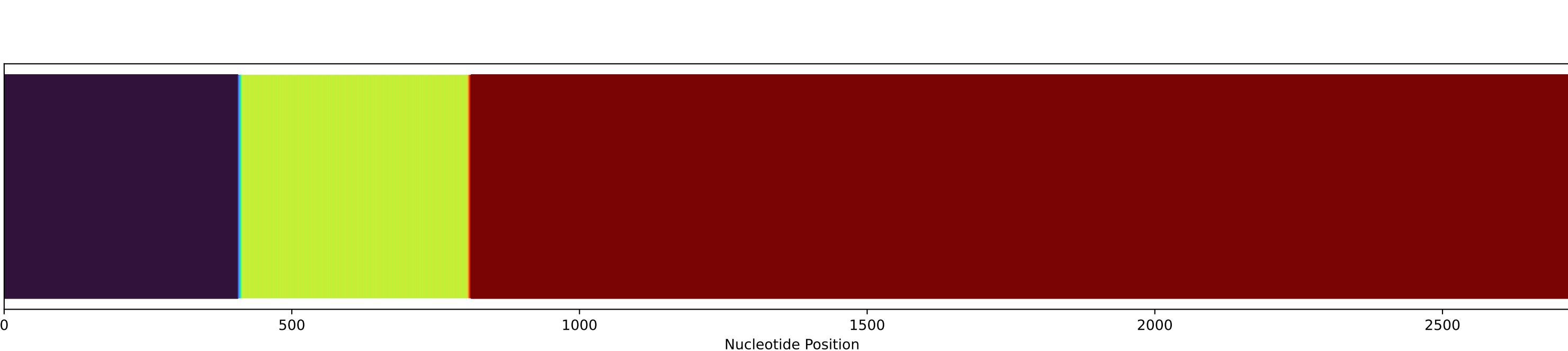
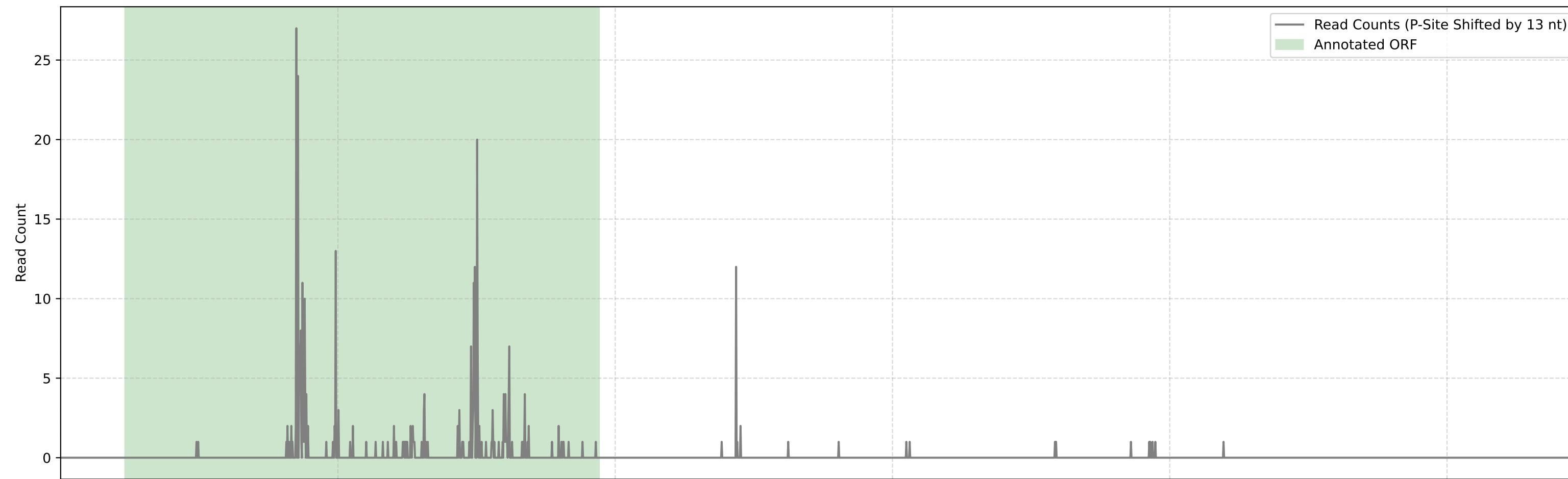
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 29th Percentile (by TPM) Transcript (ENST00000312584.4)  
Total Reads: 445 | TPM: 288.14

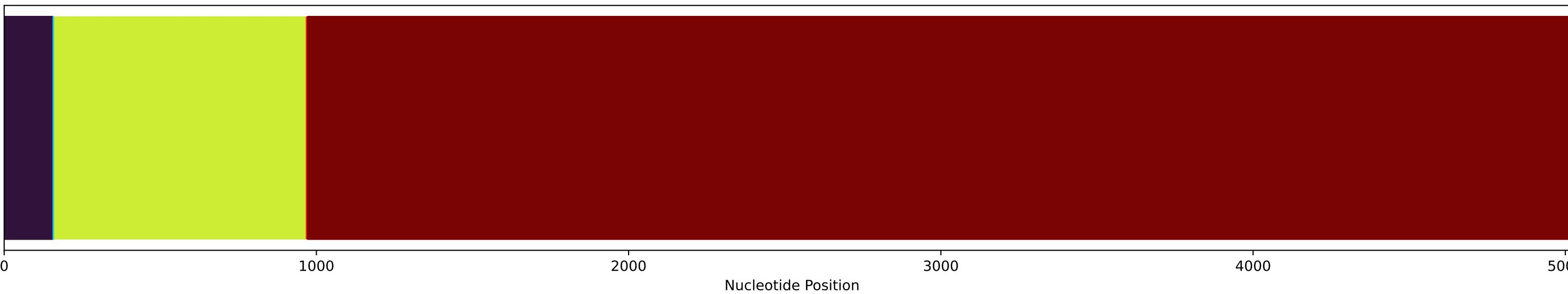
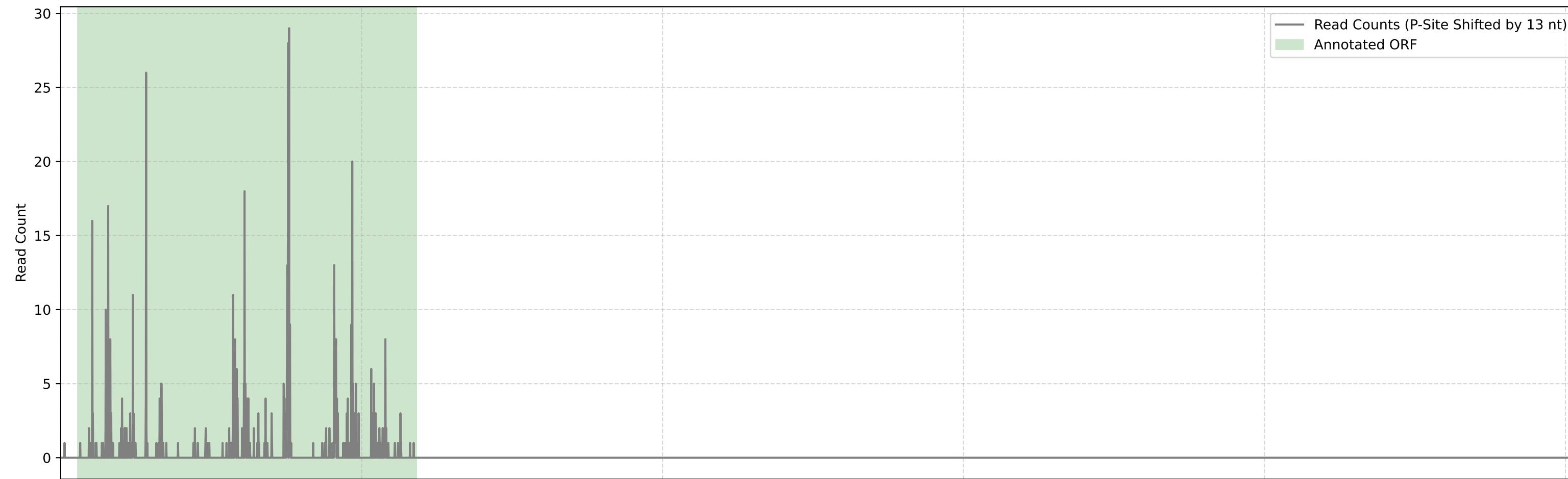


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 30th Percentile (by TPM) Transcript (ENST00000381344.8)  
Total Reads: 353 | TPM: 294.99

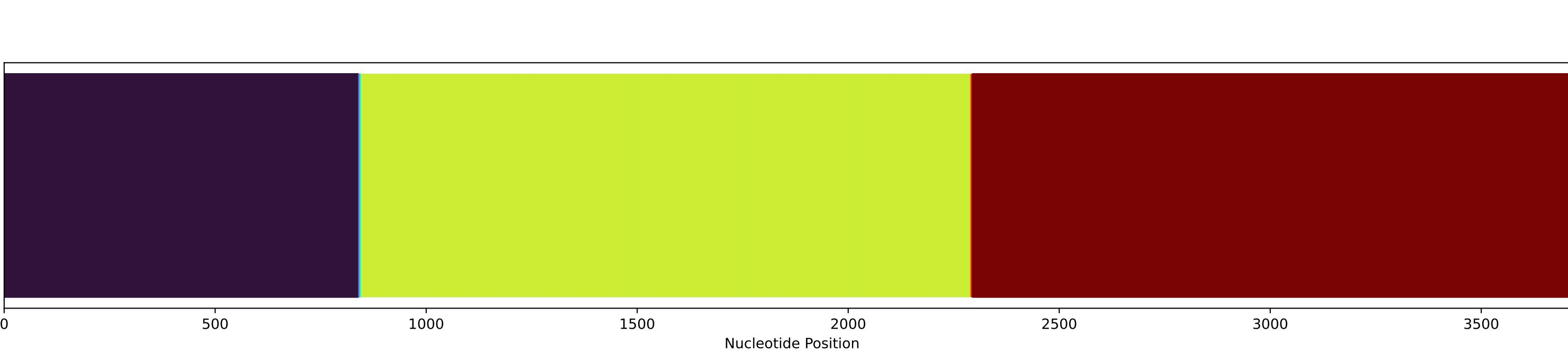
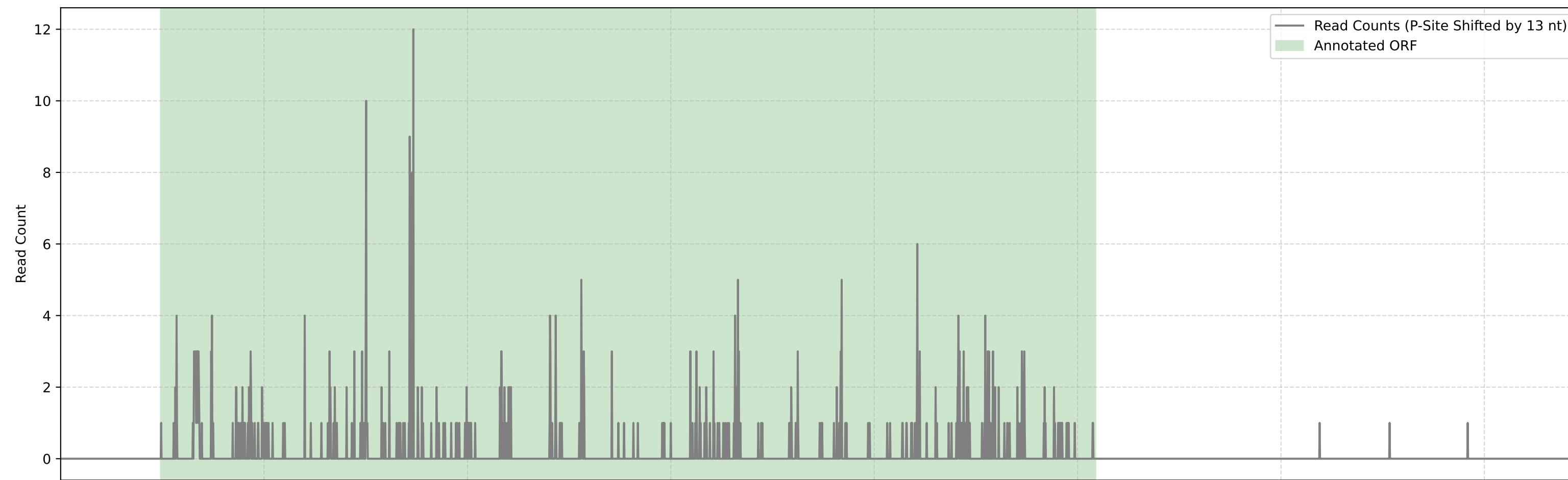


Example: 31th Percentile (by TPM) Transcript (ENST00000531120.6)  
Total Reads: 666 | TPM: 302.04



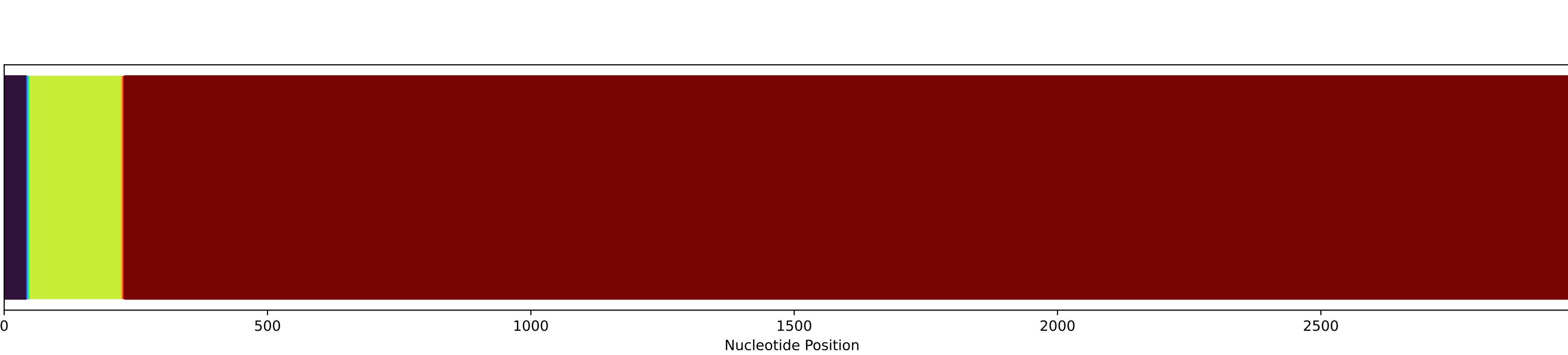
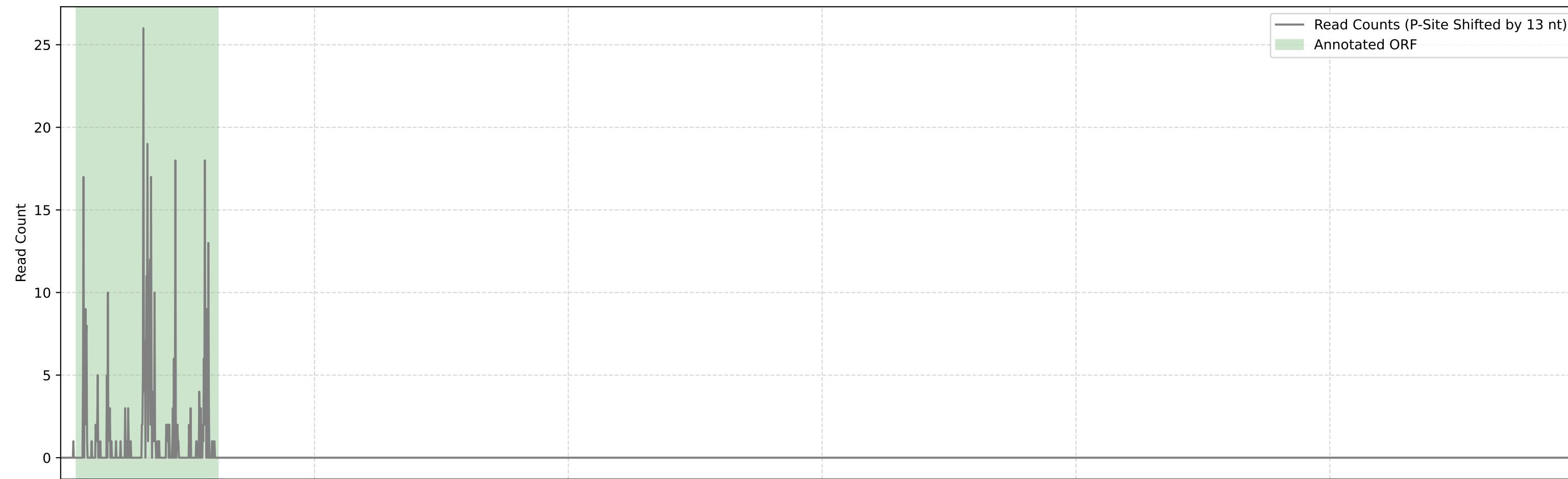
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 32th Percentile (by TPM) Transcript (ENST00000361337.3)  
Total Reads: 505 | TPM: 309.56



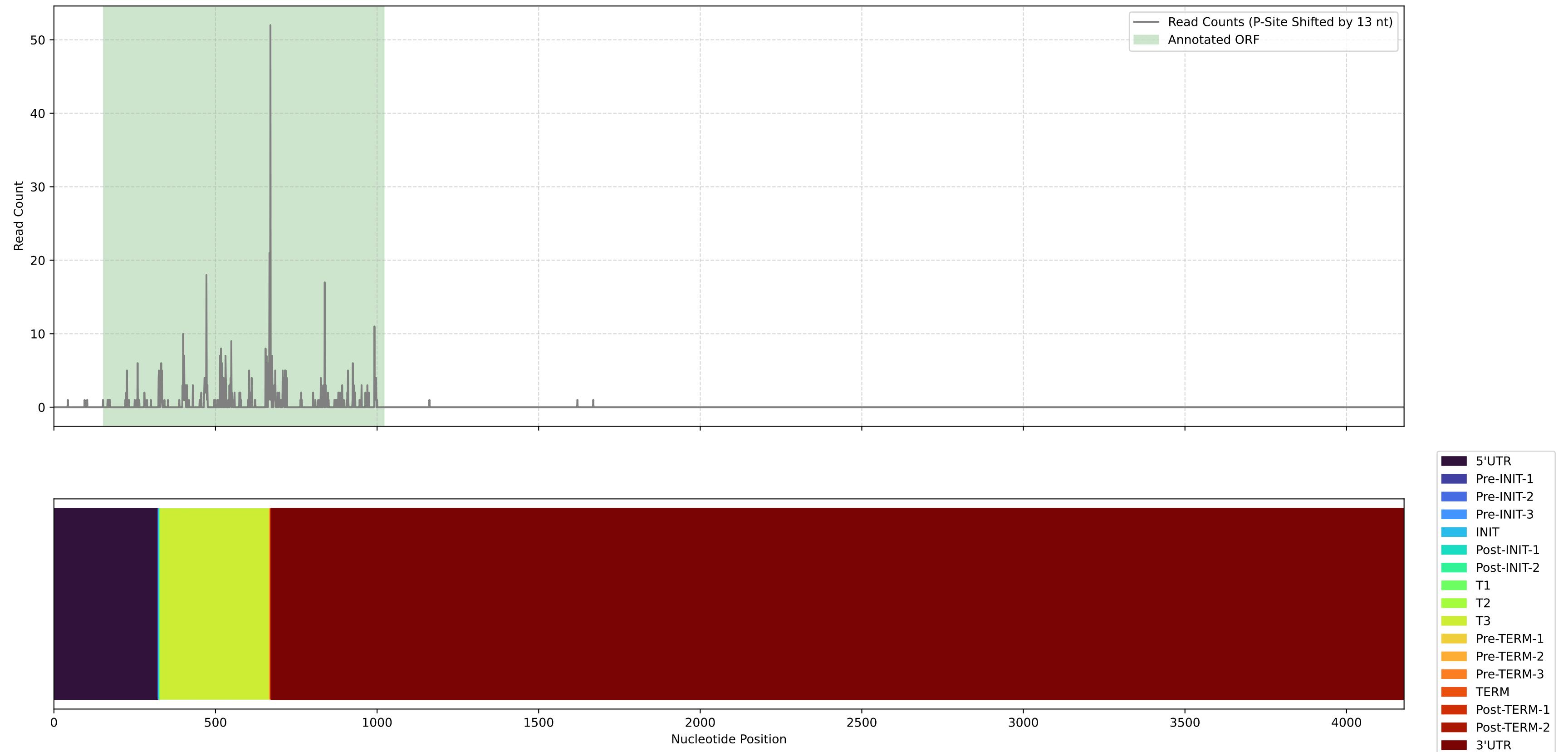
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 33th Percentile (by TPM) Transcript (ENST00000491306.6)  
Total Reads: 415 | TPM: 317.48

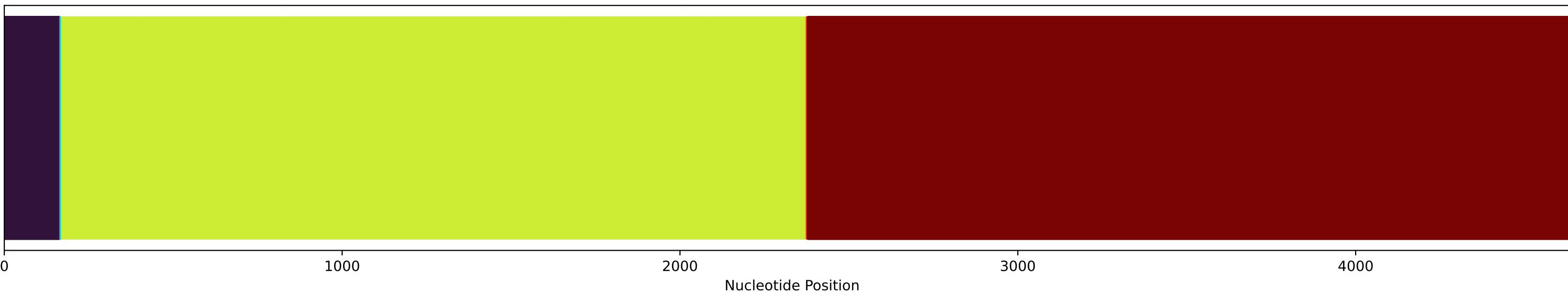
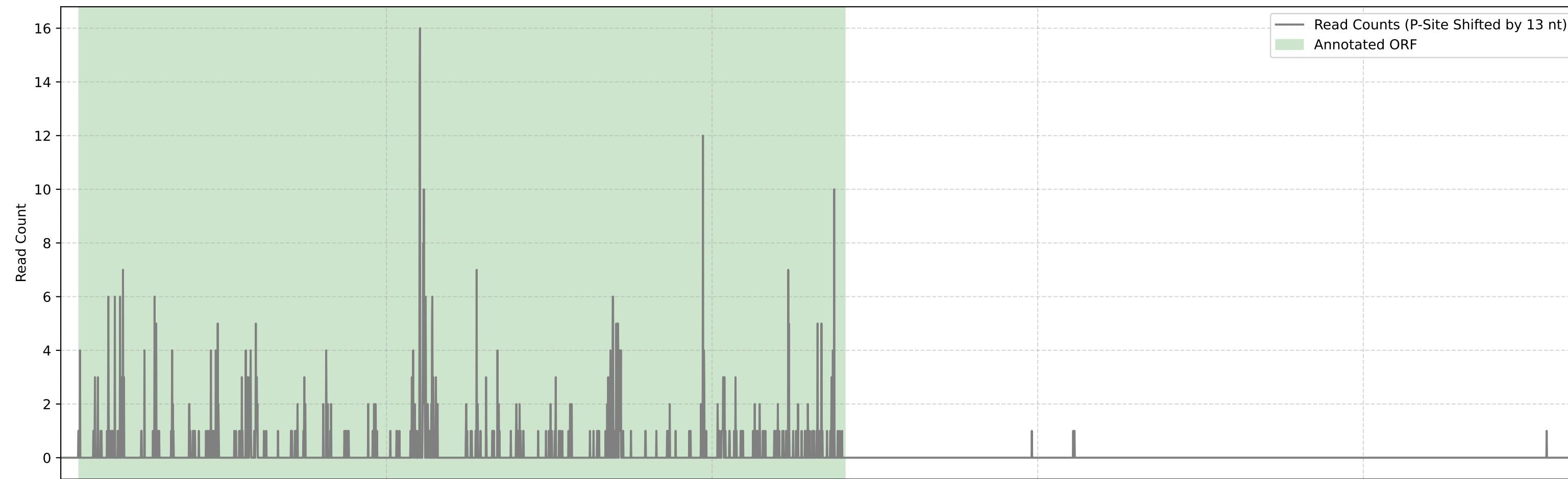


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

Example: 34th Percentile (by TPM) Transcript (ENST00000453386.7)  
Total Reads: 592 | TPM: 324.32

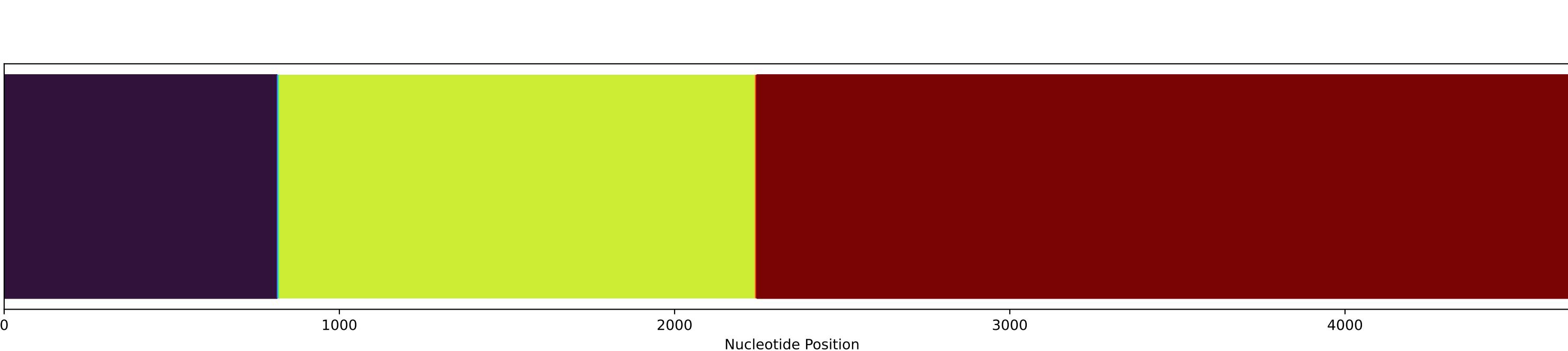
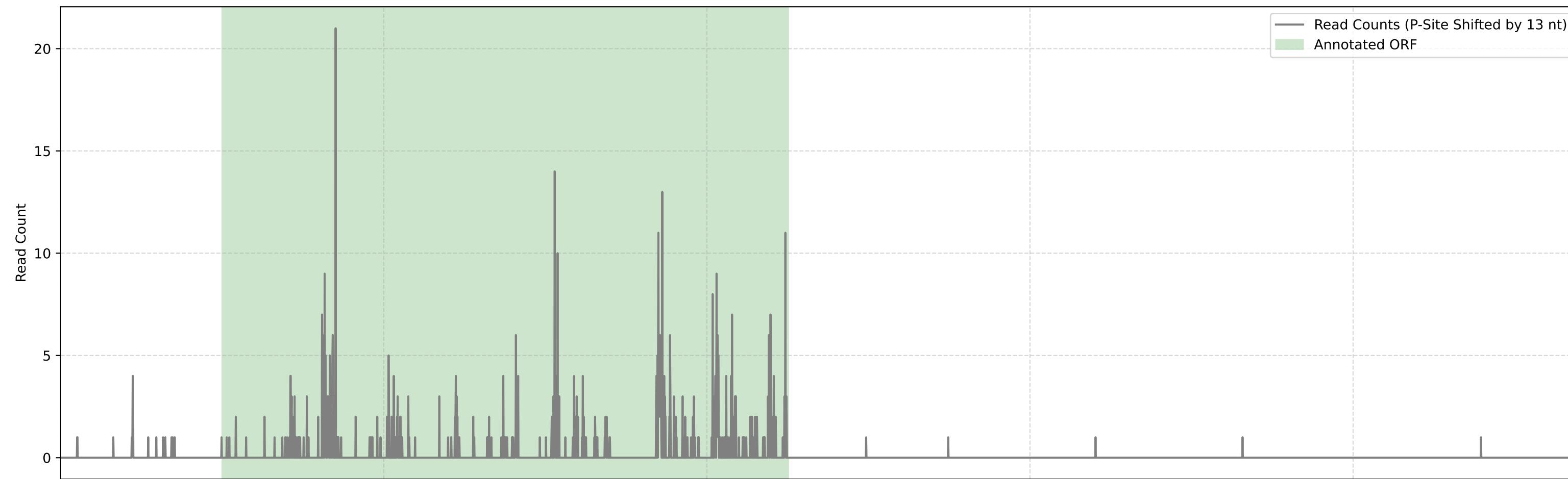


Example: 35th Percentile (by TPM) Transcript (ENST00000354185.9)  
Total Reads: 684 | TPM: 335.68

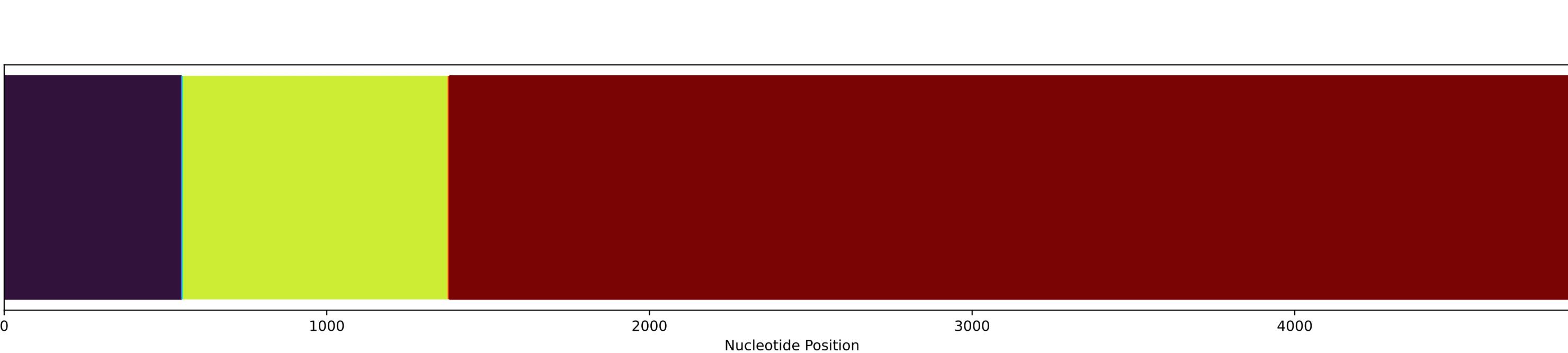
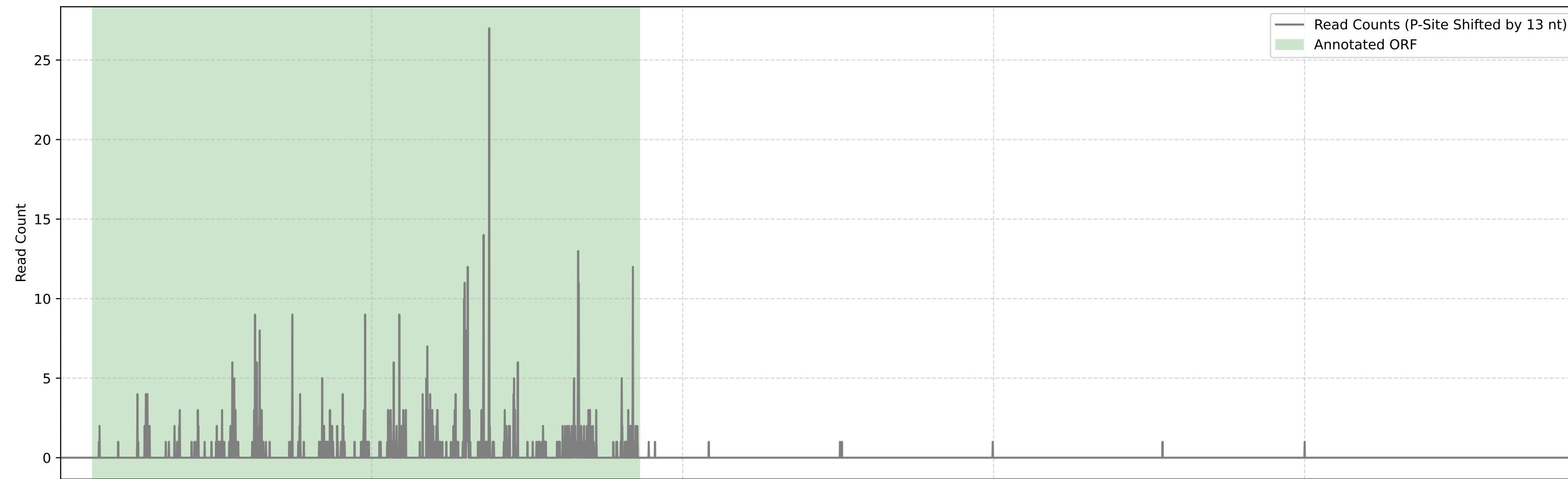


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 36th Percentile (by TPM) Transcript (ENST00000306107.9)  
Total Reads: 706 | TPM: 343.75

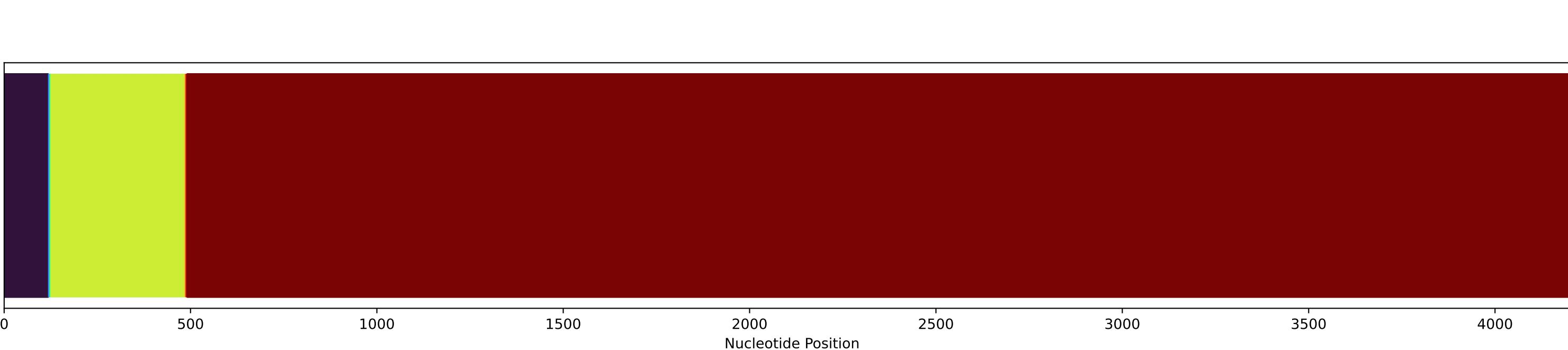
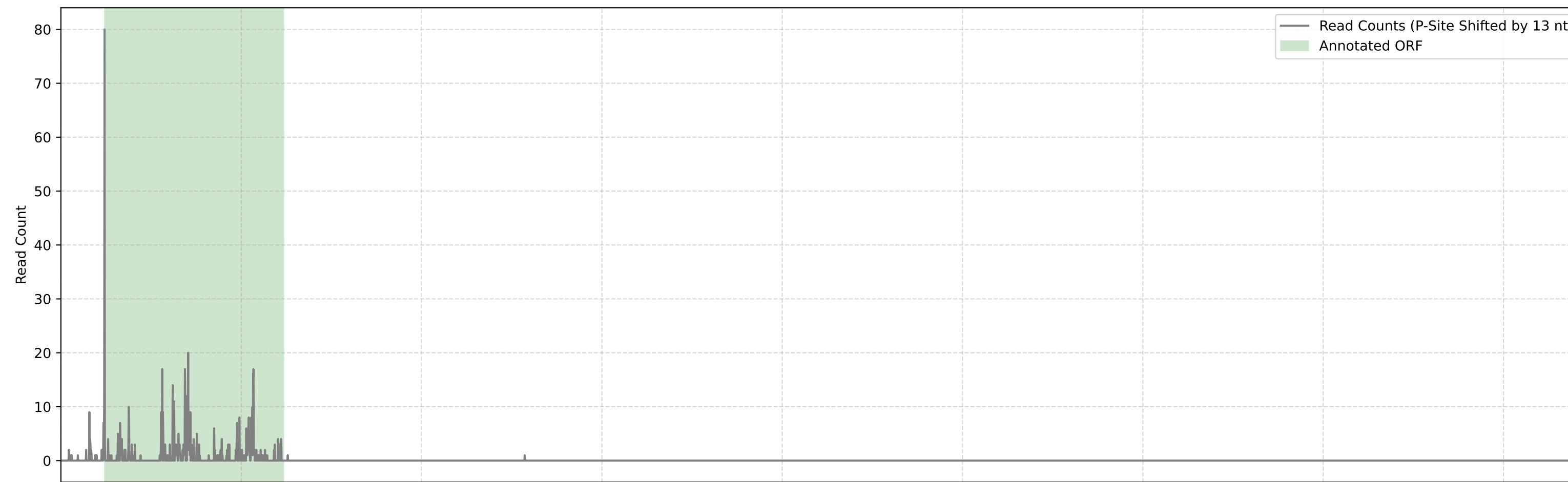


Example: 37th Percentile (by TPM) Transcript (ENST00000318950.11)  
Total Reads: 748 | TPM: 350.55

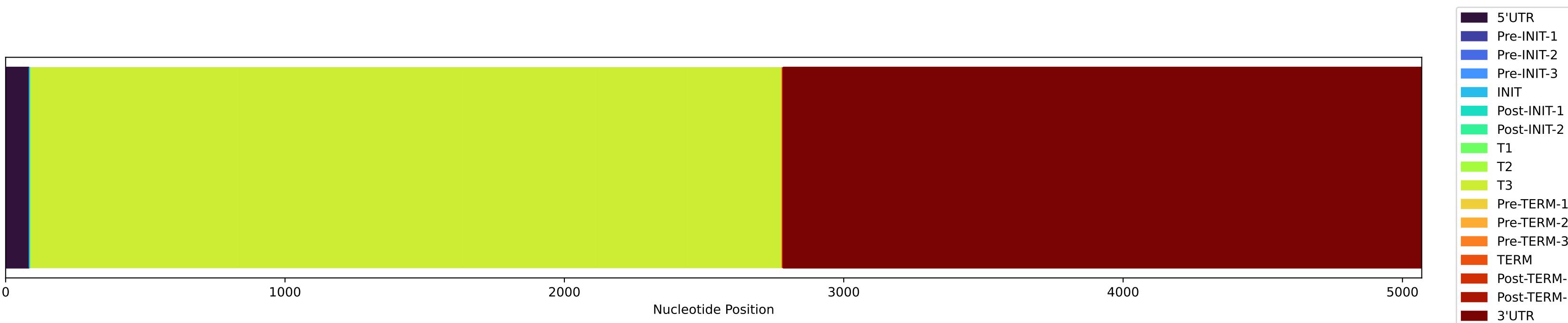
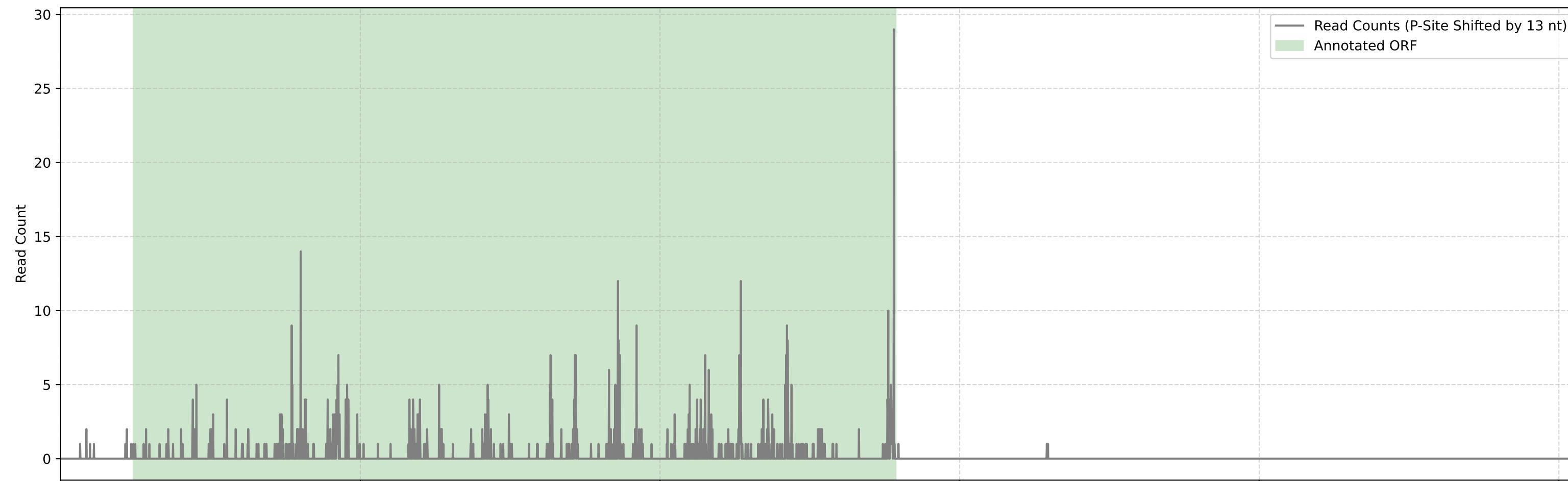


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

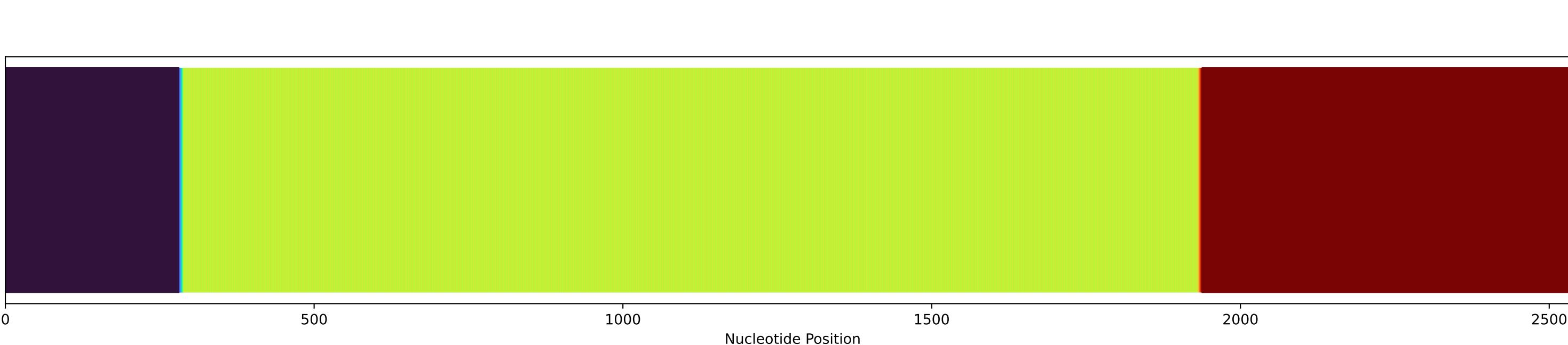
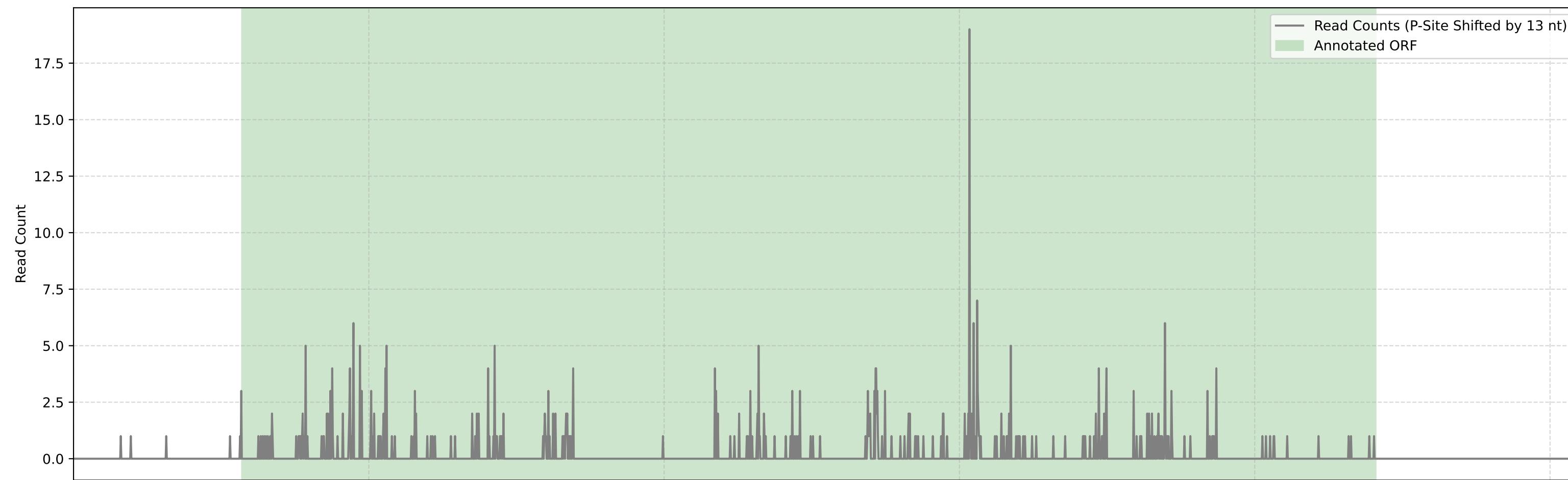
Example: 38th Percentile (by TPM) Transcript (ENST00000373715.11)  
Total Reads: 676 | TPM: 365.96



Example: 39th Percentile (by TPM) Transcript (ENST00000394805.8)  
Total Reads: 838 | TPM: 378.40

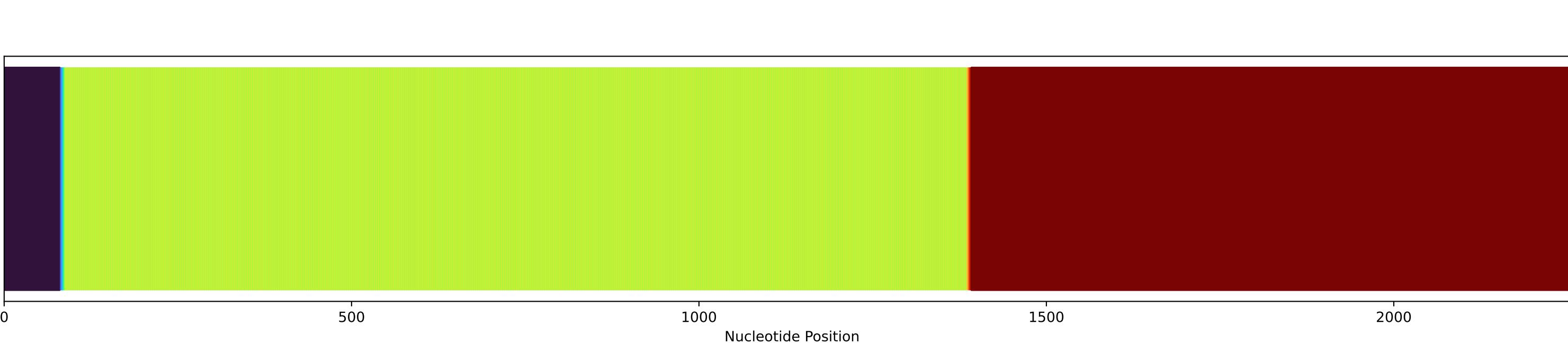
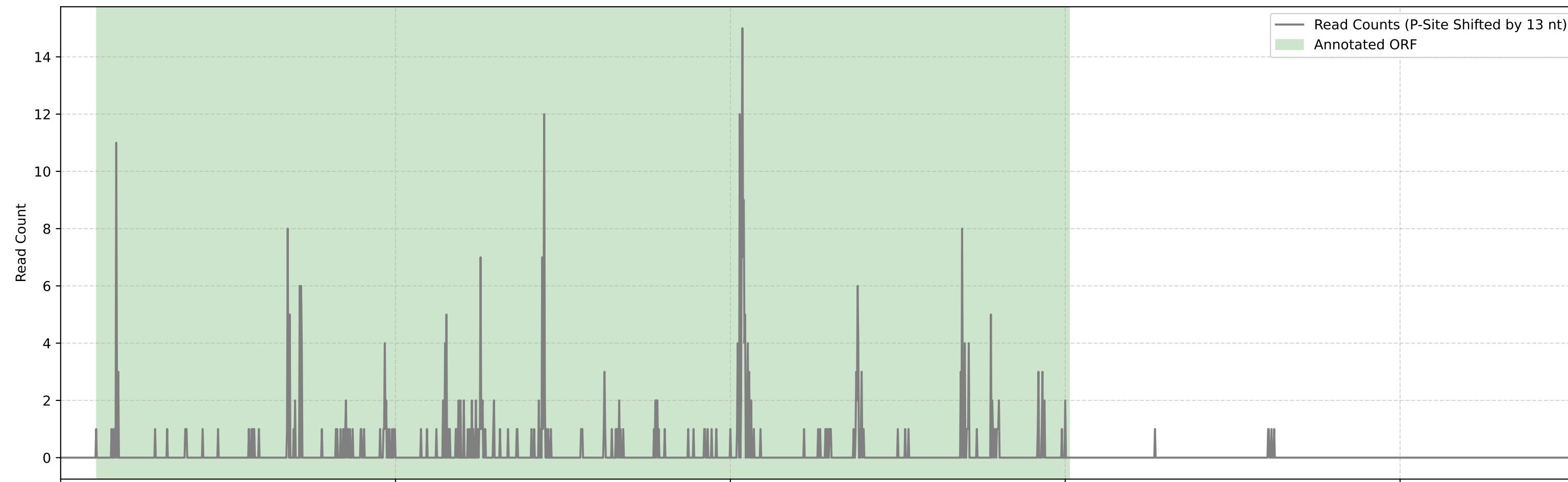


Example: 40th Percentile (by TPM) Transcript (ENST00000334553.11)  
Total Reads: 429 | TPM: 385.07

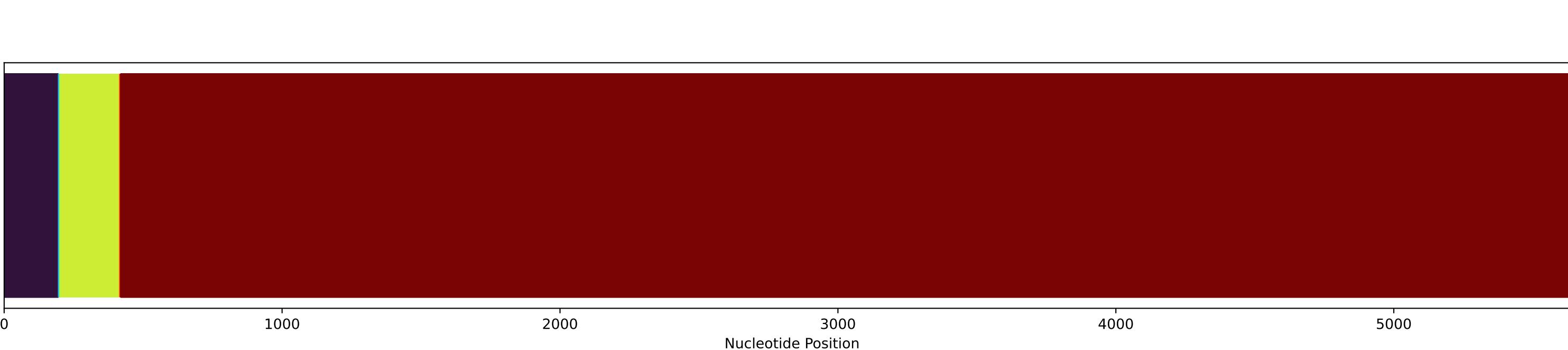
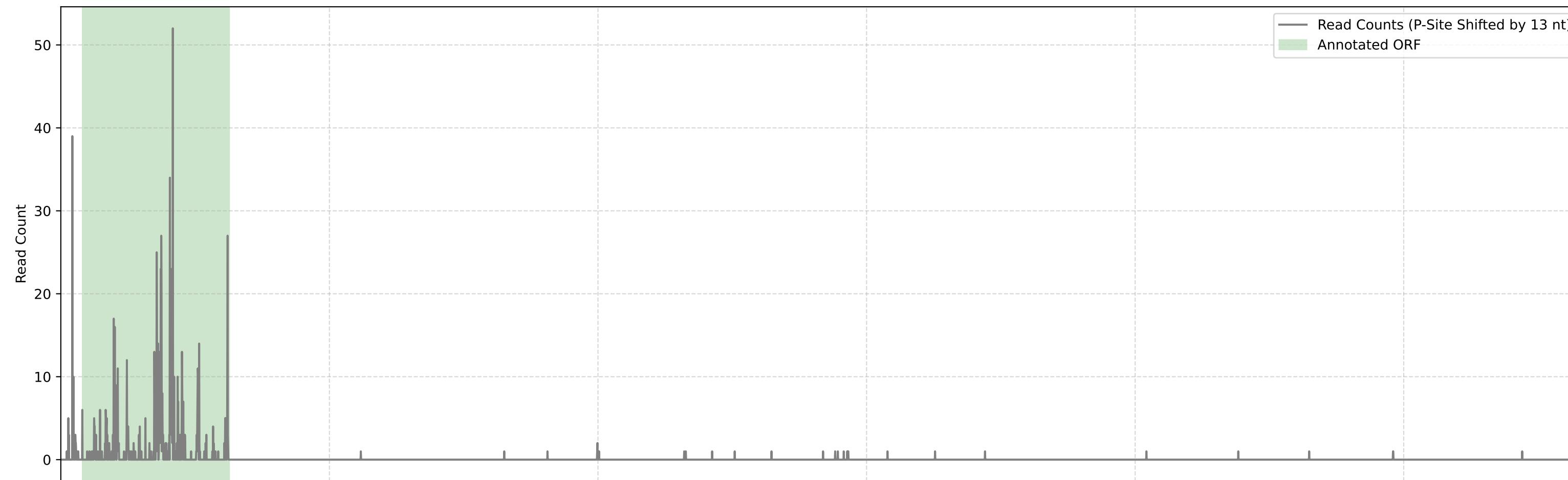


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

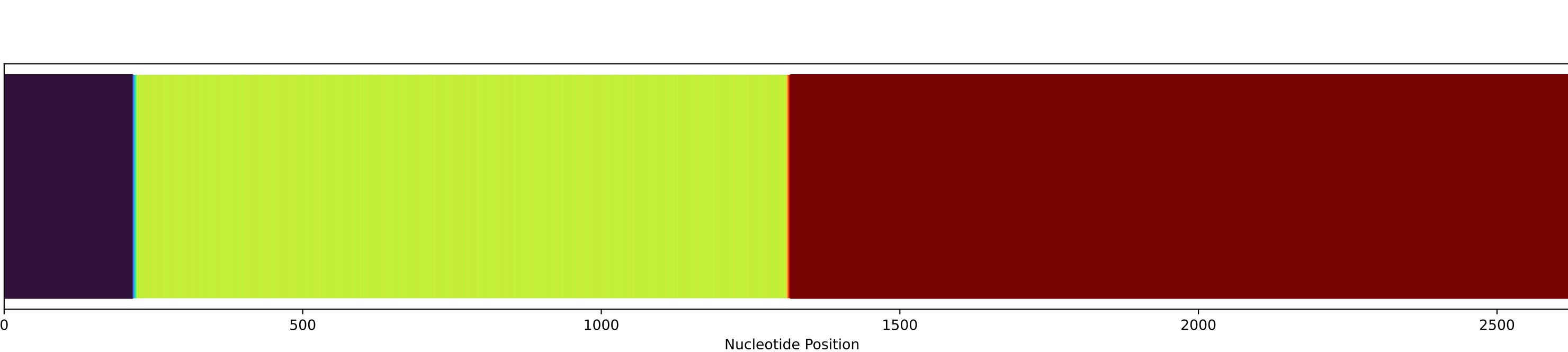
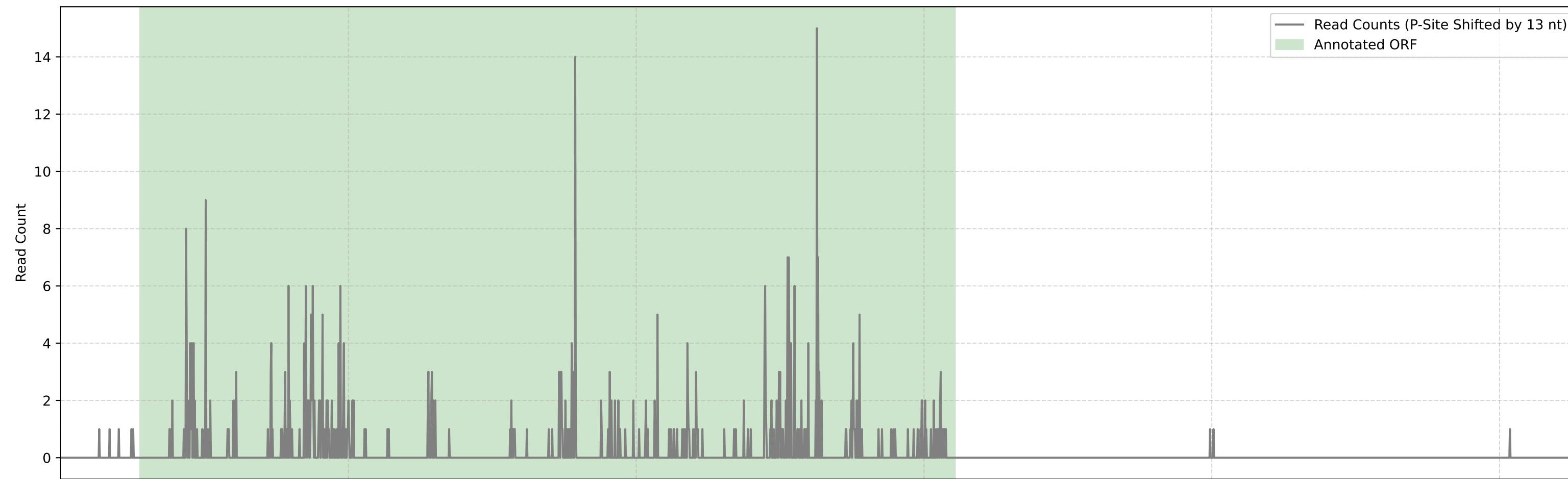
Example: 41th Percentile (by TPM) Transcript (ENST00000270776.13)  
Total Reads: 398 | TPM: 401.67



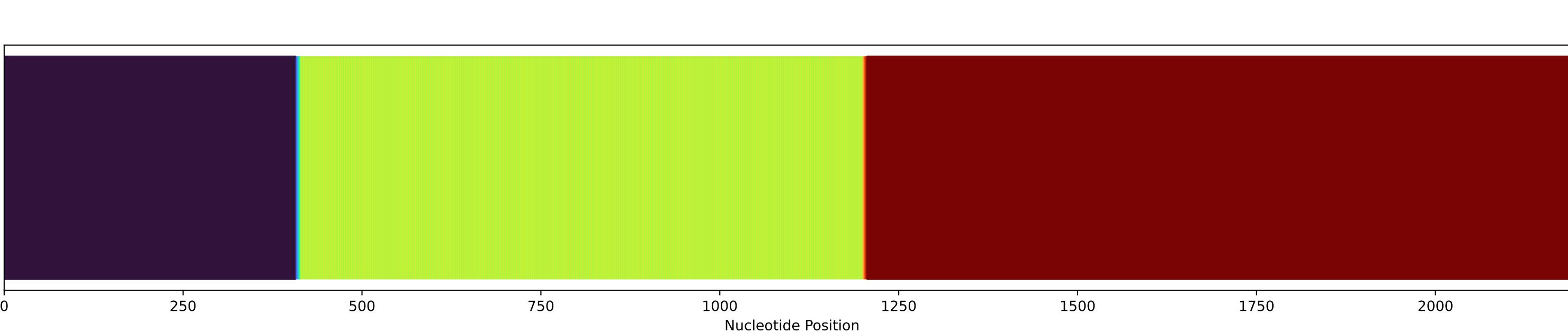
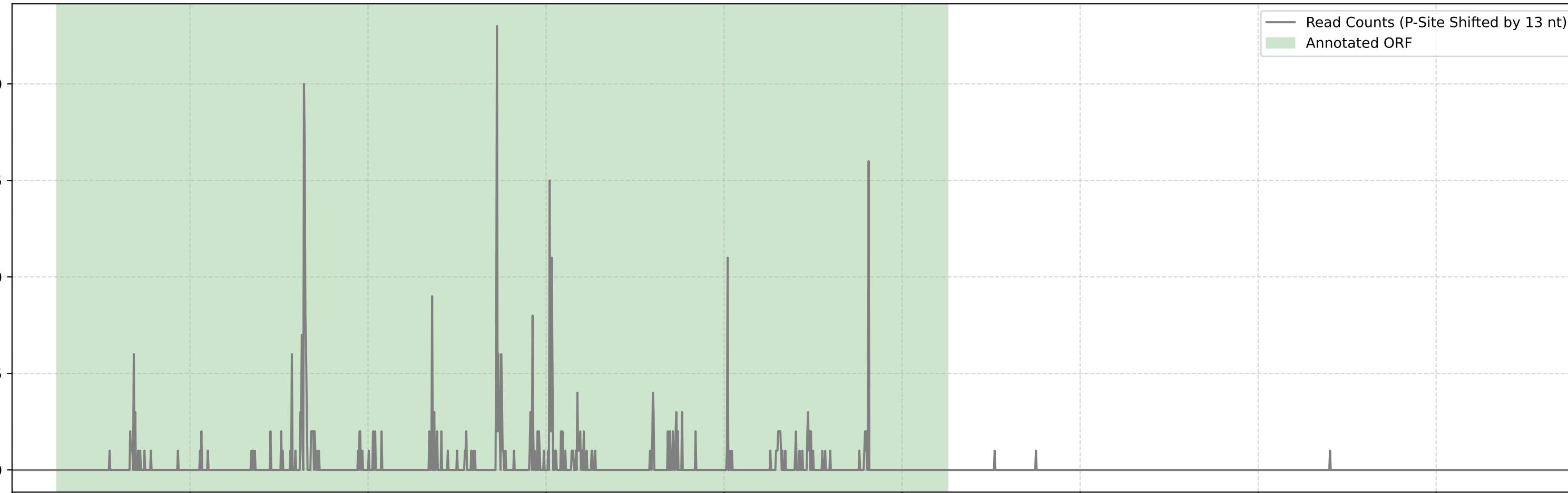
Example: 42th Percentile (by TPM) Transcript (ENST00000313961.10)  
Total Reads: 1,030 | TPM: 415.80



Example: 43th Percentile (by TPM) Transcript (ENST00000392882.7)  
Total Reads: 491 | TPM: 425.86

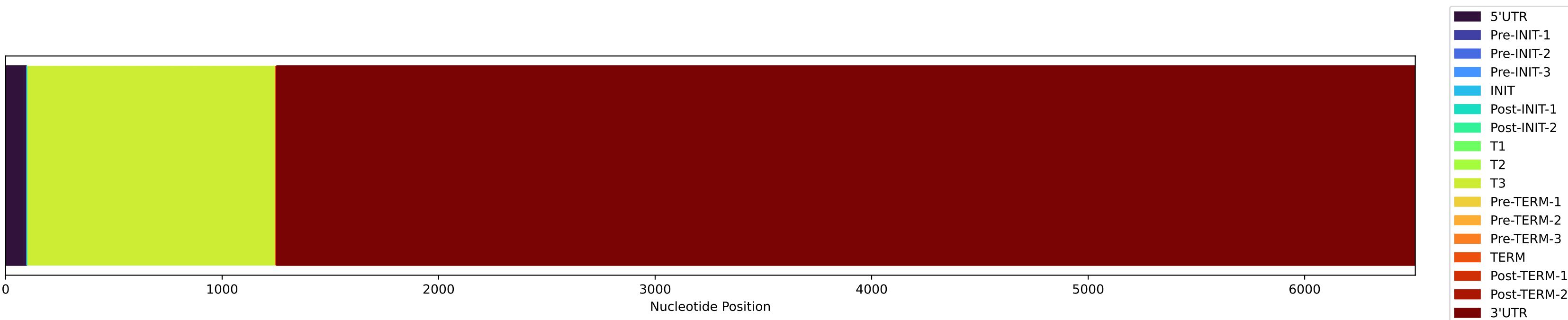
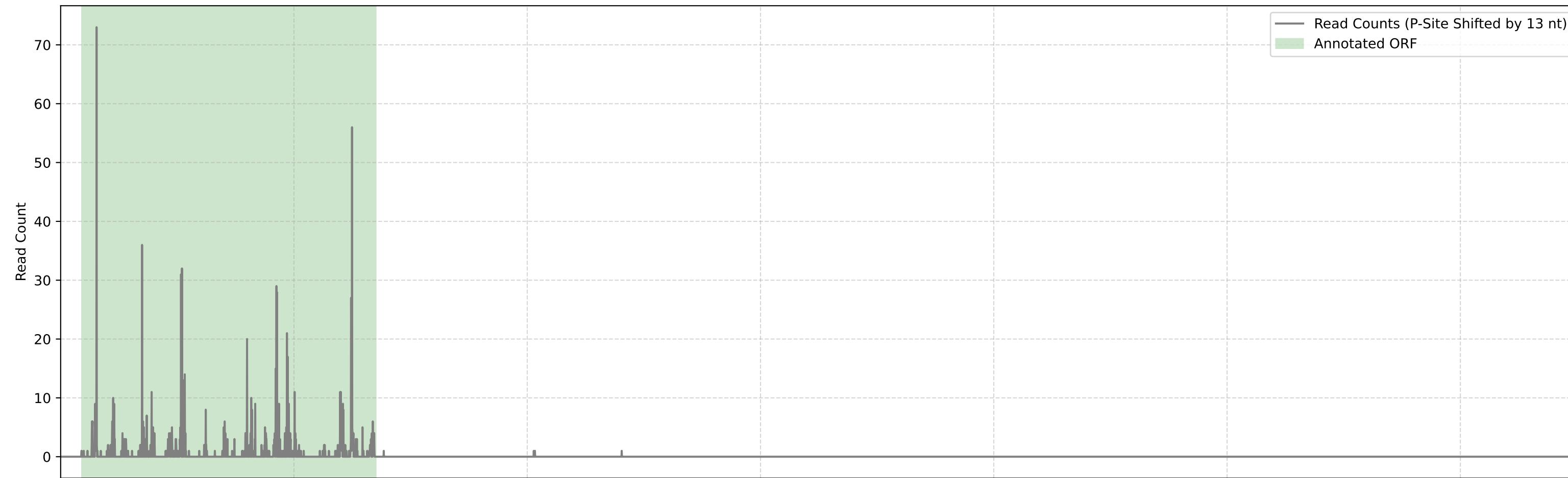


Example: 44th Percentile (by TPM) Transcript (ENST00000217456.3)  
Total Reads: 414 | TPM: 430.34

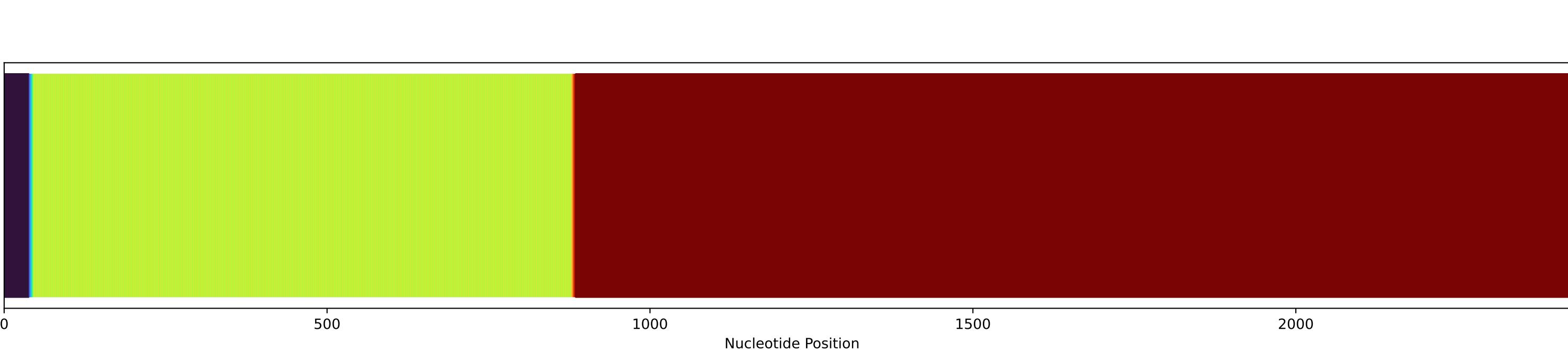
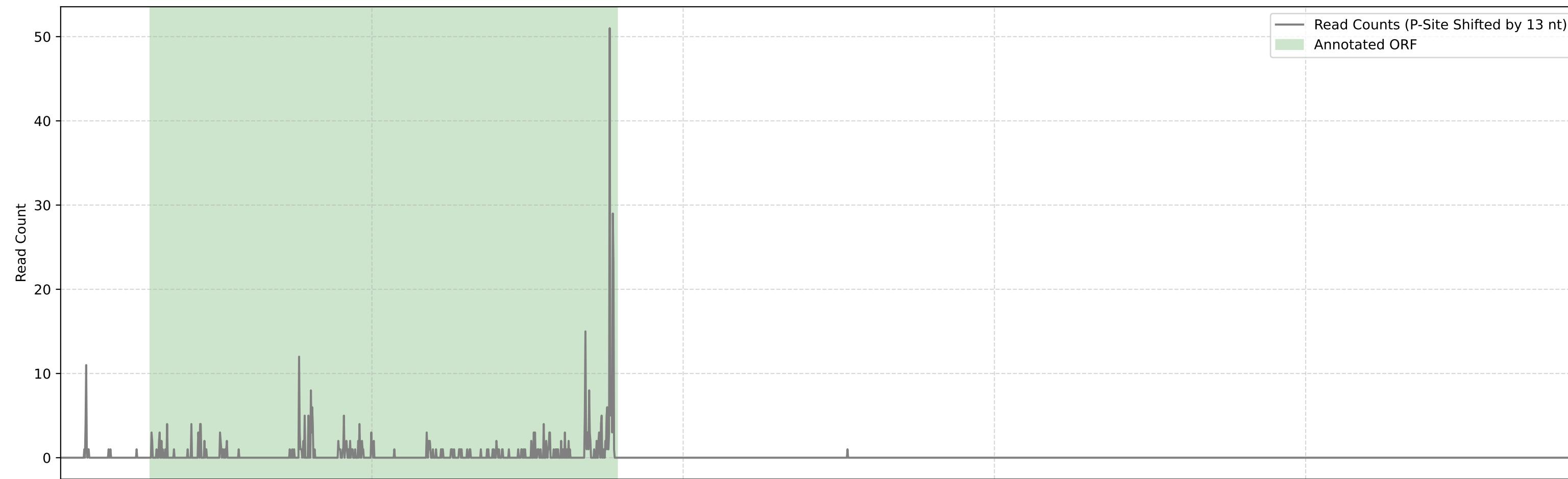


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

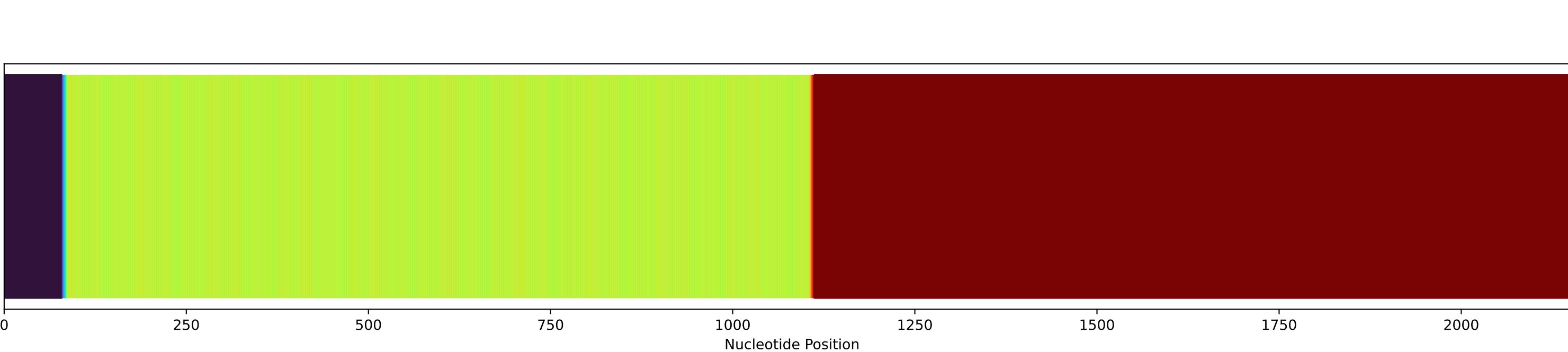
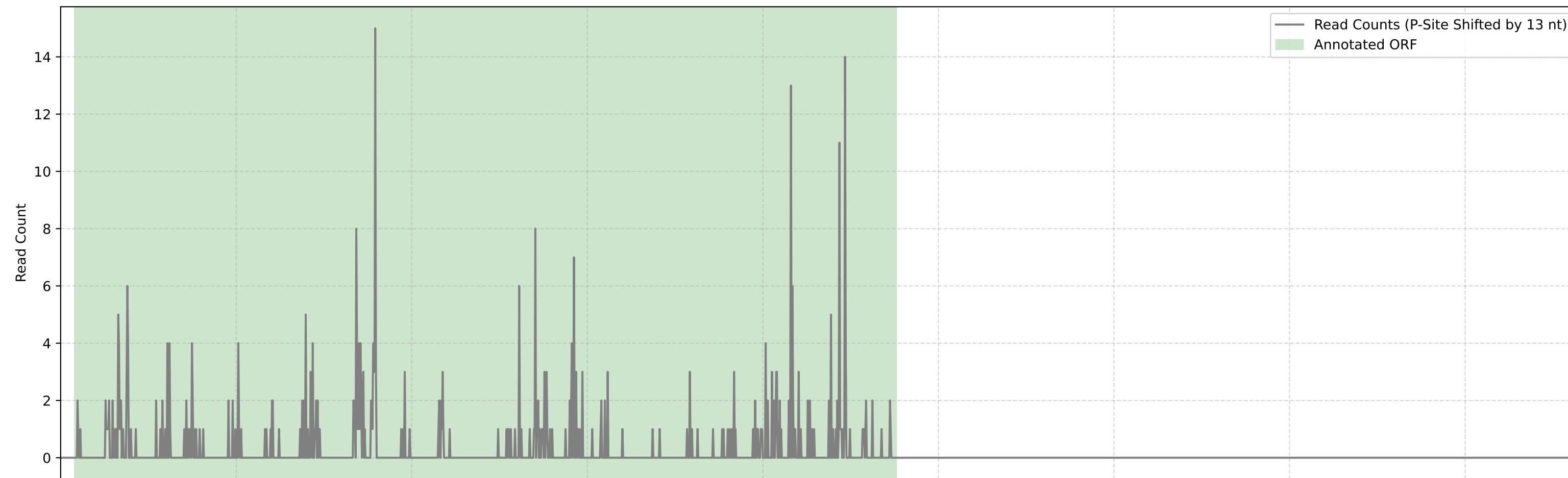
Example: 45th Percentile (by TPM) Transcript (ENST00000409600.6)  
Total Reads: 1,243 | TPM: 436.97



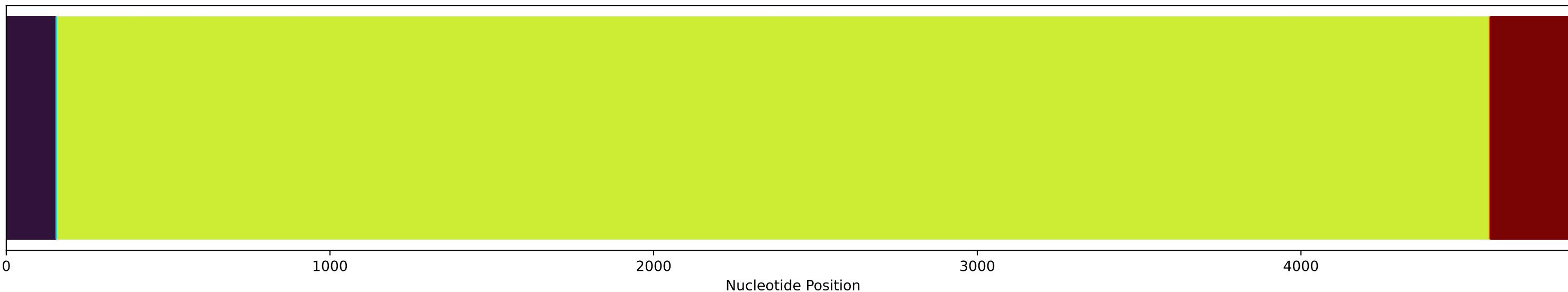
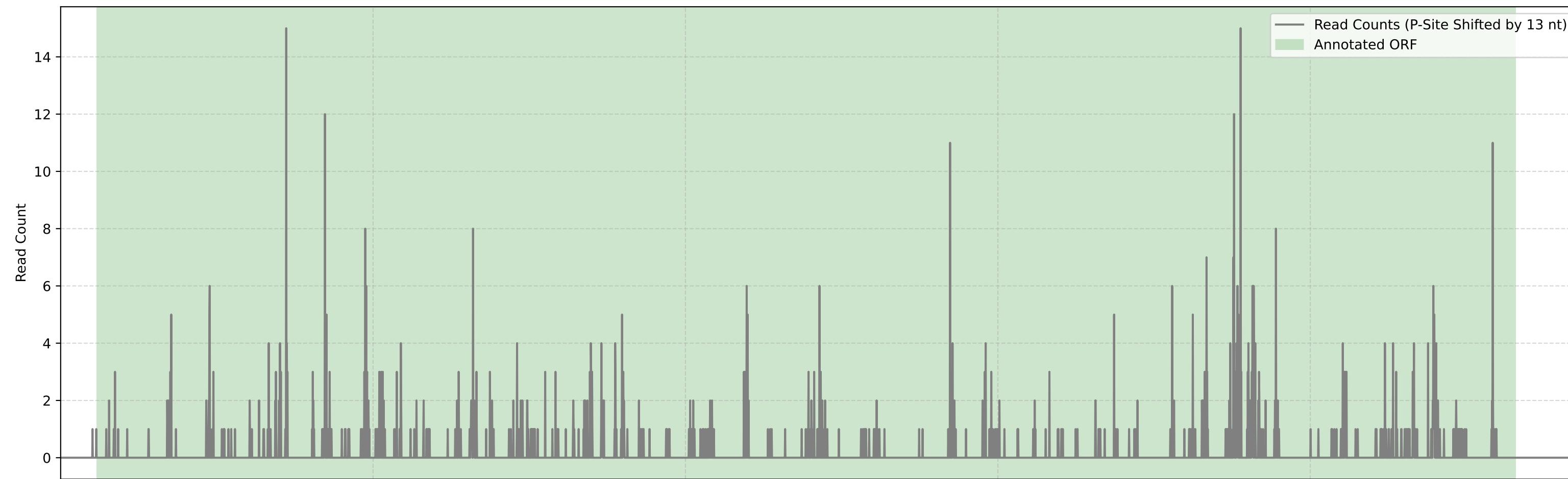
Example: 46th Percentile (by TPM) Transcript (ENST00000465139.6)  
Total Reads: 477 | TPM: 447.46



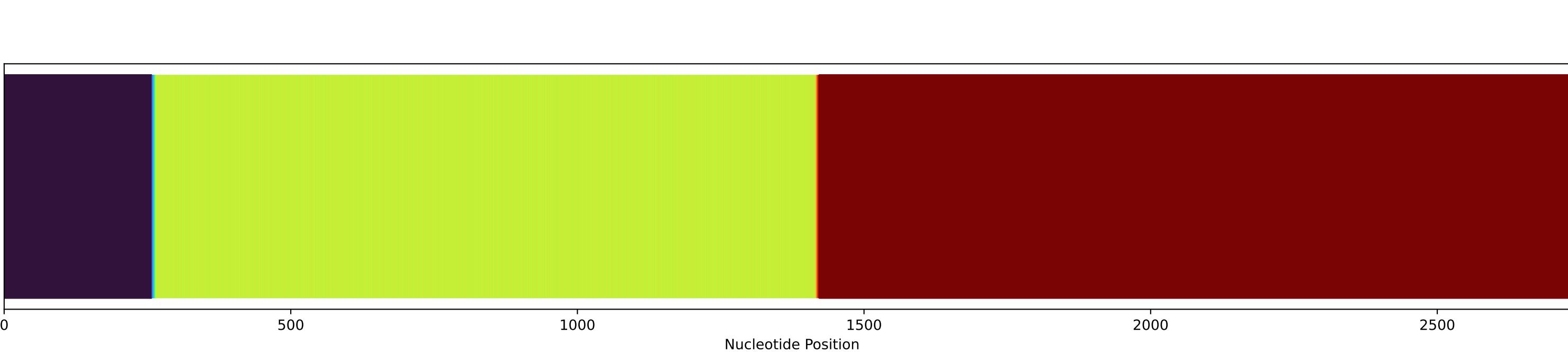
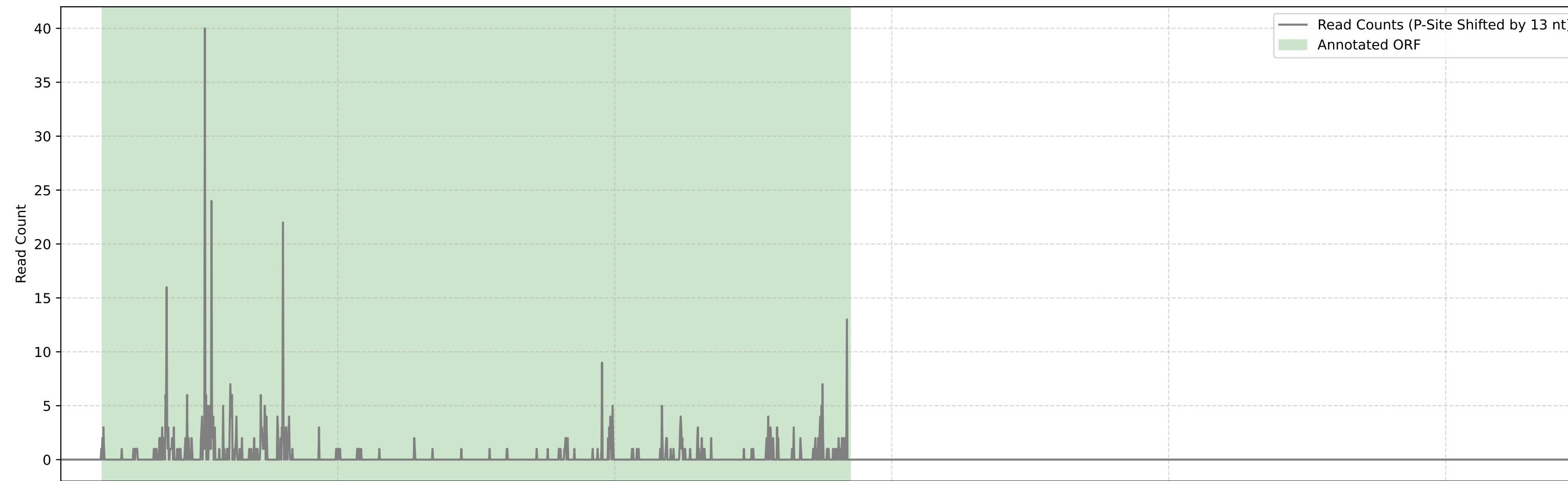
Example: 47th Percentile (by TPM) Transcript (ENST00000445930.7)  
Total Reads: 434 | TPM: 459.26



Example: 48th Percentile (by TPM) Transcript (ENST00000366923.8)  
Total Reads: 982 | TPM: 462.30

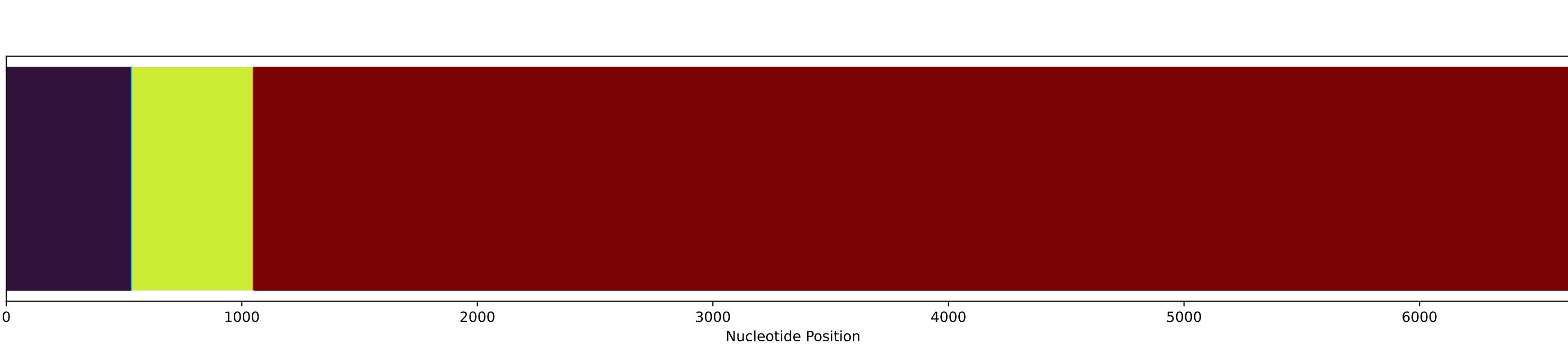
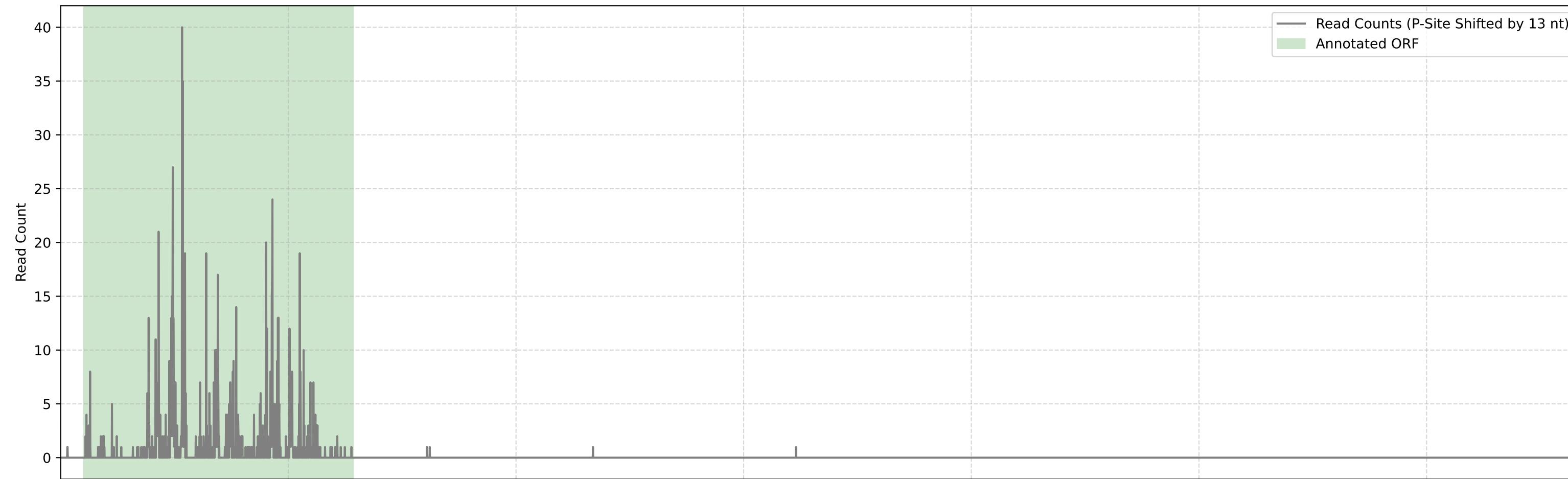


Example: 49th Percentile (by TPM) Transcript (ENST00000316403.15)  
Total Reads: 565 | TPM: 470.44

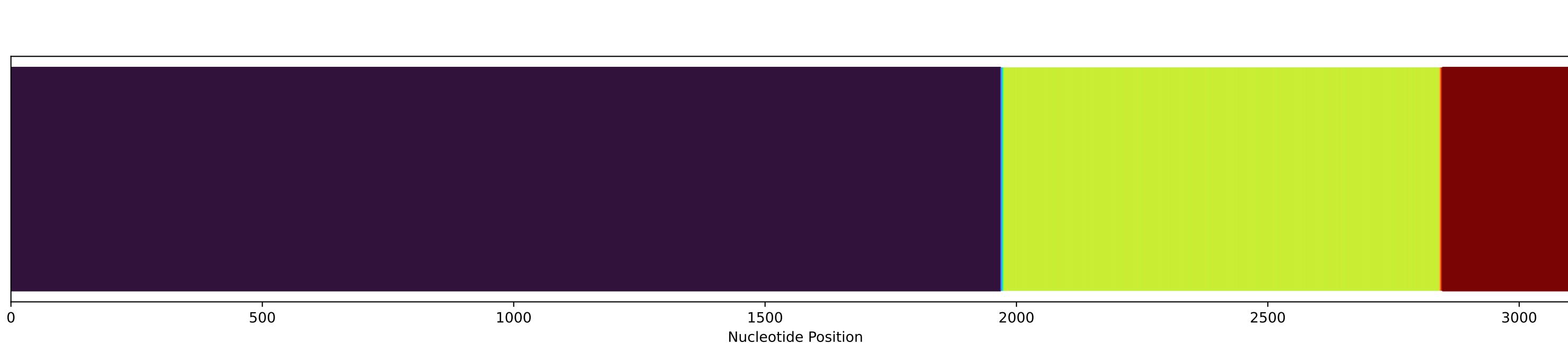
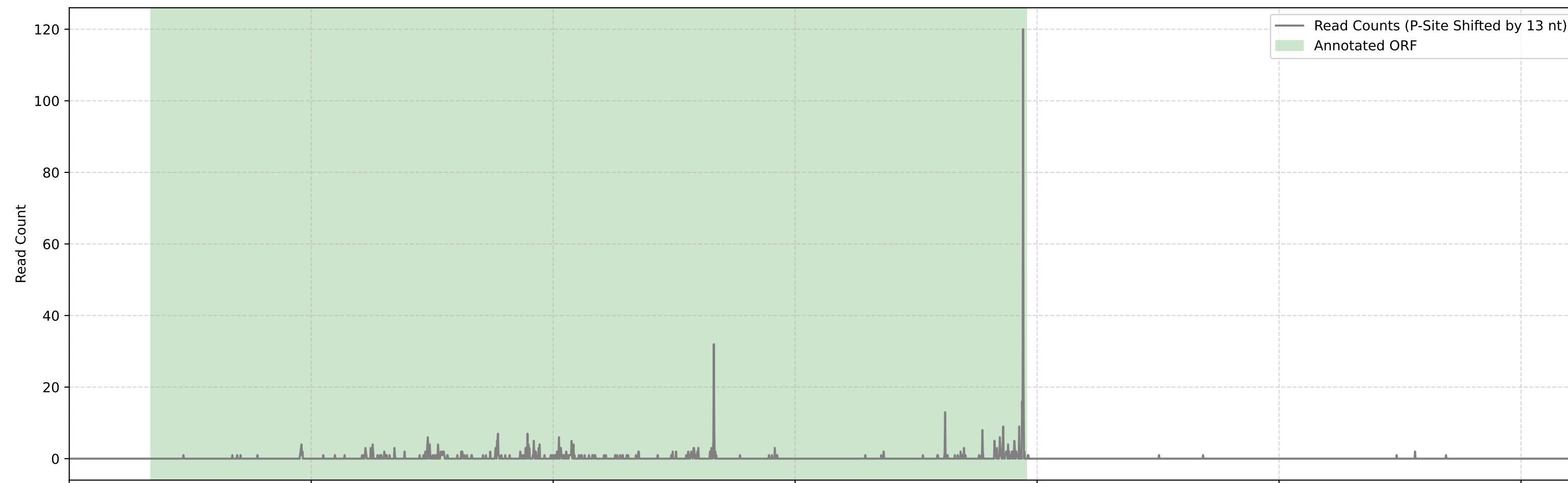


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

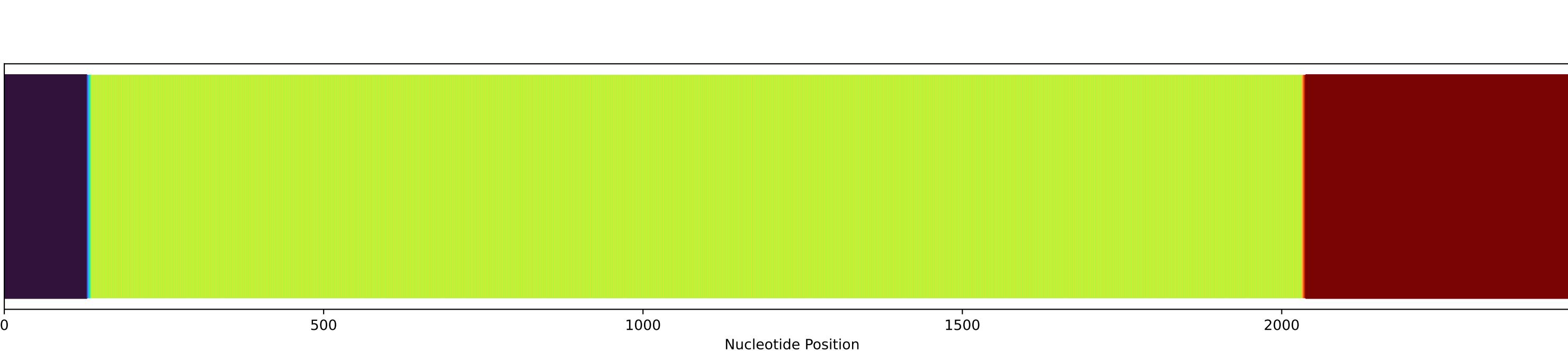
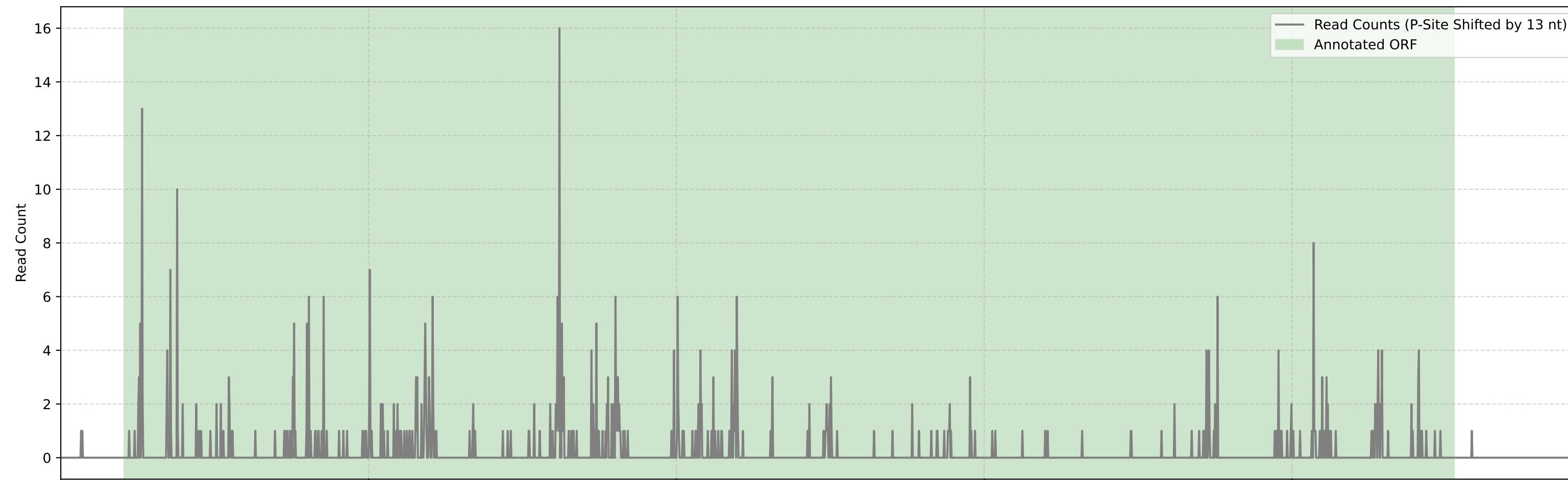
Example: 50th Percentile (by TPM) Transcript (ENST00000361219.11)  
Total Reads: 1,402 | TPM: 480.32



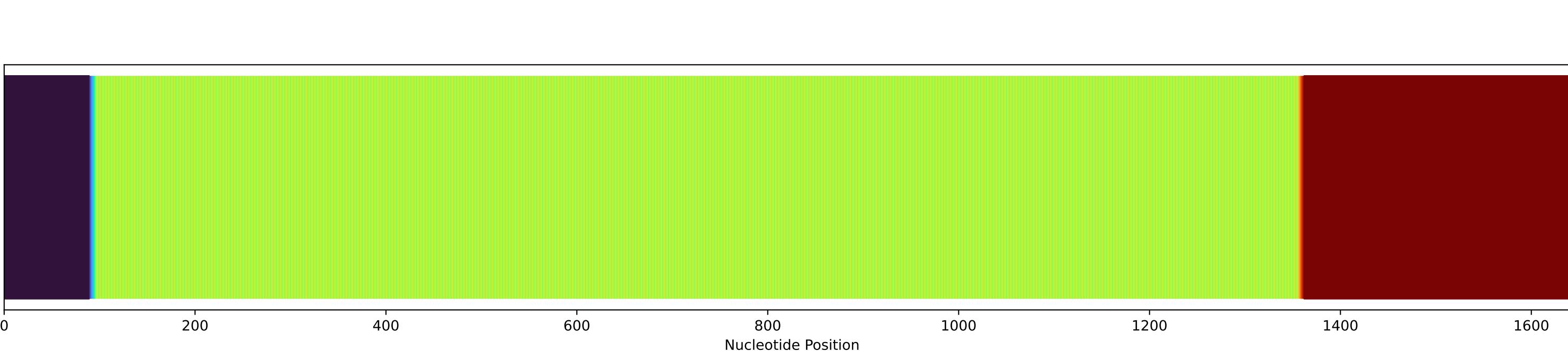
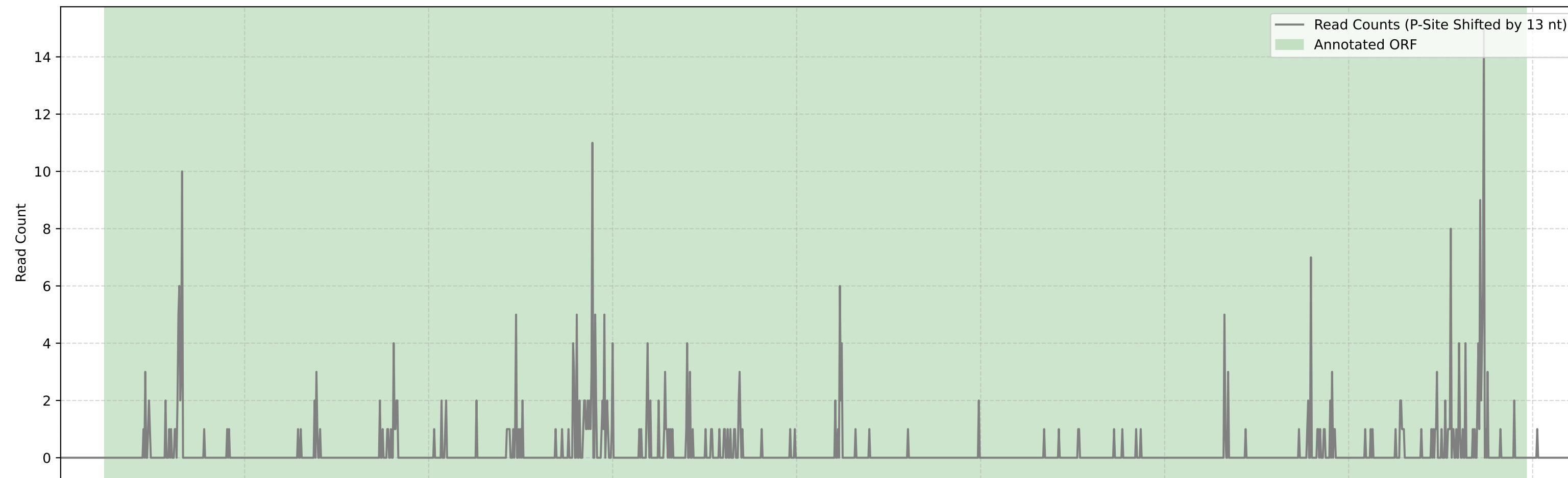
Example: 51th Percentile (by TPM) Transcript (ENST00000378026.5)  
Total Reads: 664 | TPM: 486.97



Example: 52th Percentile (by TPM) Transcript (ENST00000303887.10)  
Total Reads: 536 | TPM: 497.30

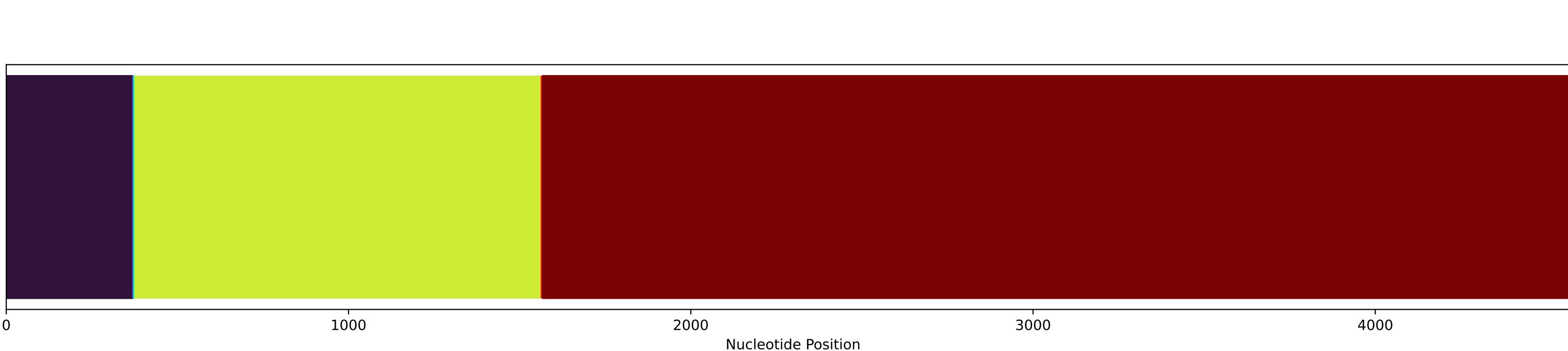
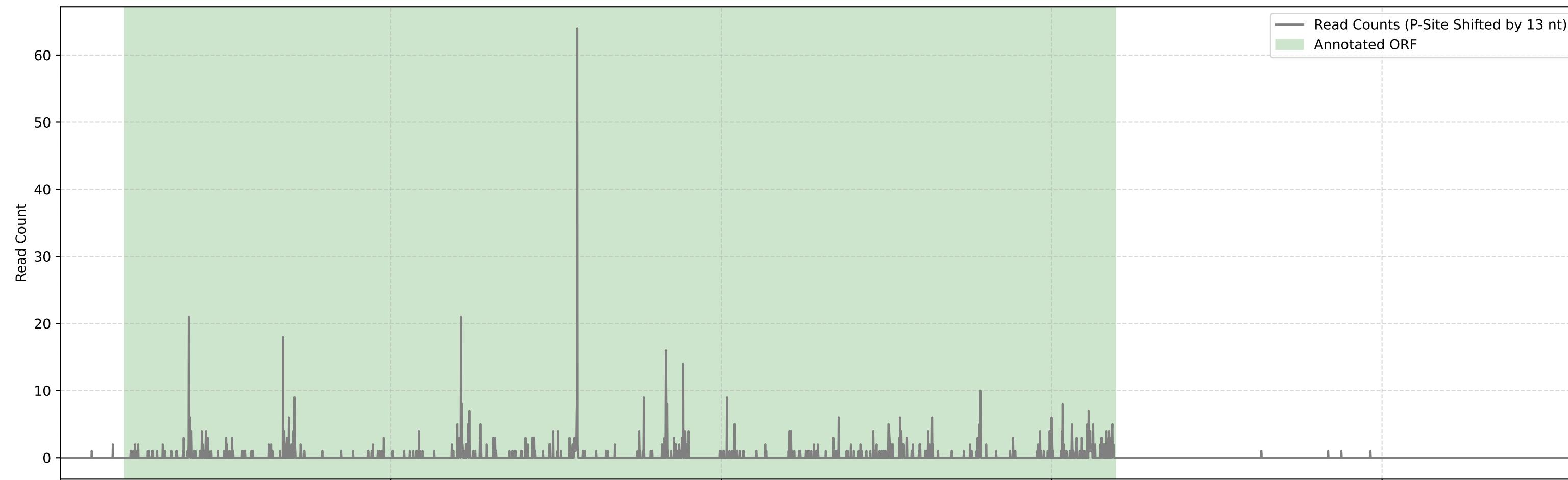


Example: 53th Percentile (by TPM) Transcript (ENST00000326739.9)  
Total Reads: 373 | TPM: 517.12

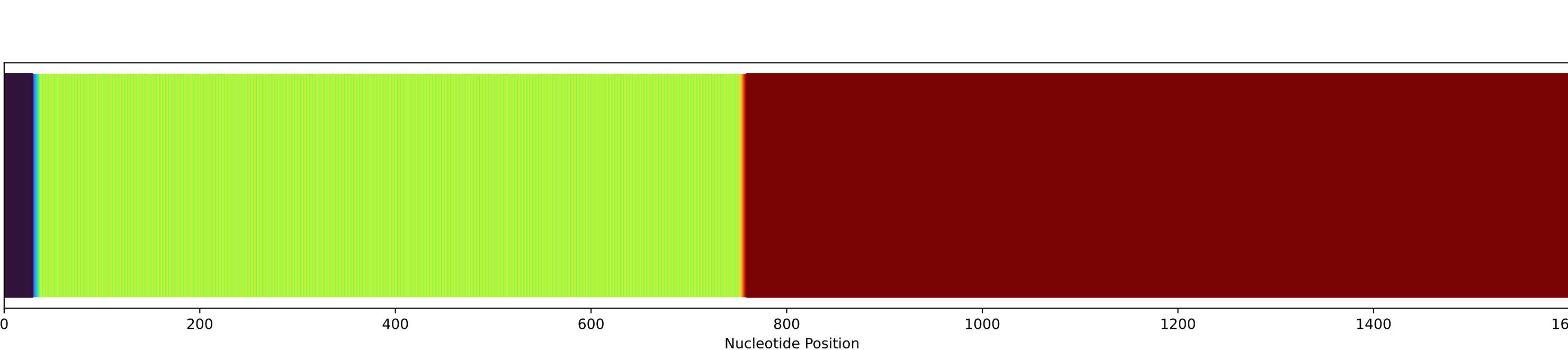
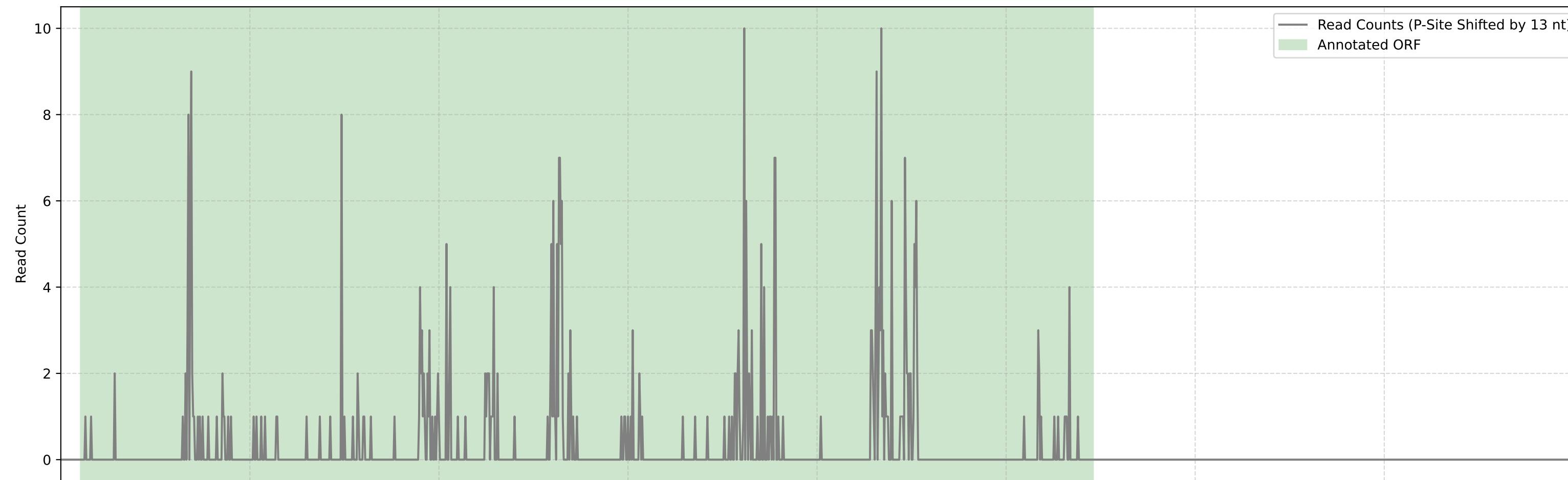


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 54th Percentile (by TPM) Transcript (ENST00000617285.5)  
Total Reads: 1,069 | TPM: 532.15

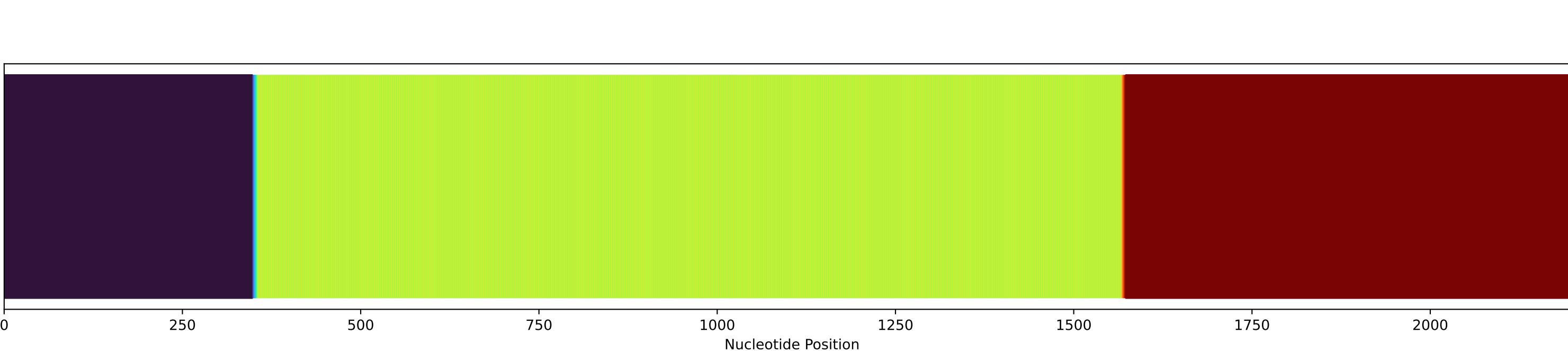
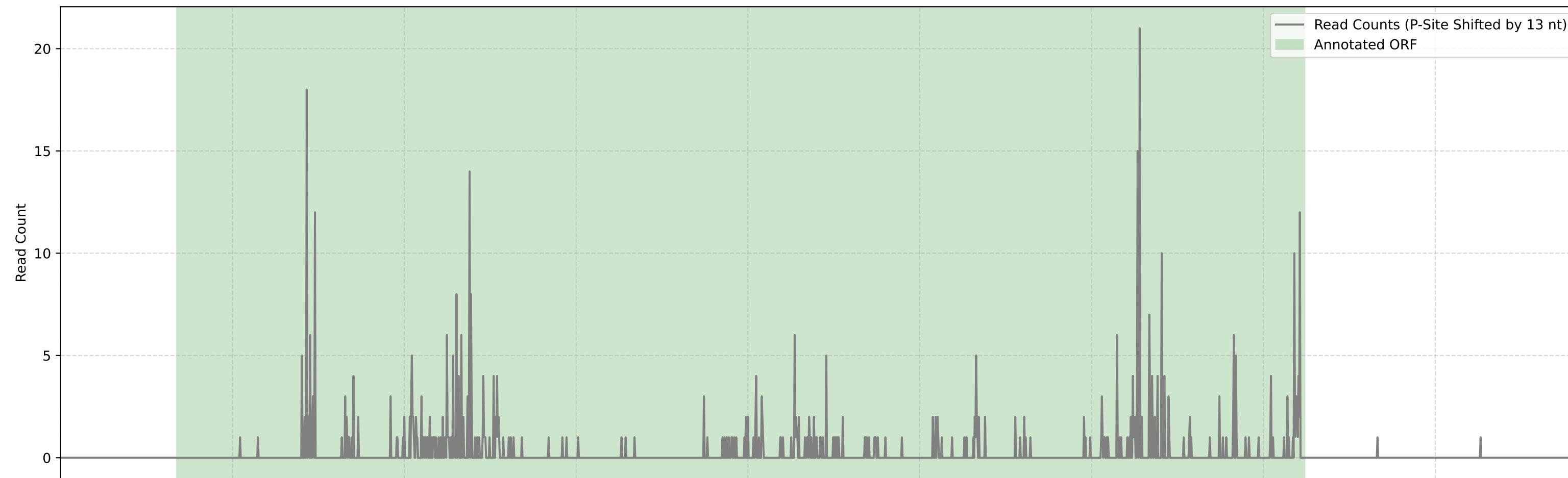


Example: 55th Percentile (by TPM) Transcript (ENST00000303127.12)  
Total Reads: 387 | TPM: 549.85



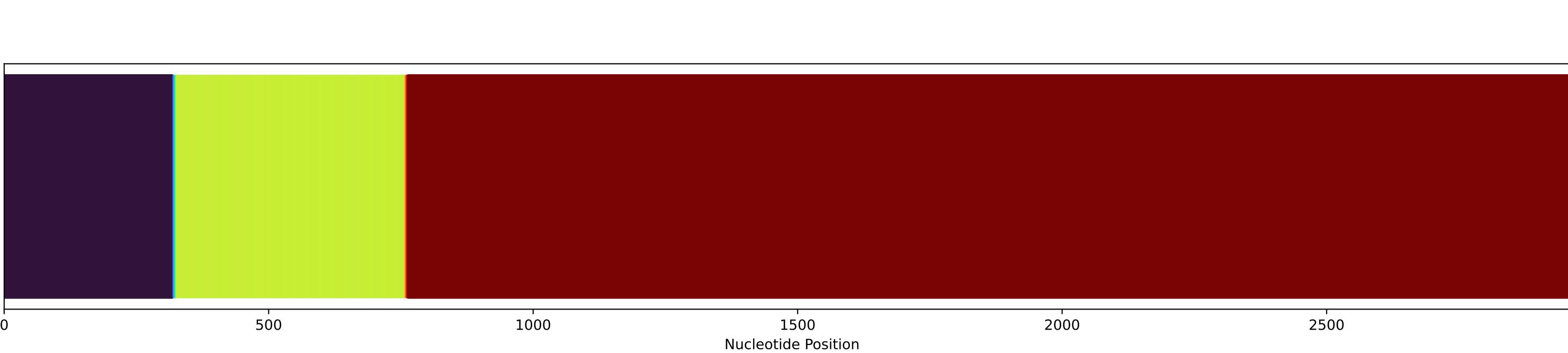
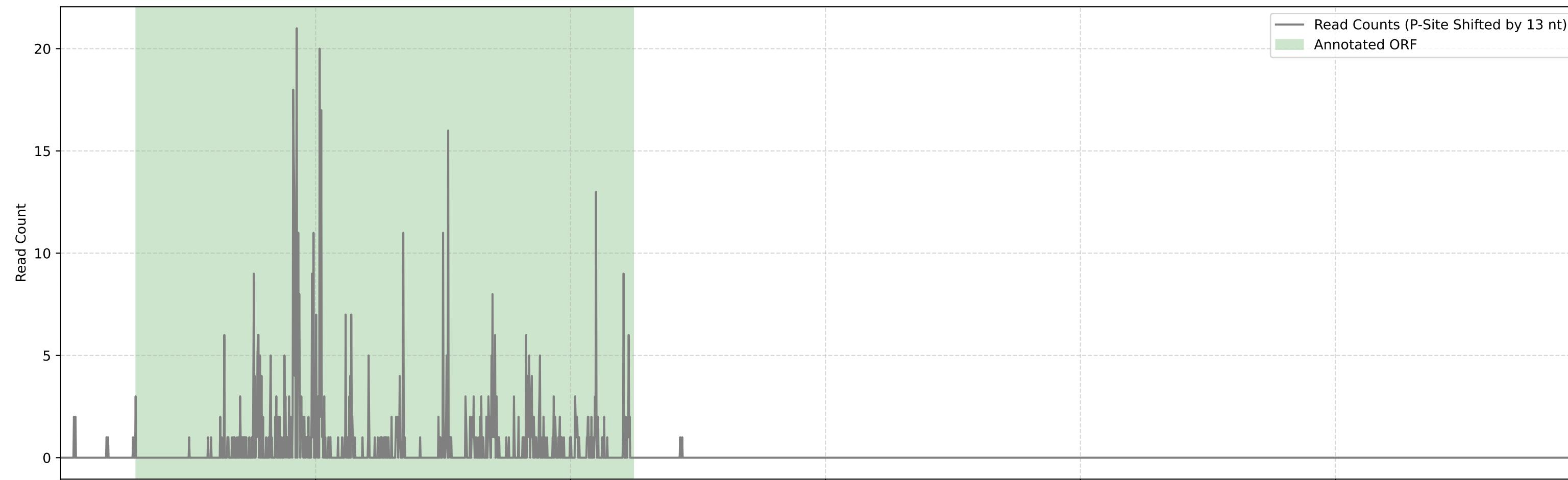
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 56th Percentile (by TPM) Transcript (ENST00000344034.5)  
Total Reads: 544 | TPM: 563.42

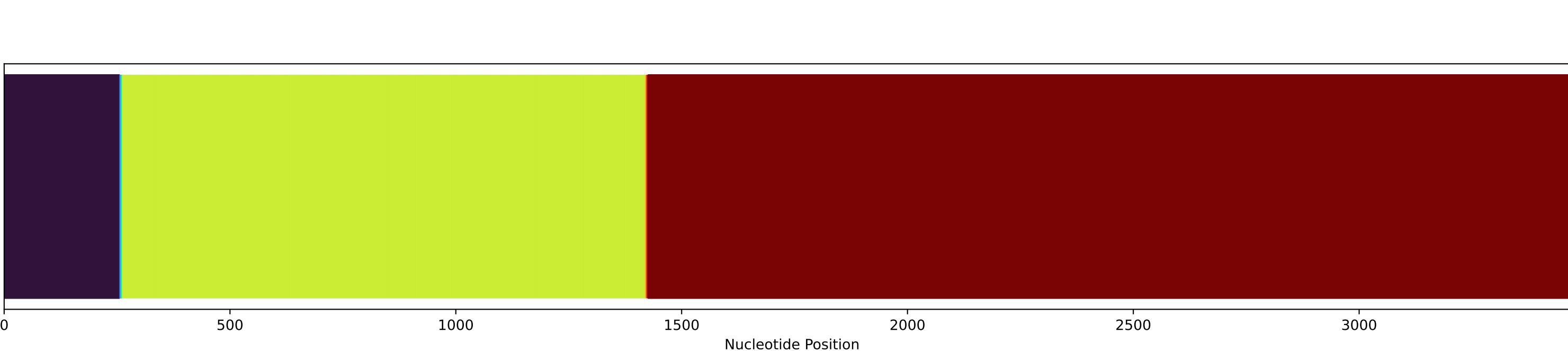
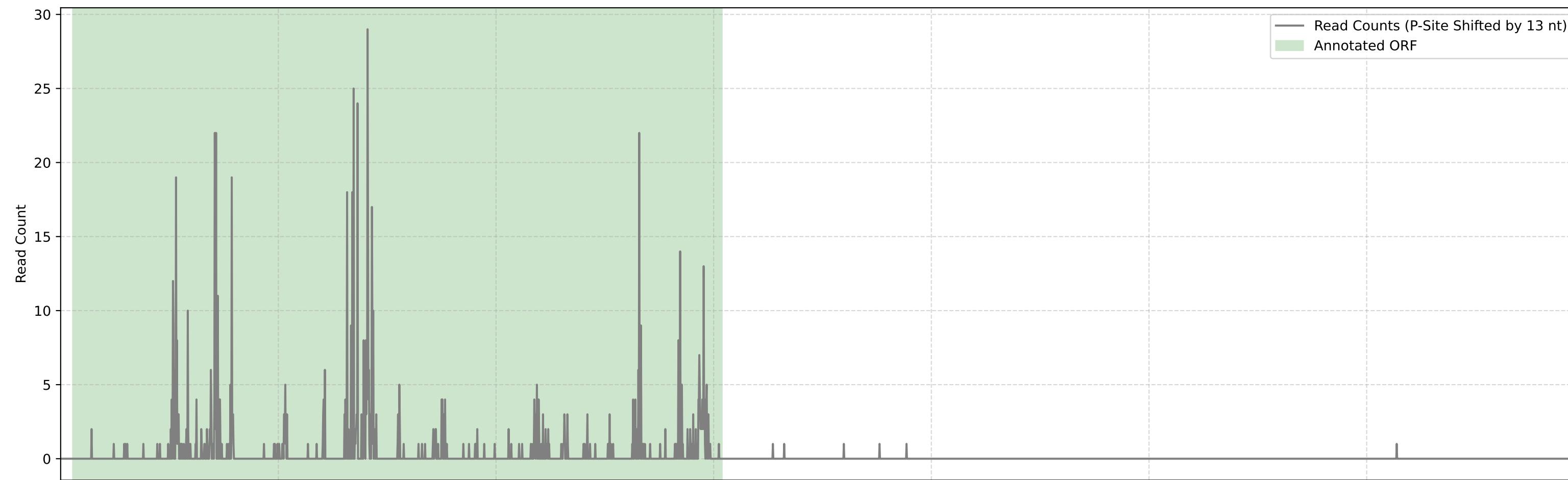


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

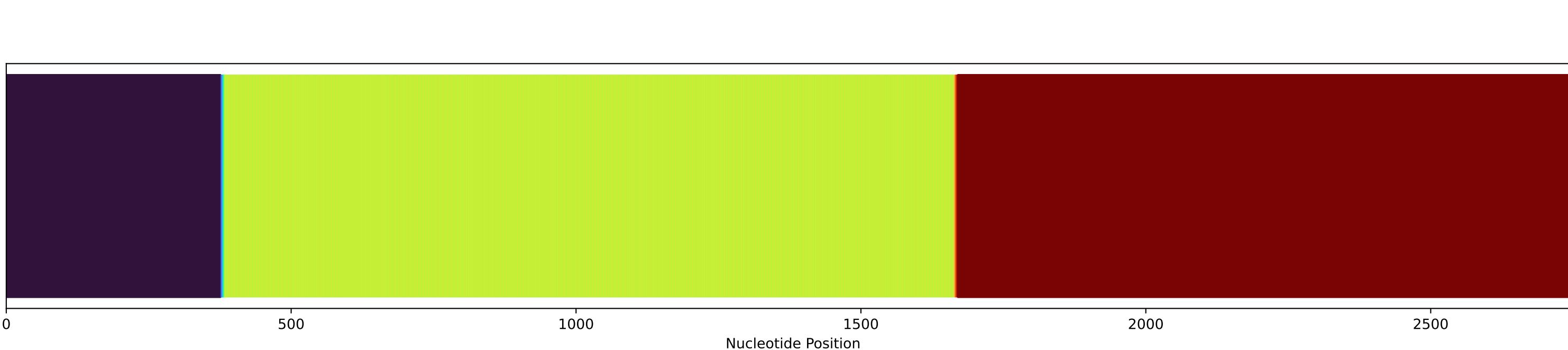
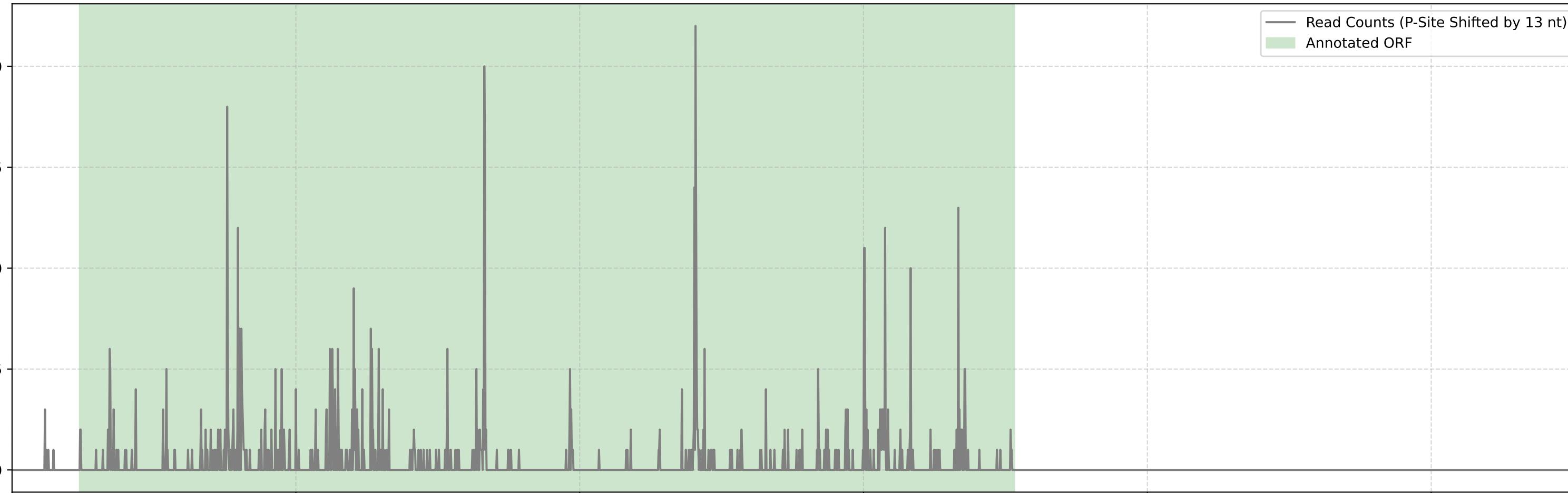
Example: 57th Percentile (by TPM) Transcript (ENST00000321358.12)  
Total Reads: 754 | TPM: 579.33



Example: 58th Percentile (by TPM) Transcript (ENST00000313010.8)  
Total Reads: 902 | TPM: 591.74

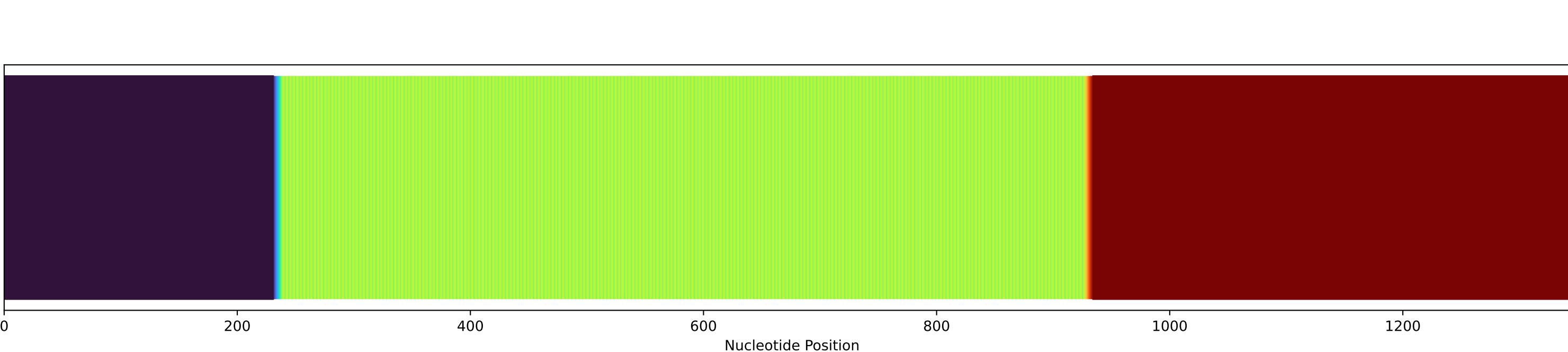
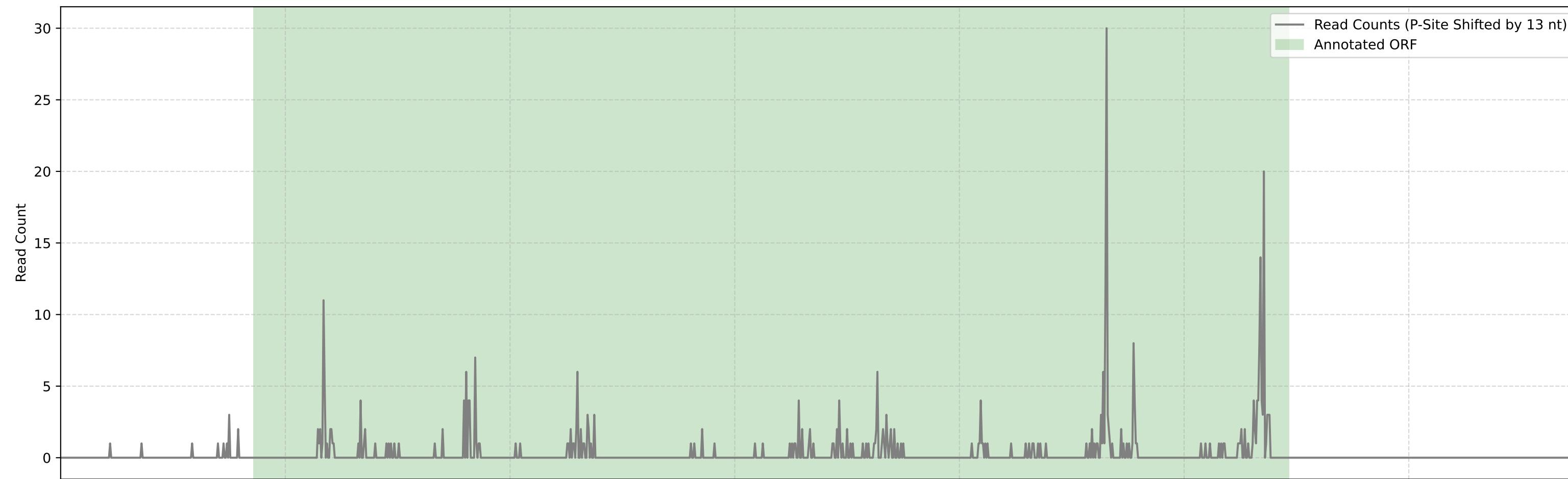


Example: 59th Percentile (by TPM) Transcript (ENST00000256854.10)  
Total Reads: 740 | TPM: 613.25



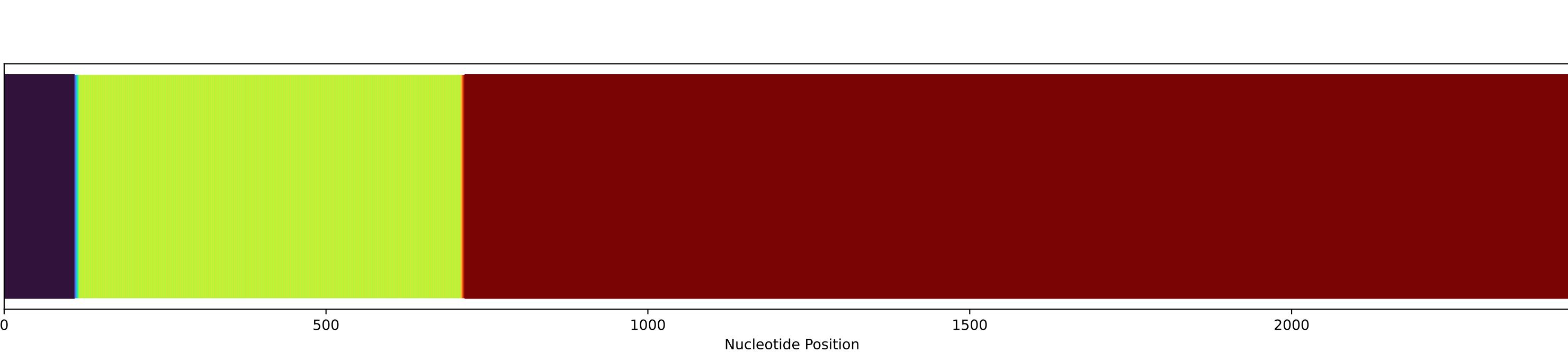
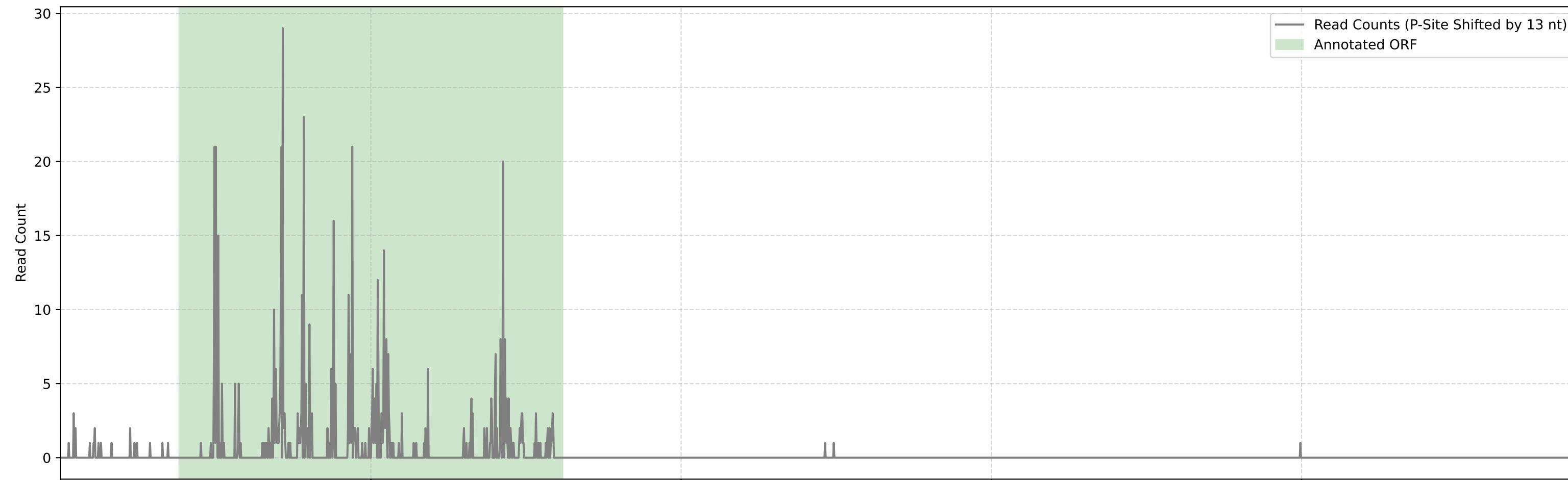
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 60th Percentile (by TPM) Transcript (ENST00000236051.3)  
Total Reads: 374 | TPM: 633.17

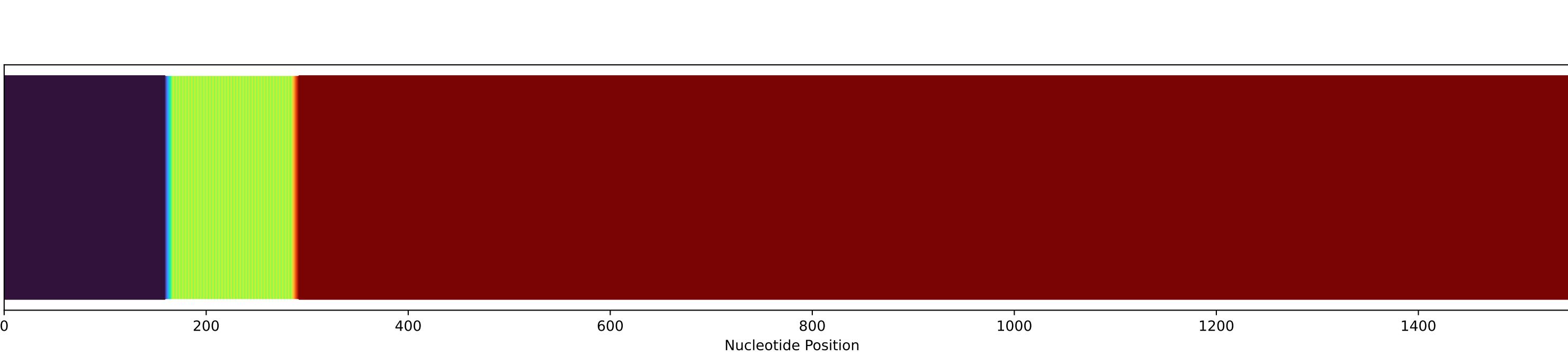
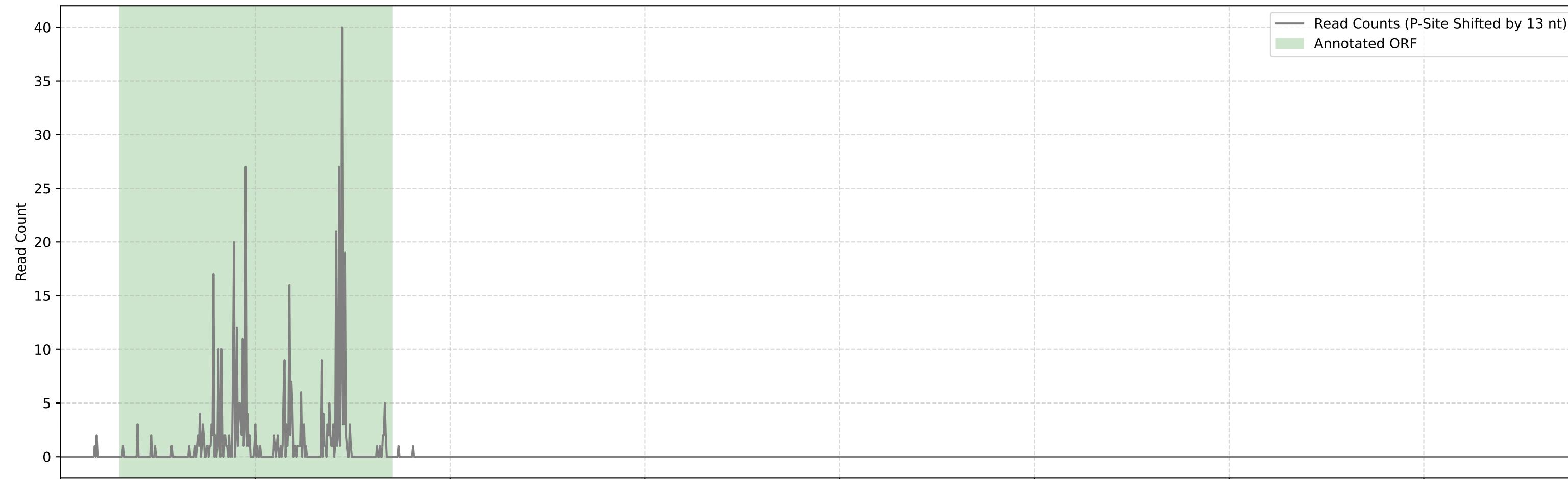


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 61th Percentile (by TPM) Transcript (ENST00000409784.8)  
Total Reads: 697 | TPM: 651.70

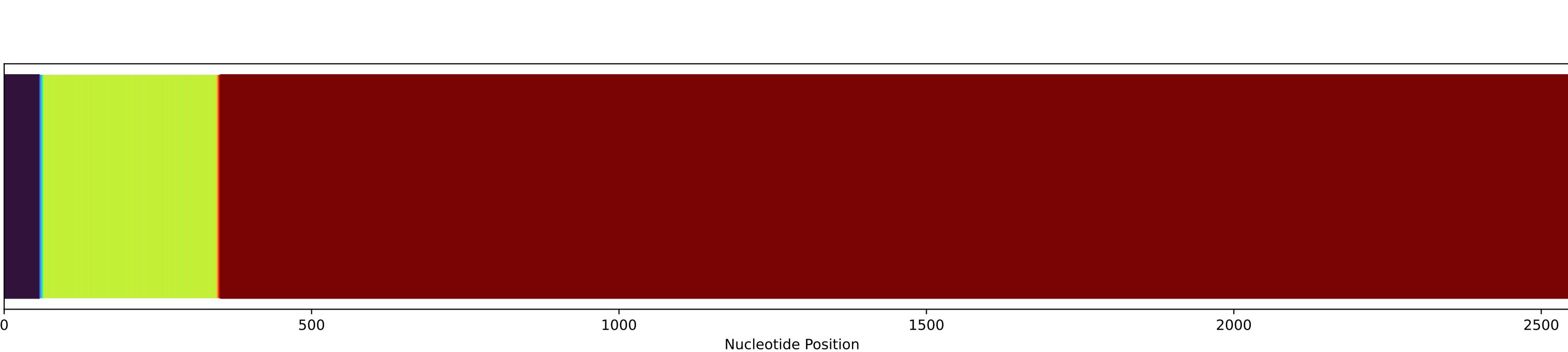
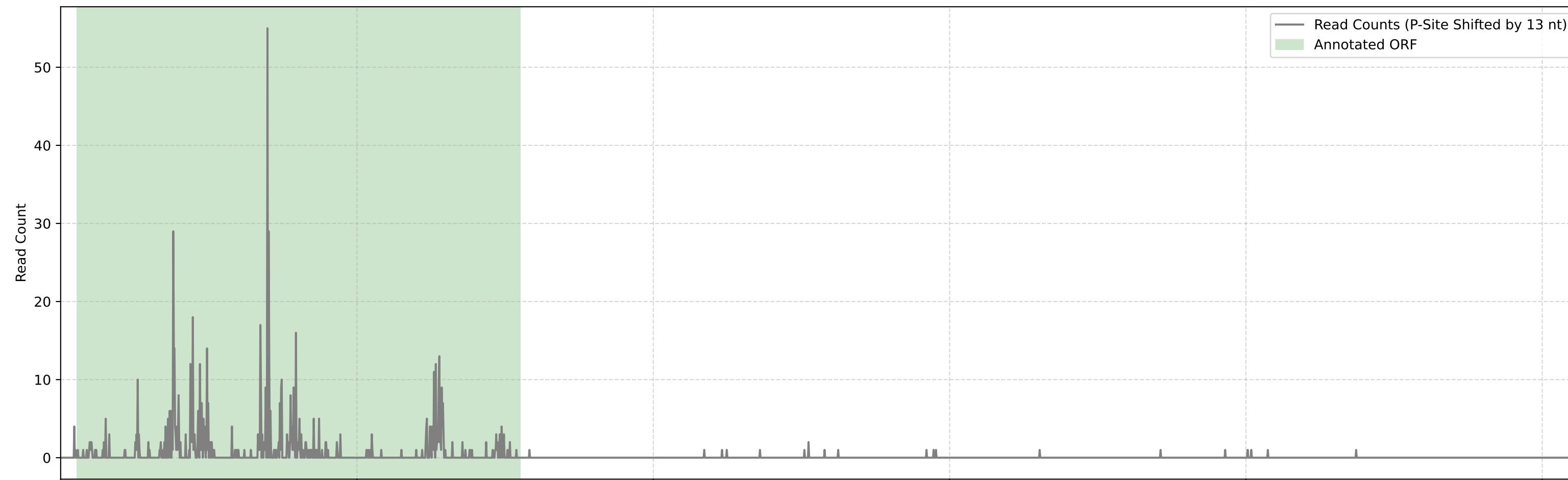


Example: 62th Percentile (by TPM) Transcript (ENST00000414487.7)  
Total Reads: 461 | TPM: 676.40

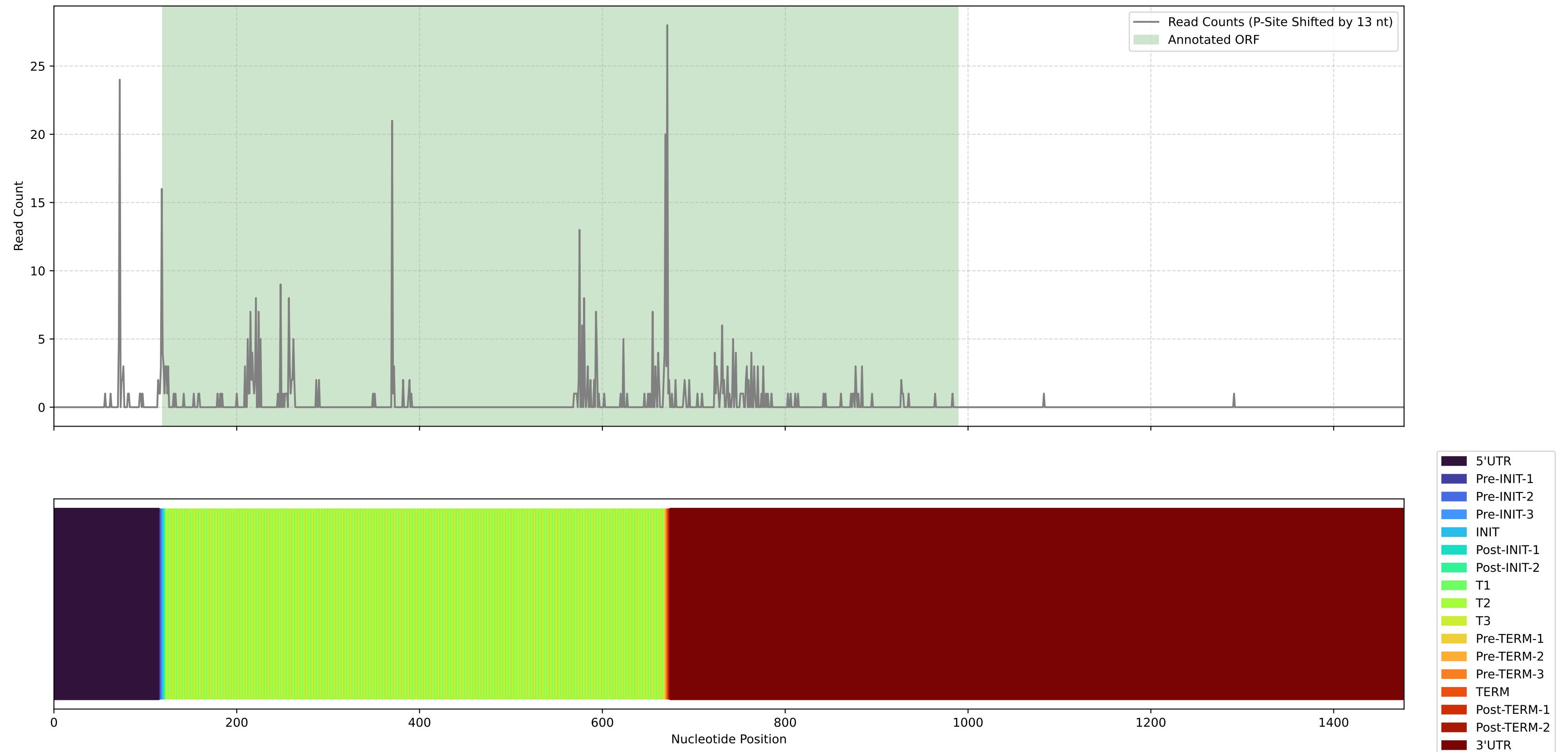


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

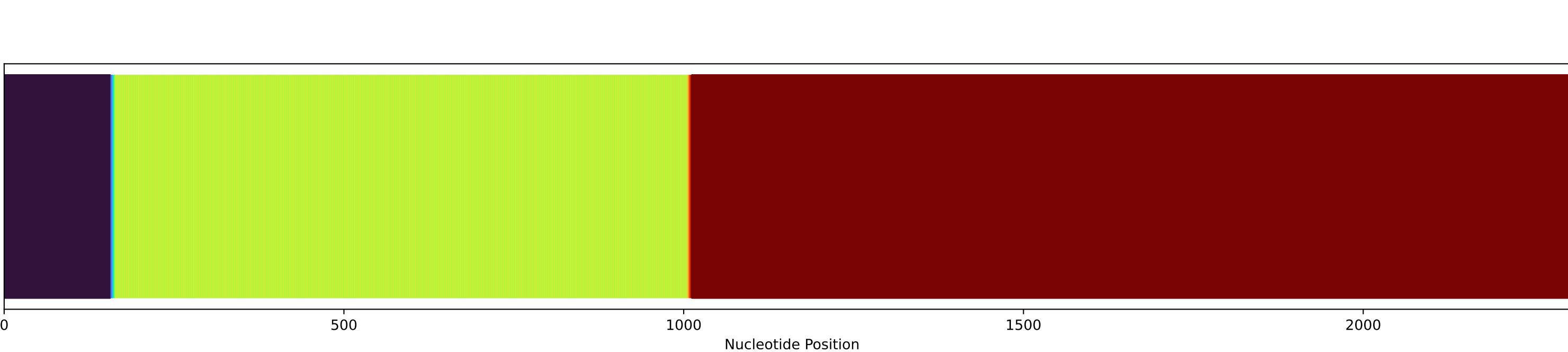
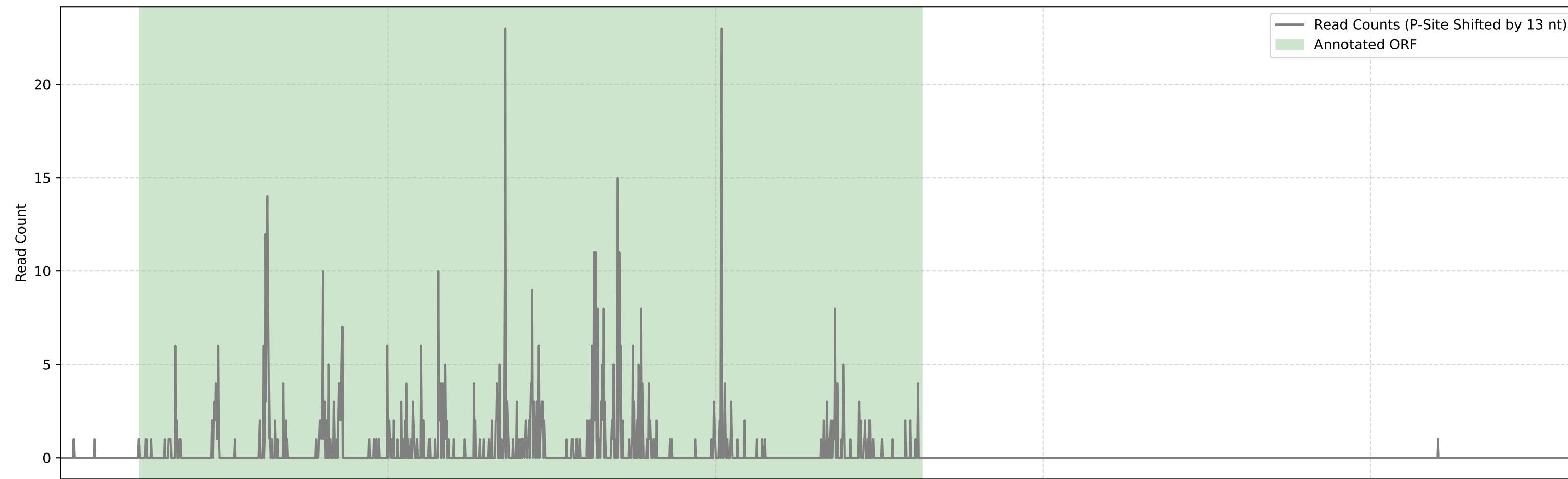
Example: 63th Percentile (by TPM) Transcript (ENST00000265753.13)  
Total Reads: 784 | TPM: 700.15



Example: 64th Percentile (by TPM) Transcript (ENST00000361505.10)  
Total Reads: 465 | TPM: 720.61

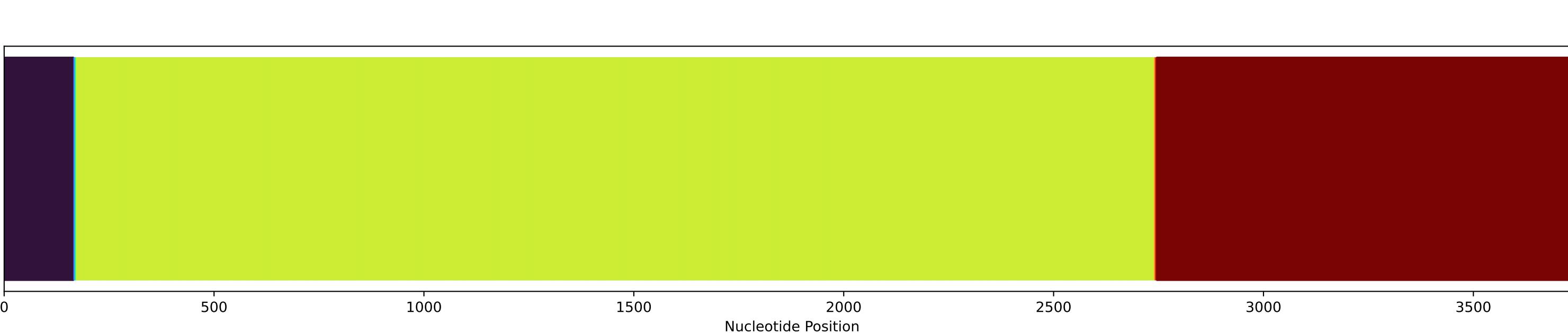
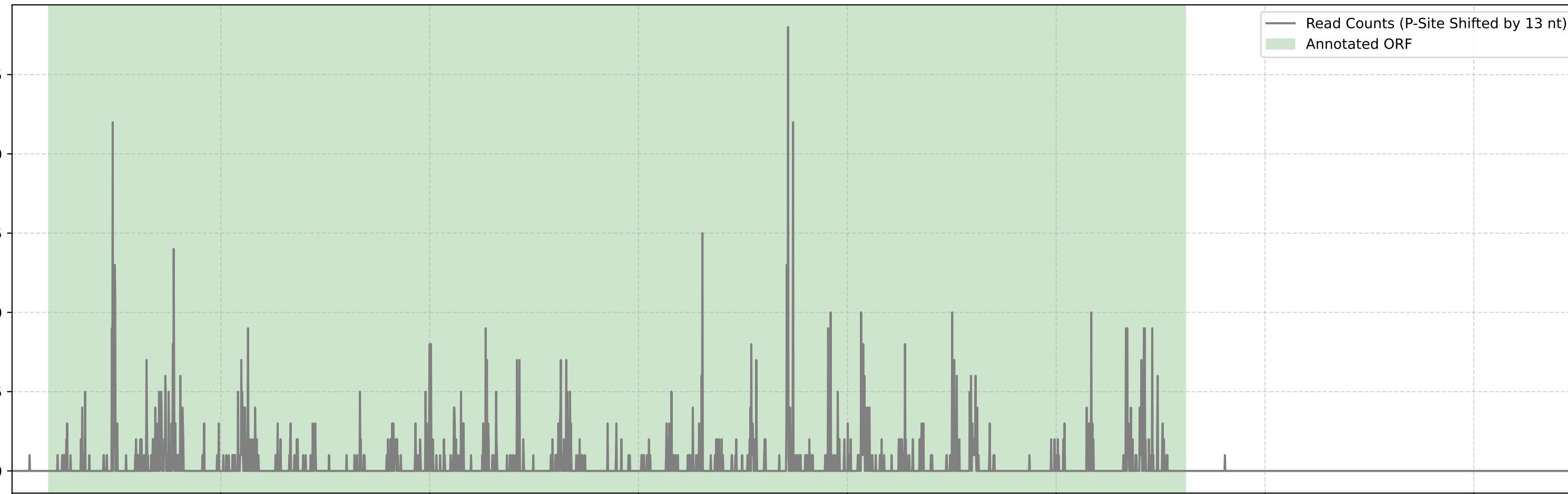


Example: 65th Percentile (by TPM) Transcript (ENST00000330899.5)  
Total Reads: 761 | TPM: 751.12



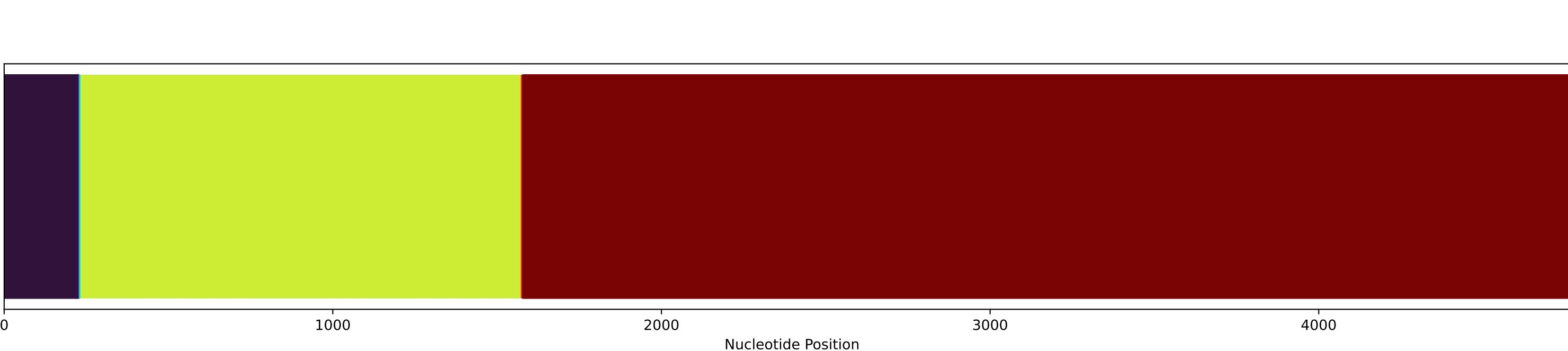
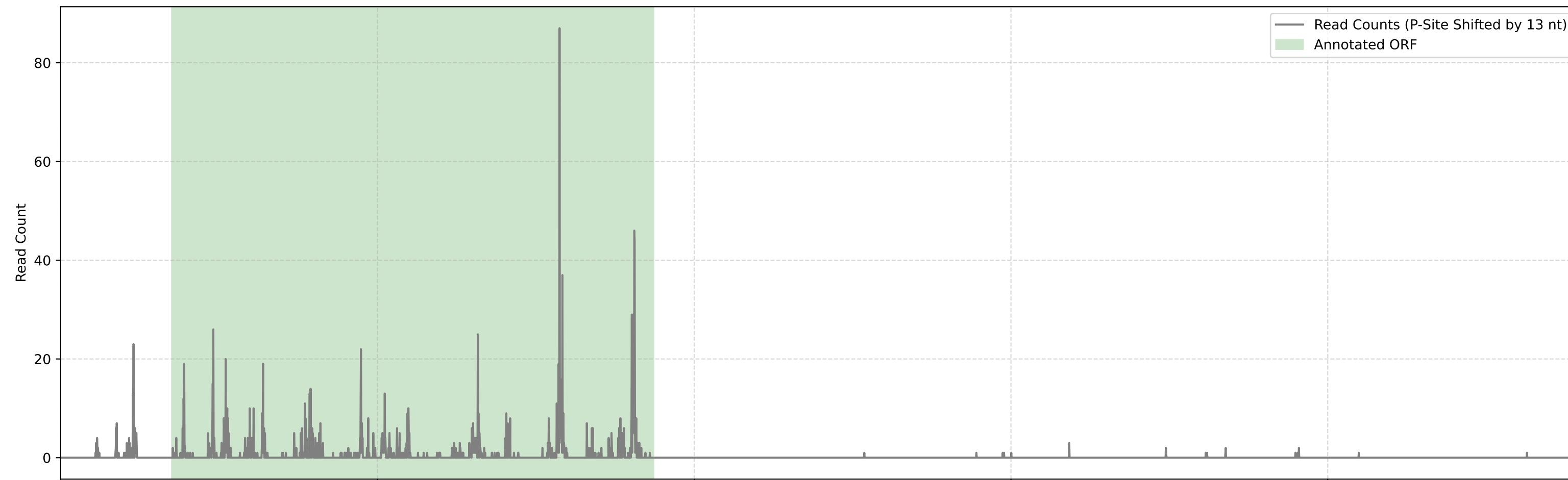
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 66th Percentile (by TPM) Transcript (ENST00000302763.12)  
Total Reads: 1,279 | TPM: 779.83

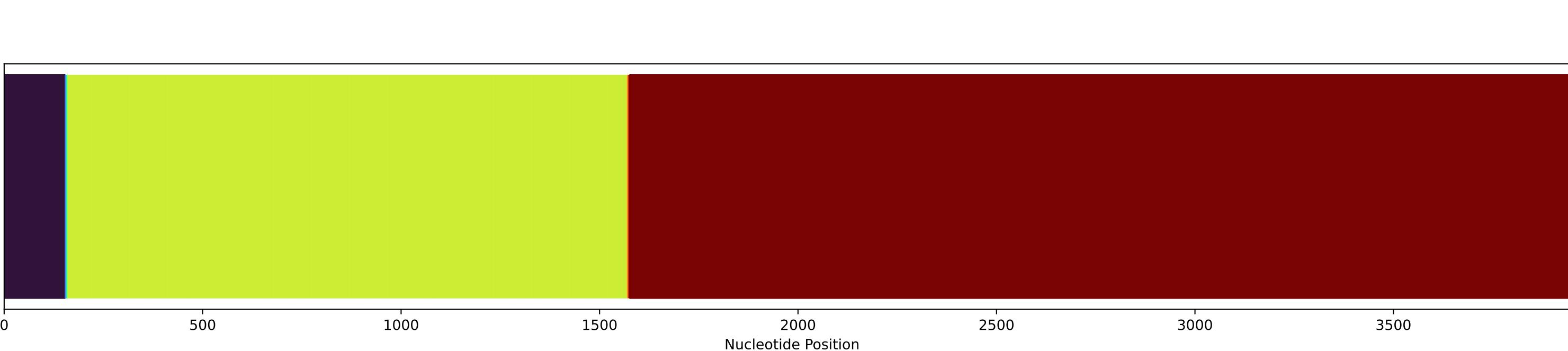
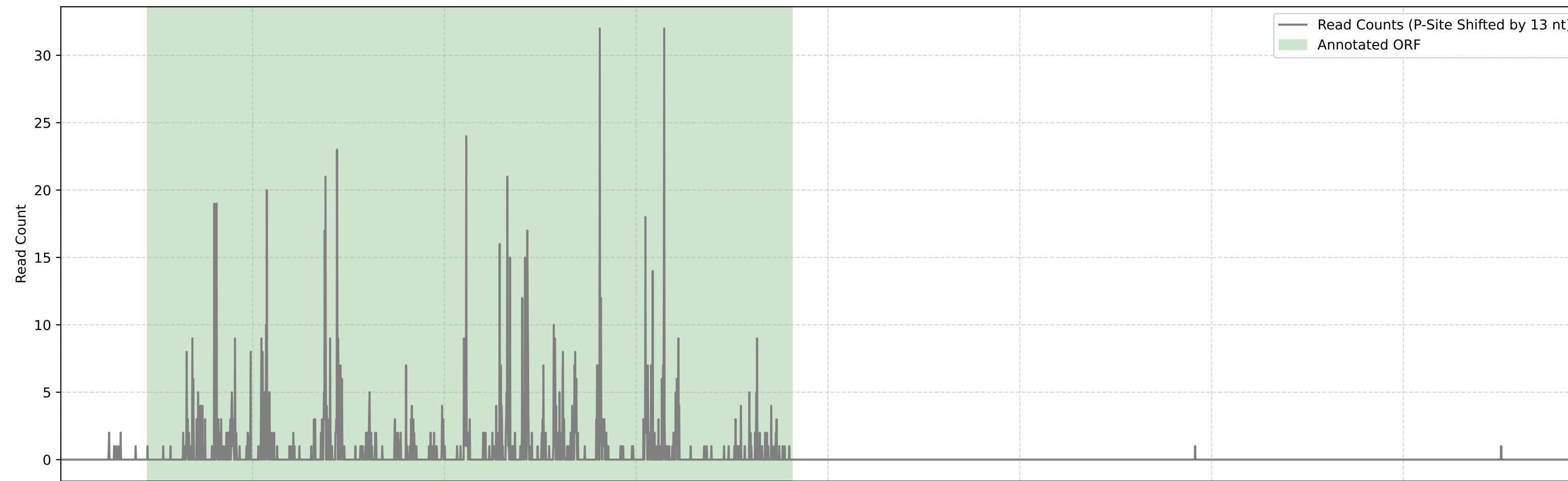


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

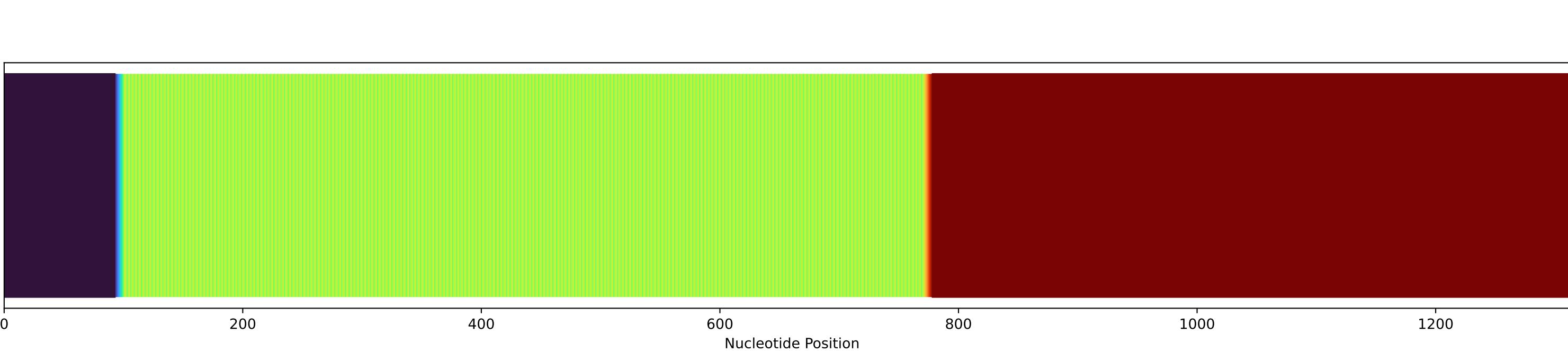
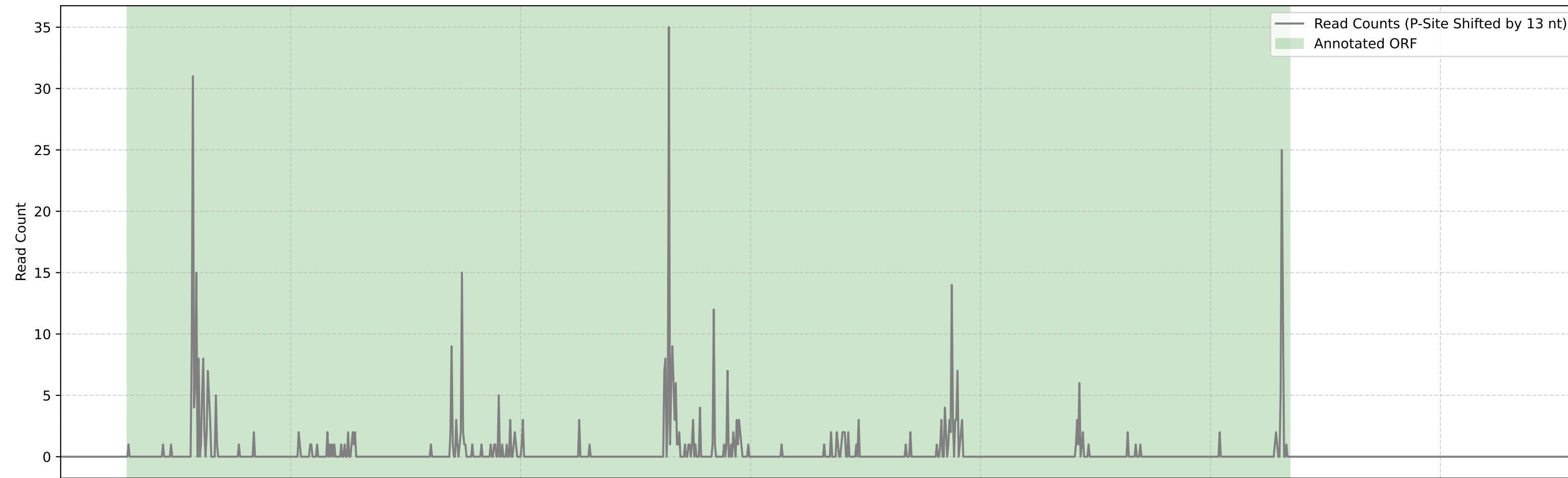
Example: 67th Percentile (by TPM) Transcript (ENST00000256689.10)  
Total Reads: 1,685 | TPM: 804.34



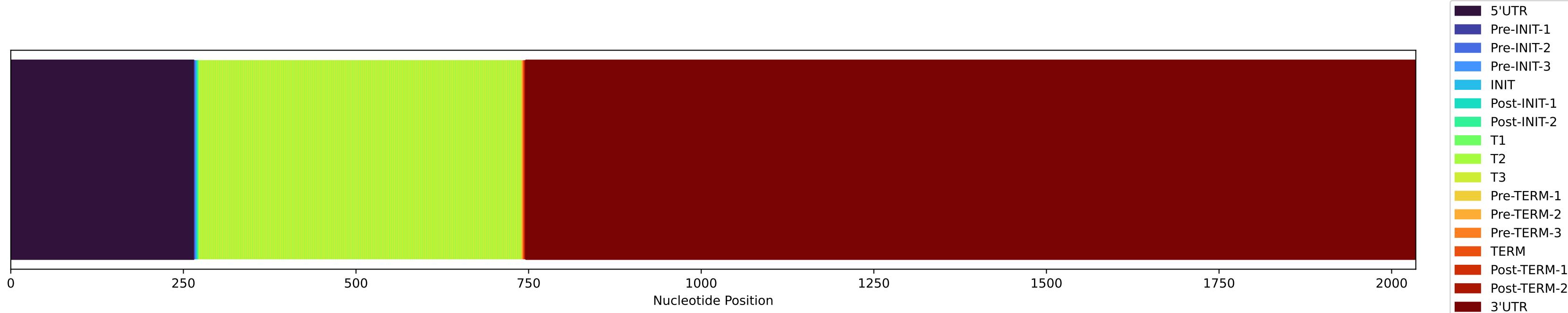
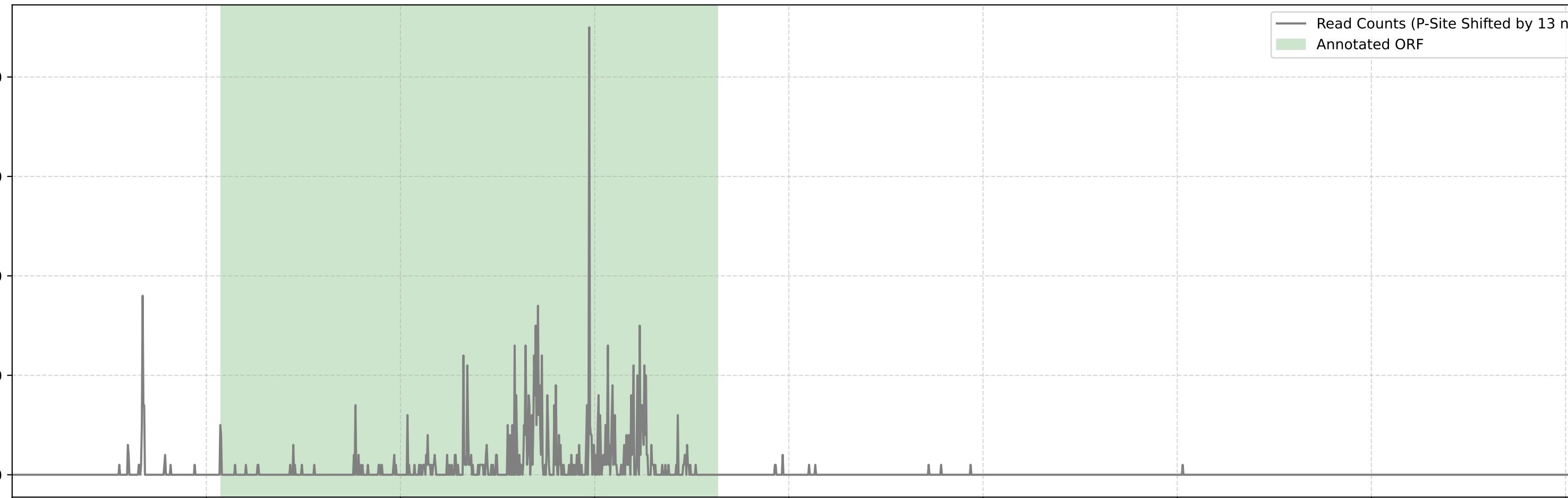
Example: 68th Percentile (by TPM) Transcript (ENST00000269195.6)  
Total Reads: 1,421 | TPM: 819.27



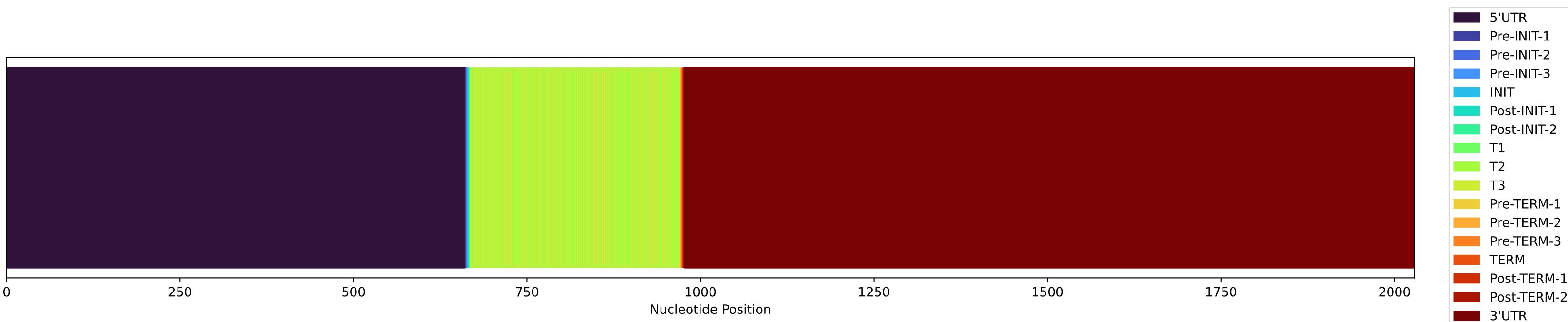
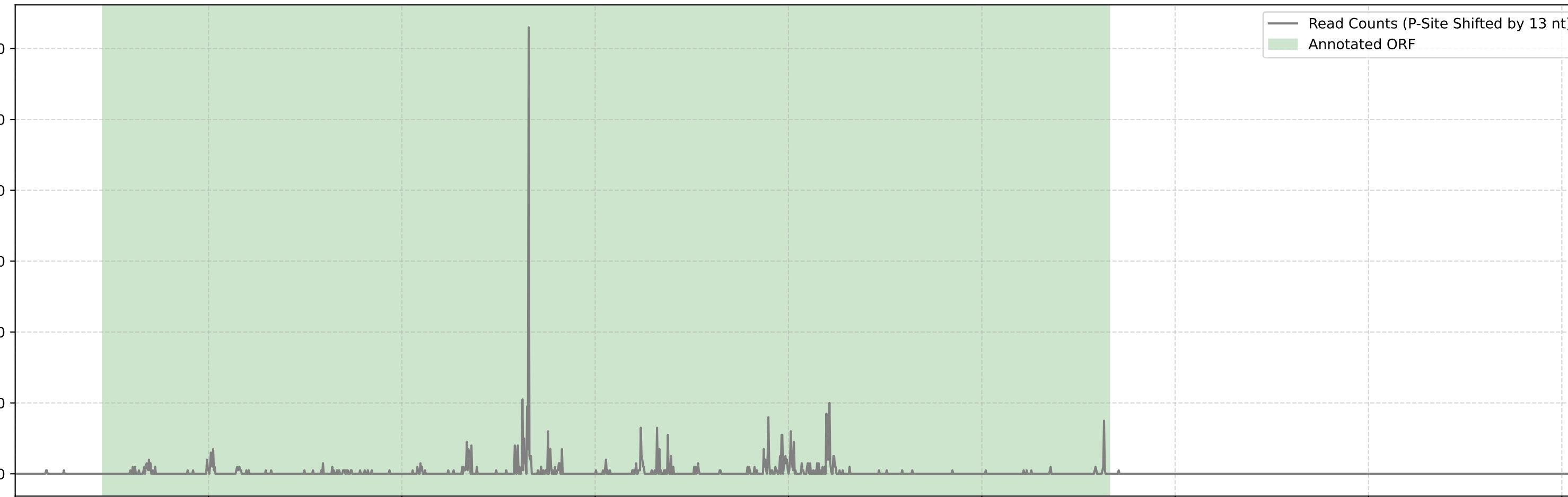
Example: 69th Percentile (by TPM) Transcript (ENST00000281141.9)  
Total Reads: 487 | TPM: 843.82



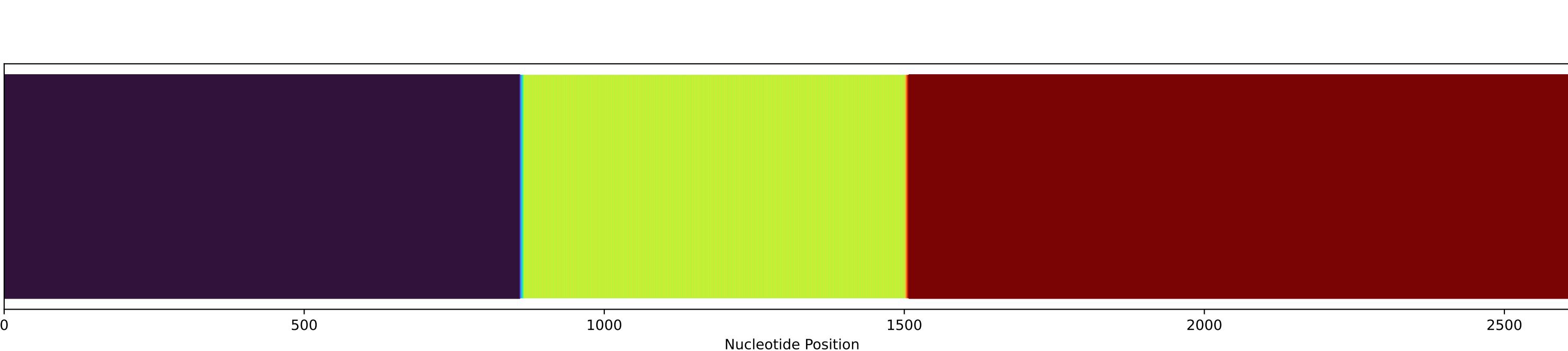
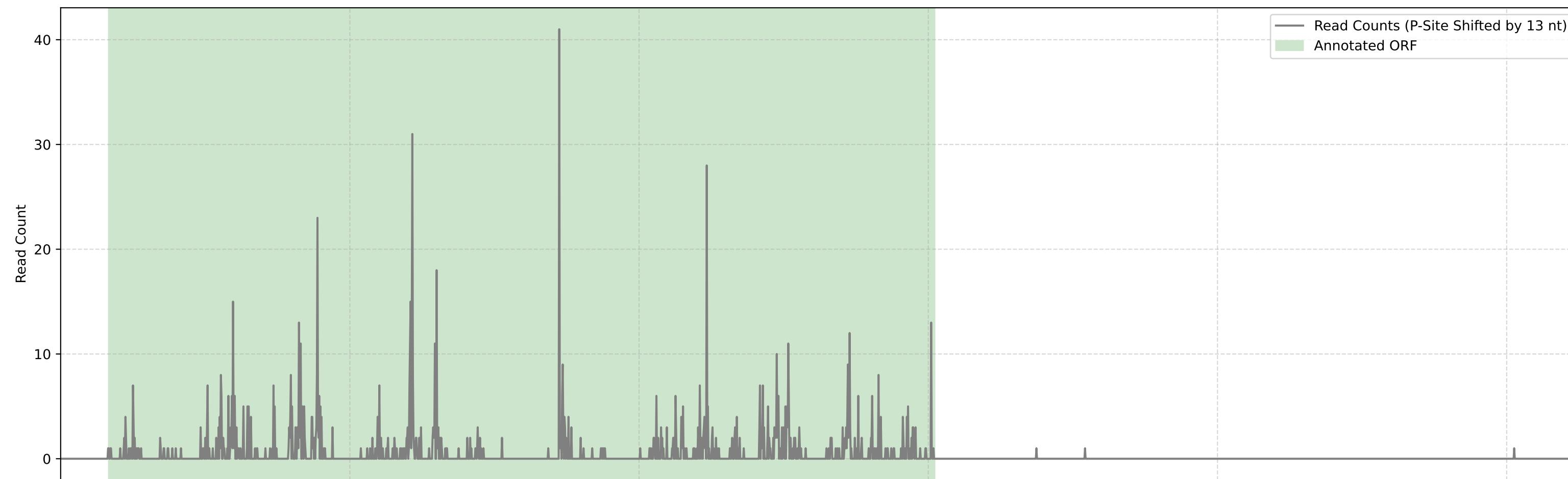
Example: 70th Percentile (by TPM) Transcript (ENST00000379375.6)  
Total Reads: 780 | TPM: 877.32



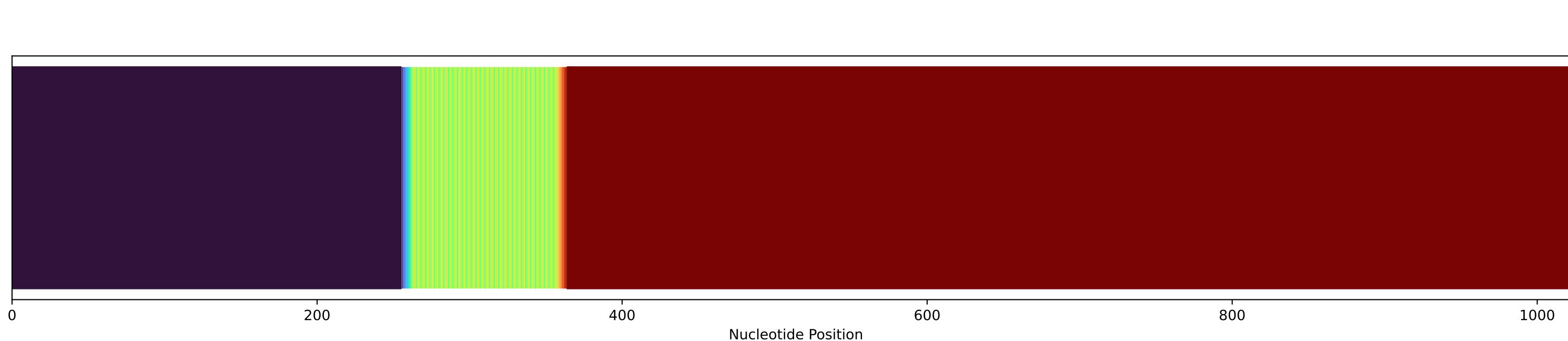
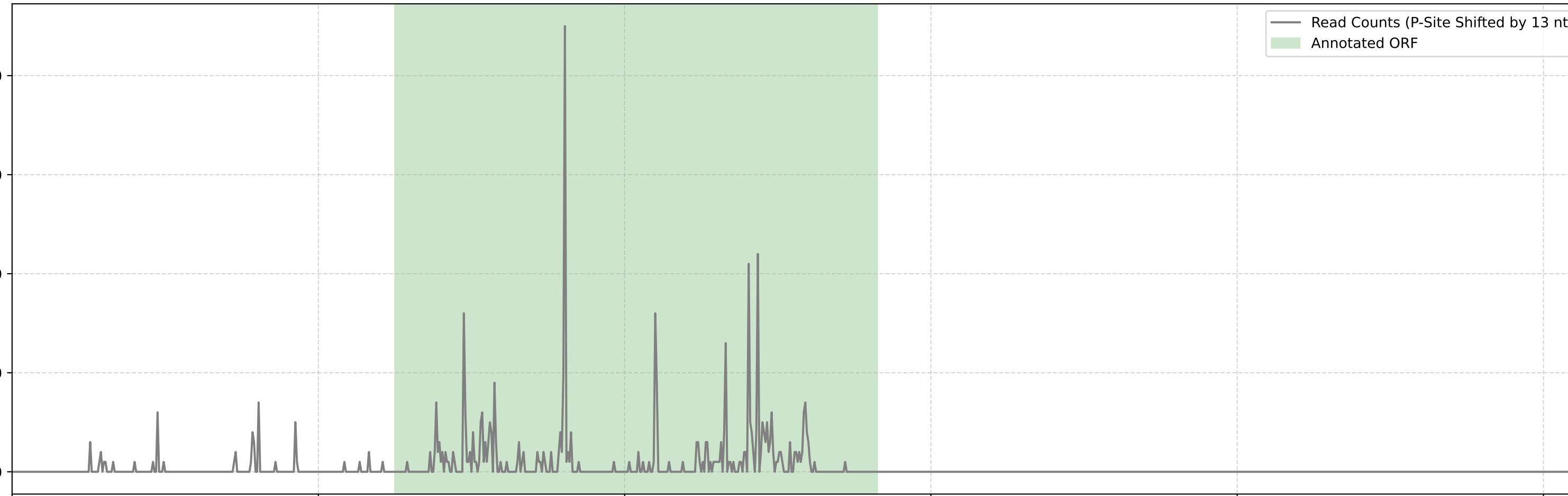
Example: 71th Percentile (by TPM) Transcript (ENST00000256442.10)  
Total Reads: 813 | TPM: 917.14



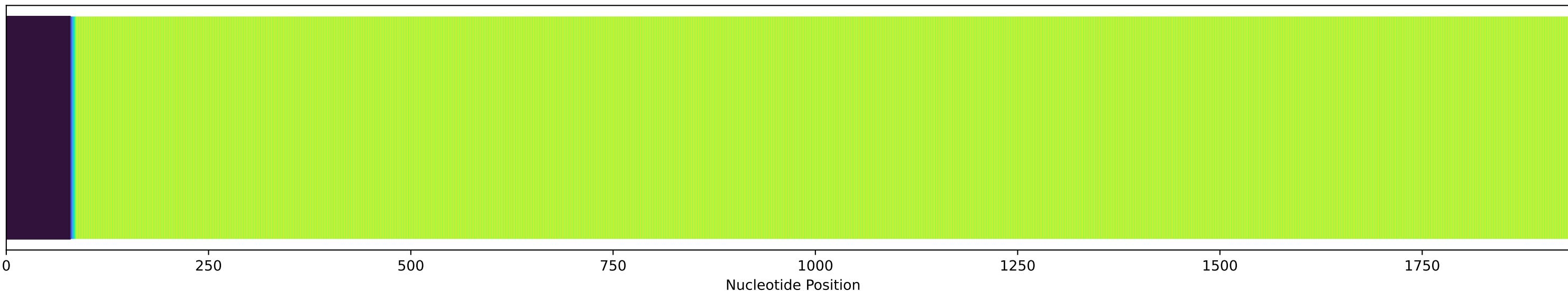
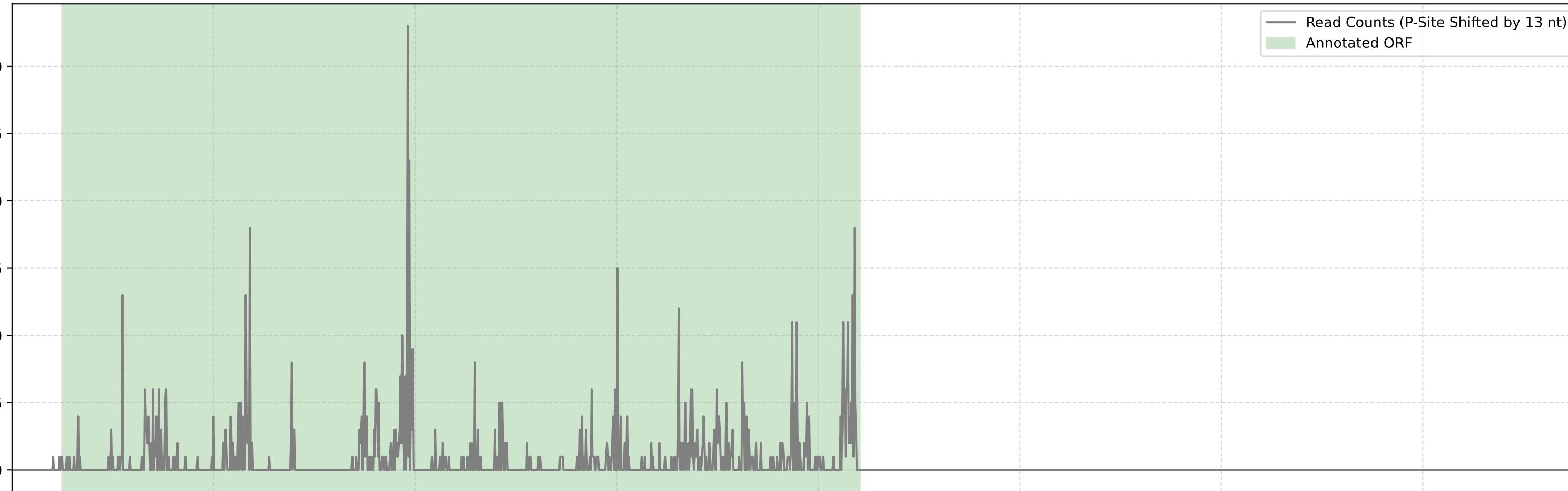
Example: 72th Percentile (by TPM) Transcript (ENST00000372805.8)  
Total Reads: 1,089 | TPM: 949.20



Example: 73th Percentile (by TPM) Transcript (ENST00000372661.6)  
Total Reads: 454 | TPM: 1010.85

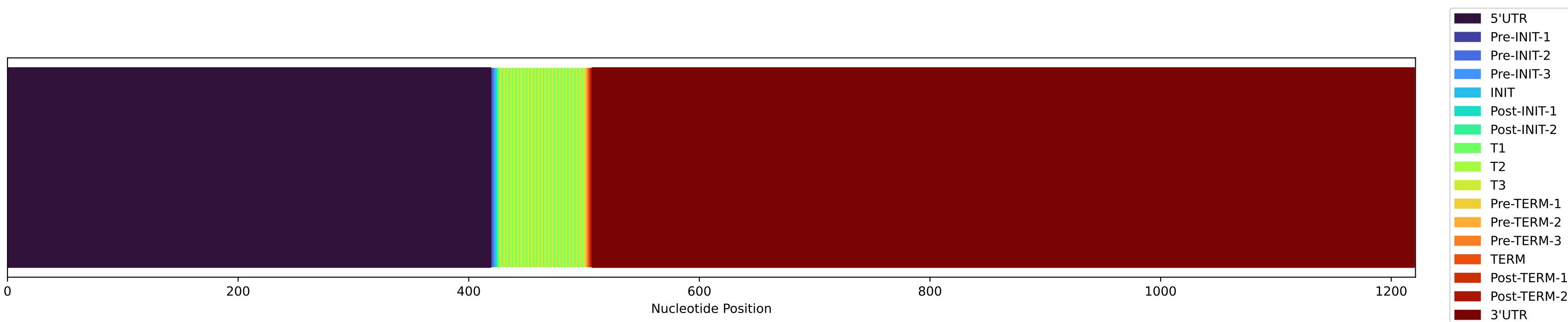
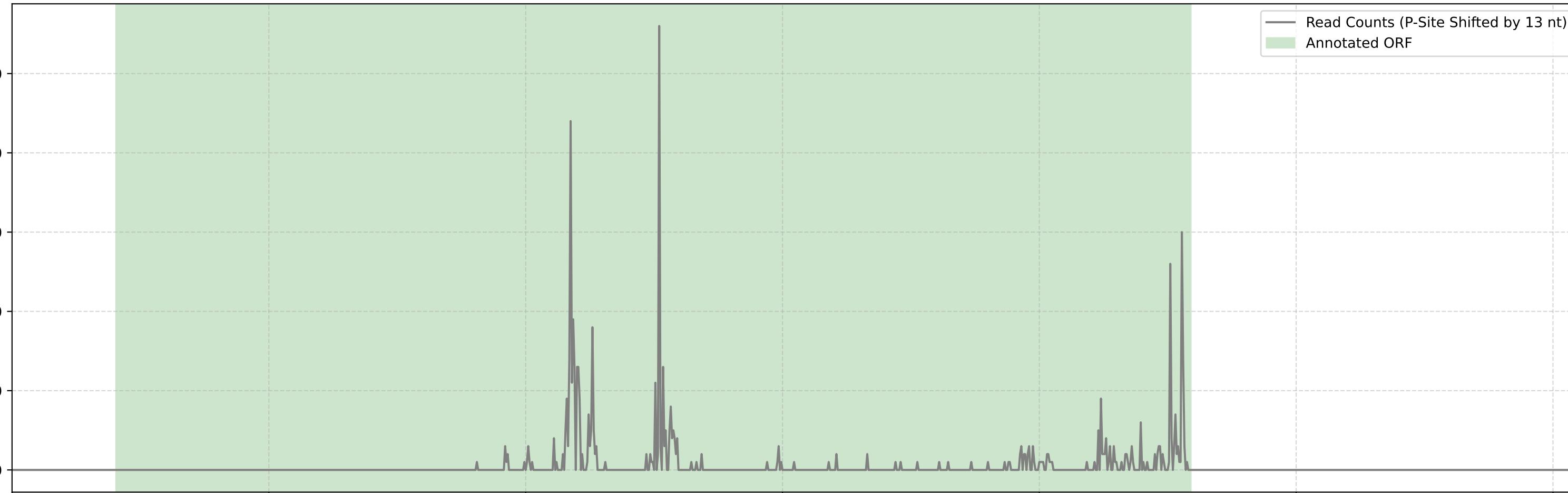


Example: 74th Percentile (by TPM) Transcript (ENST00000255945.4)  
Total Reads: 886 | TPM: 1042.65

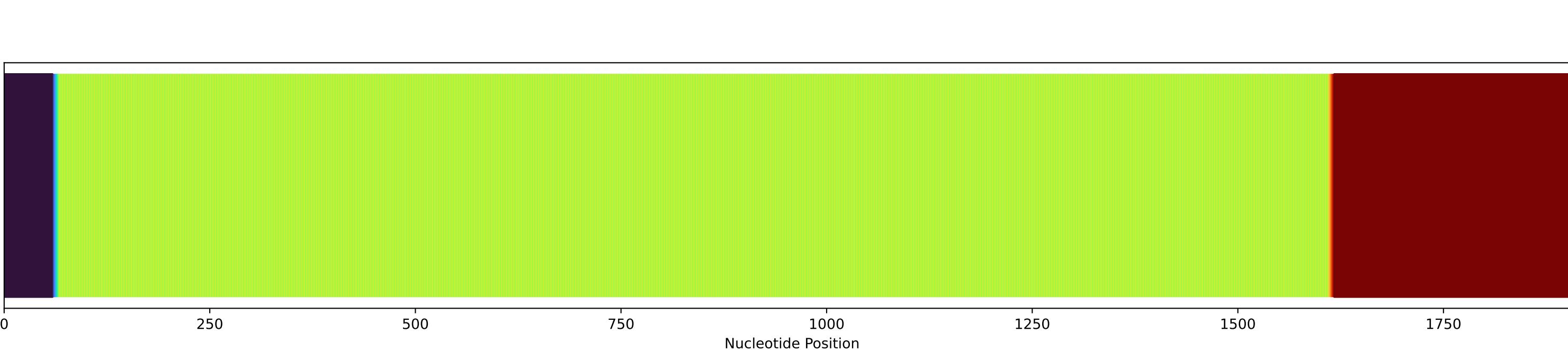
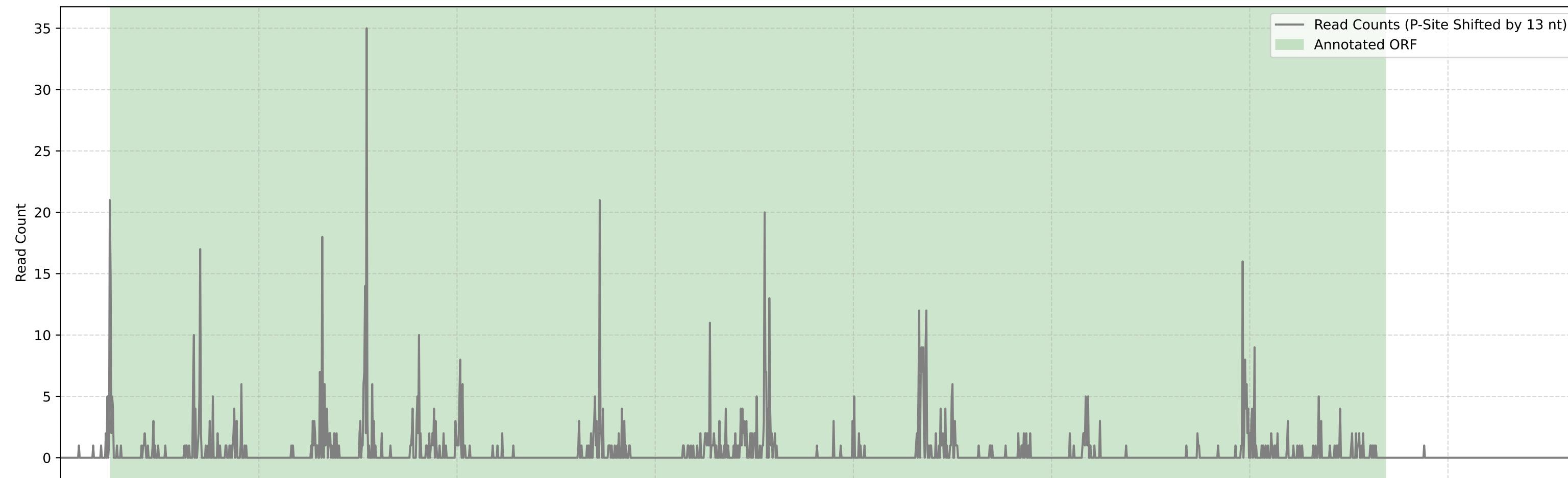


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

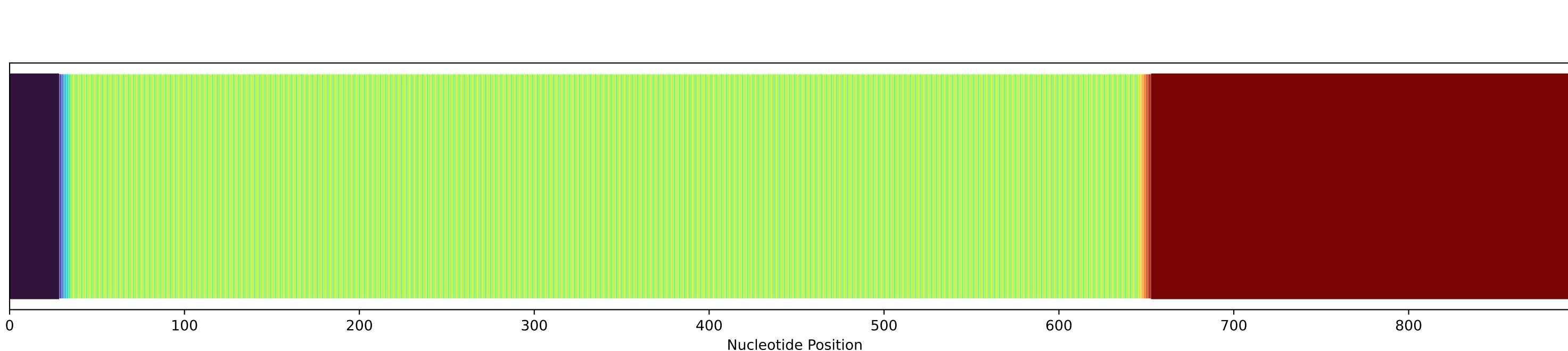
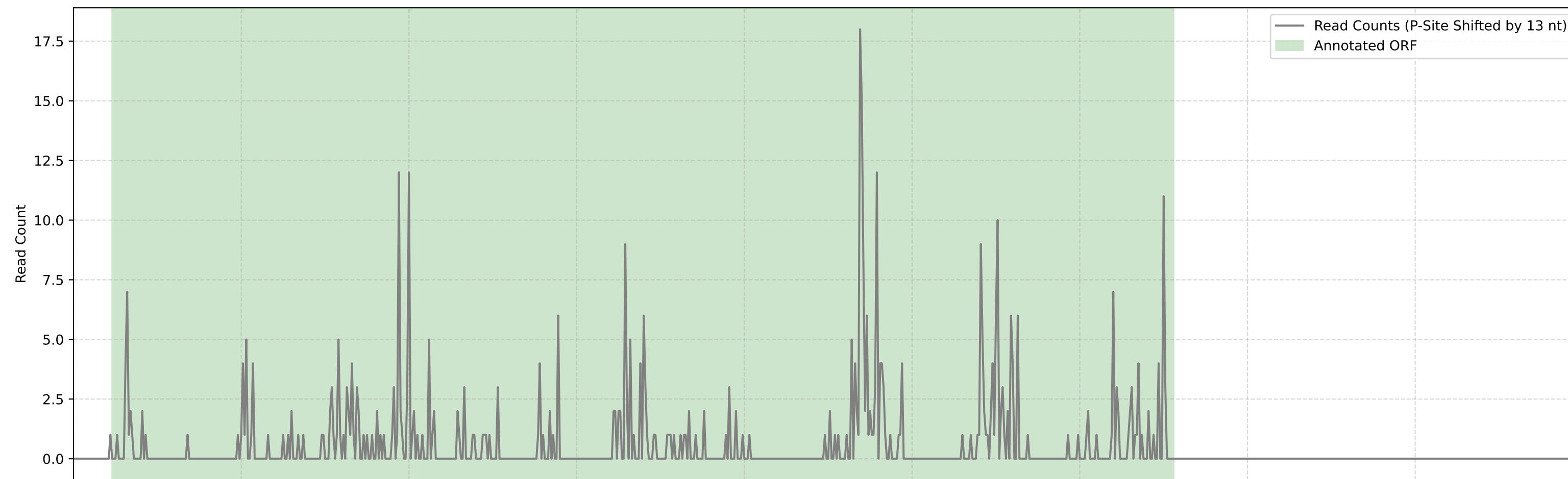
Example: 75th Percentile (by TPM) Transcript (ENST00000430524.6)  
Total Reads: 570 | TPM: 1068.53



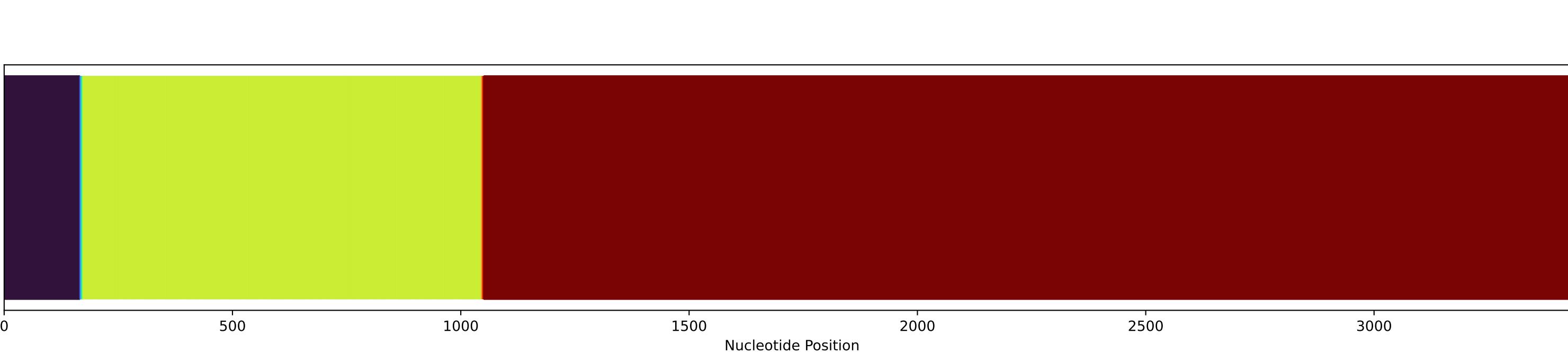
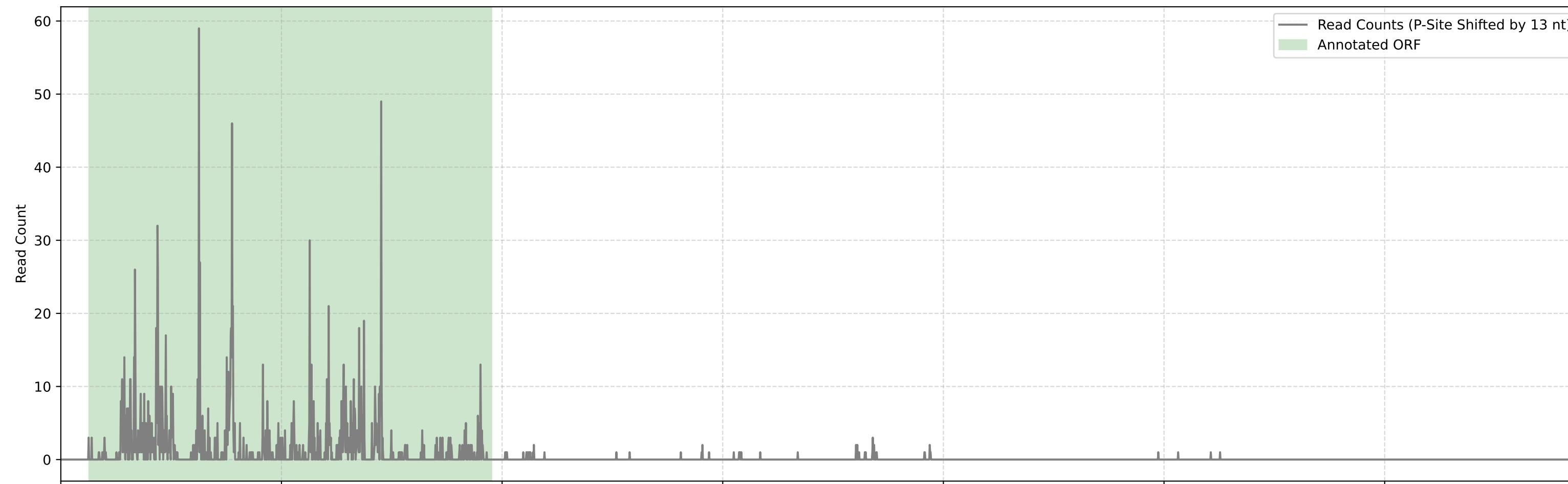
Example: 76th Percentile (by TPM) Transcript (ENST00000299300.11)  
Total Reads: 939 | TPM: 1121.75



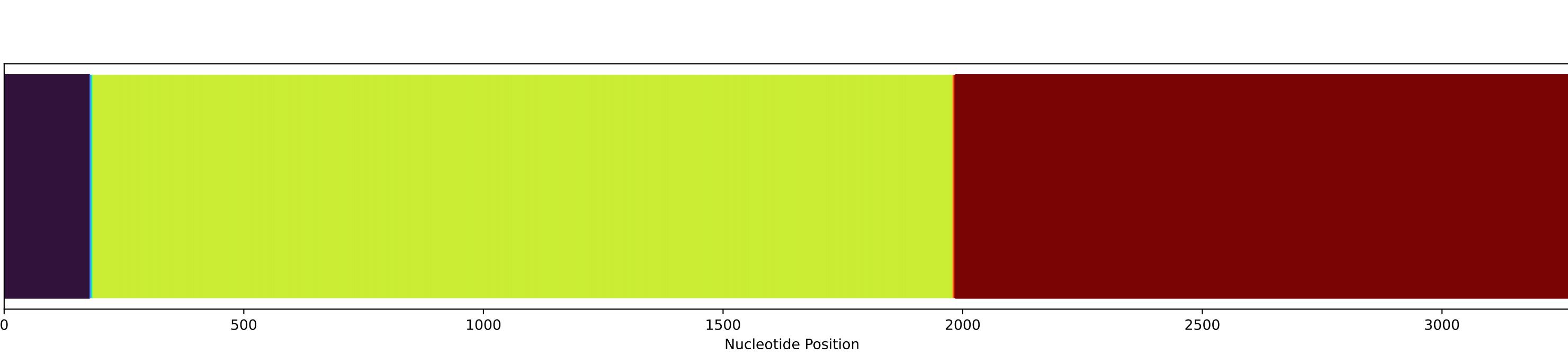
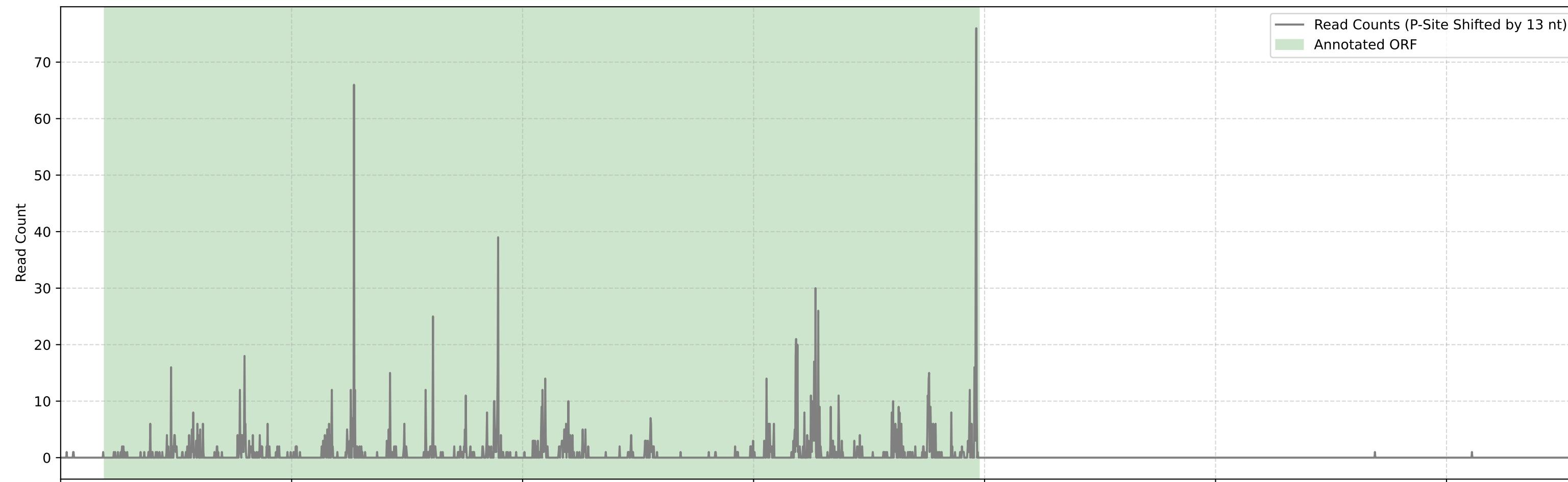
Example: 77th Percentile (by TPM) Transcript (ENST00000336133.8)  
Total Reads: 452 | TPM: 1152.09



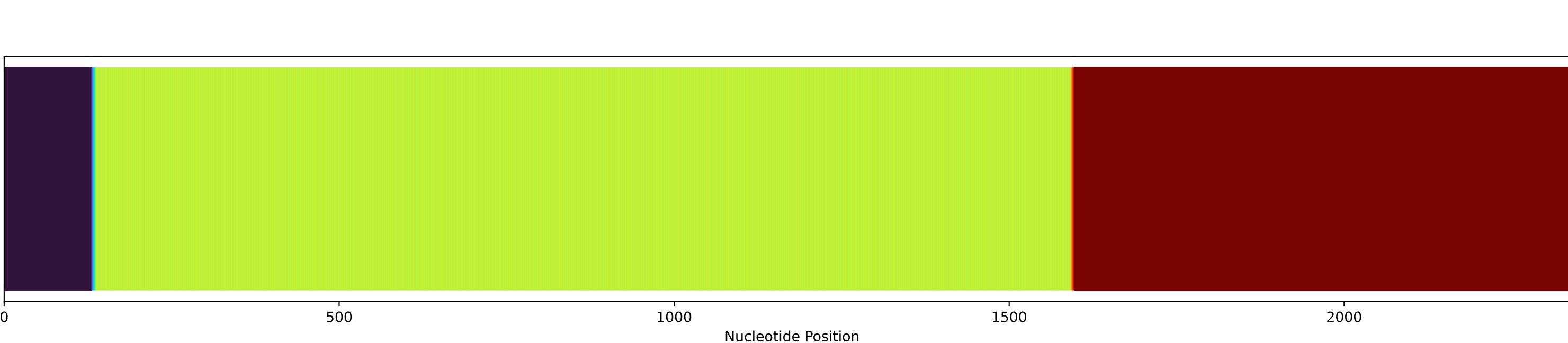
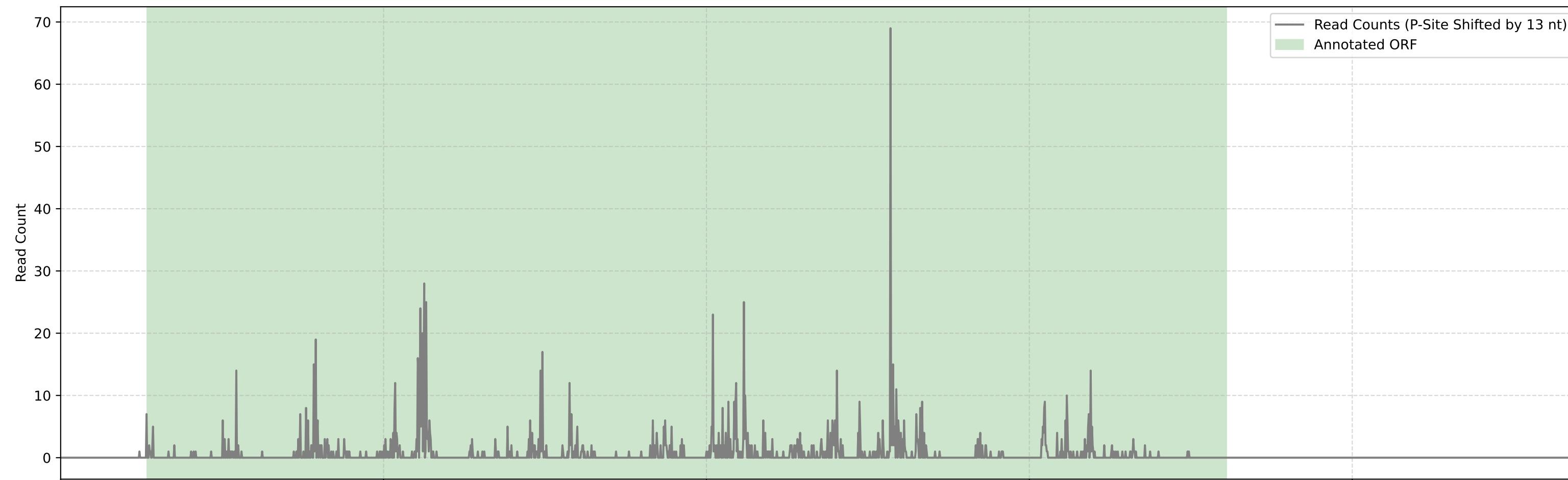
Example: 78th Percentile (by TPM) Transcript (ENST00000231061.9)  
Total Reads: 1,809 | TPM: 1199.83



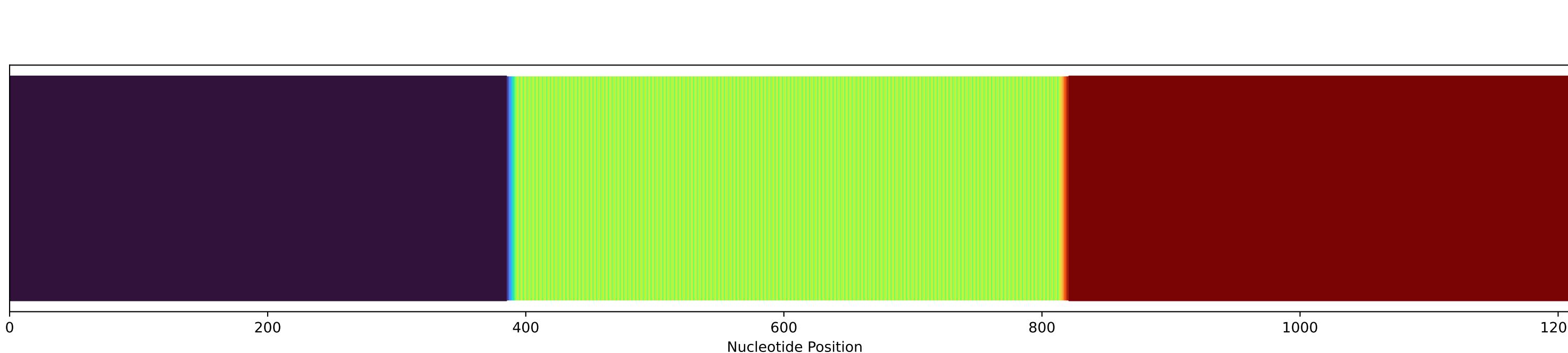
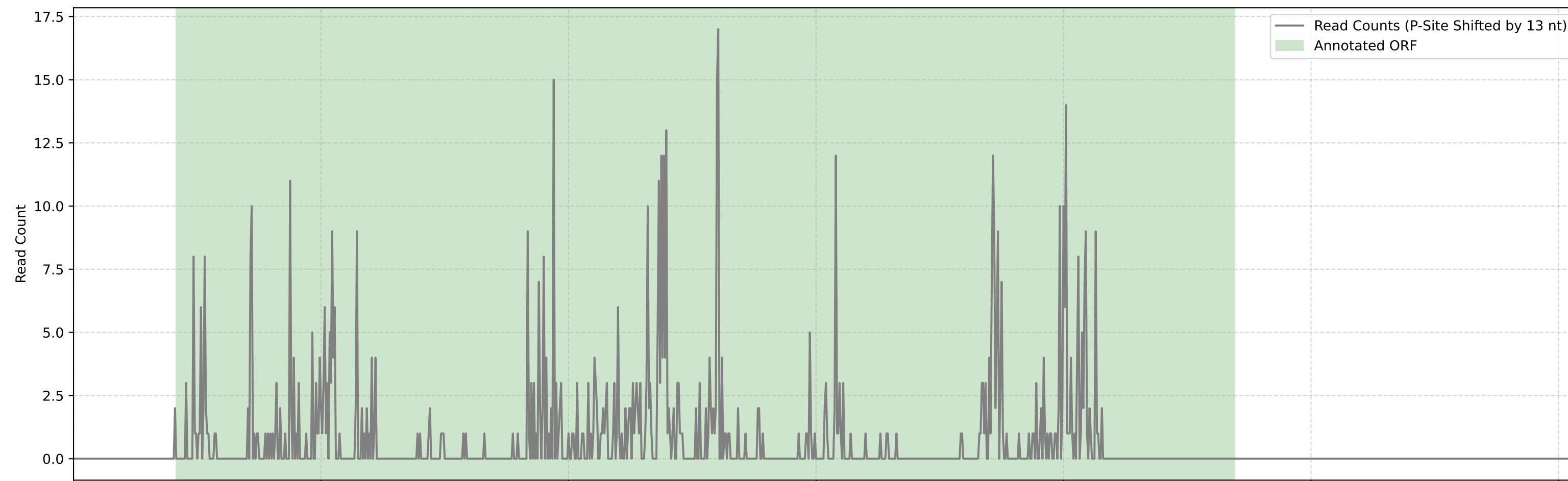
Example: 79th Percentile (by TPM) Transcript (ENST00000355899.8)  
Total Reads: 1,782 | TPM: 1240.51



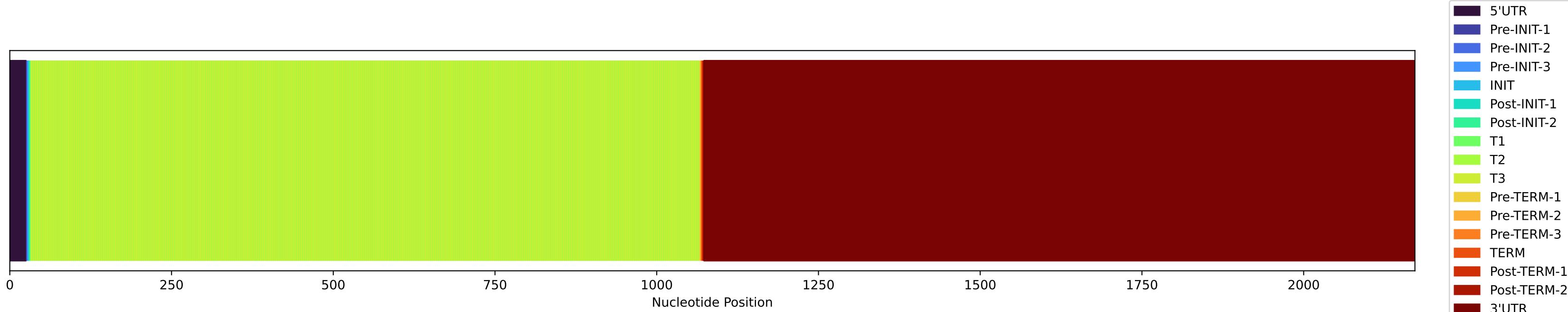
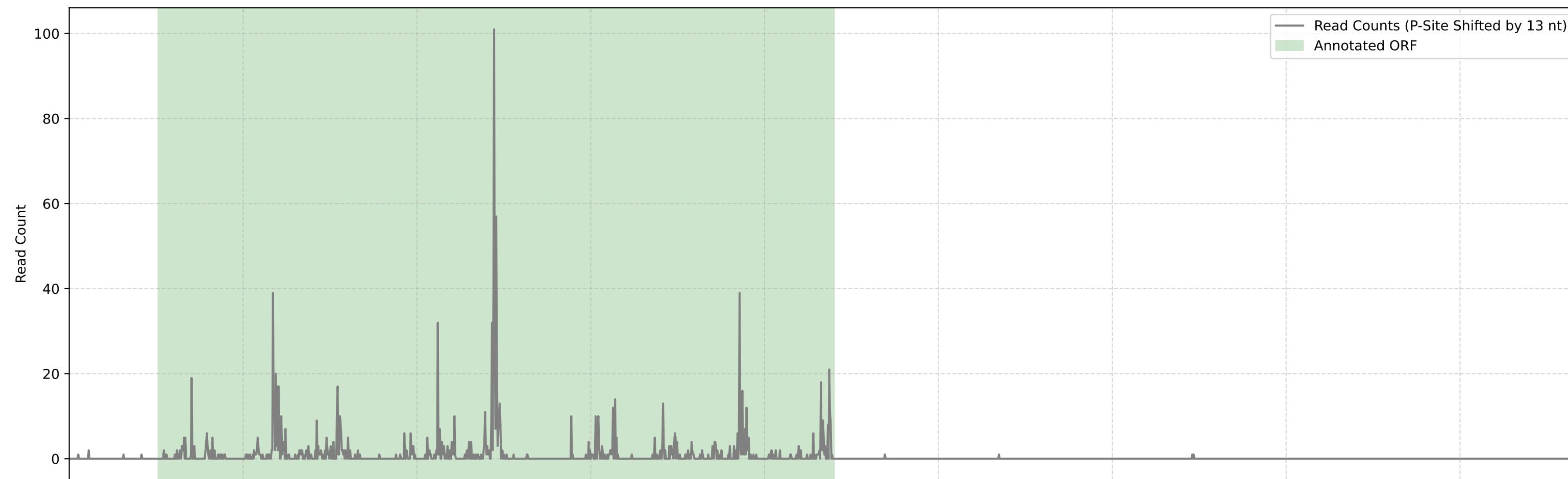
Example: 80th Percentile (by TPM) Transcript (ENST00000321394.12)  
Total Reads: 1,347 | TPM: 1310.86



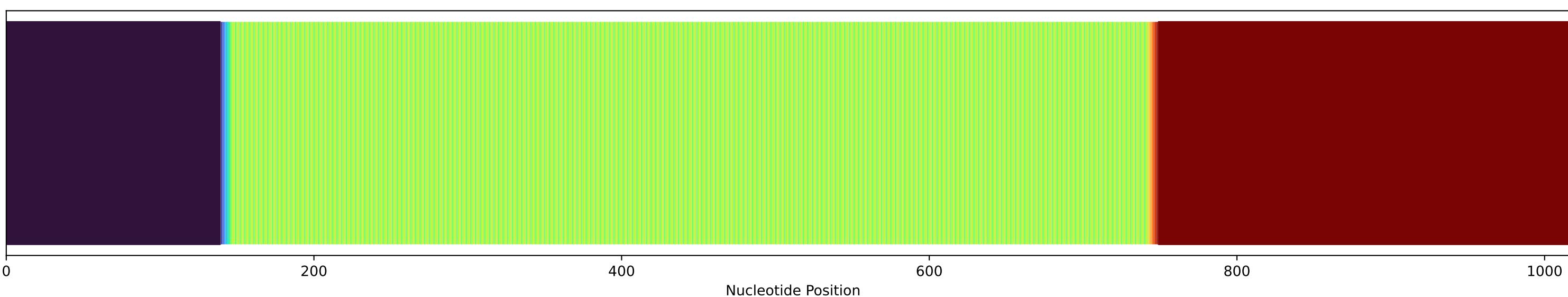
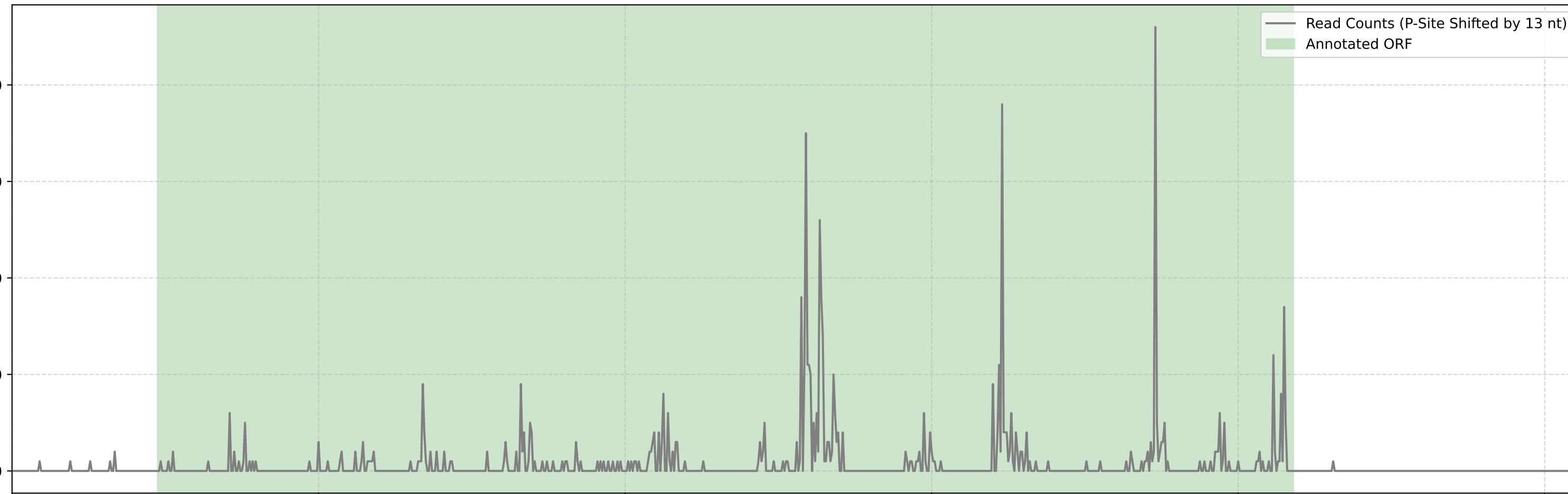
Example: 81th Percentile (by TPM) Transcript (ENST00000403994.9)  
Total Reads: 740 | TPM: 1391.77



Example: 82th Percentile (by TPM) Transcript (ENST00000426013.7)  
Total Reads: 1,404 | TPM: 1479.56

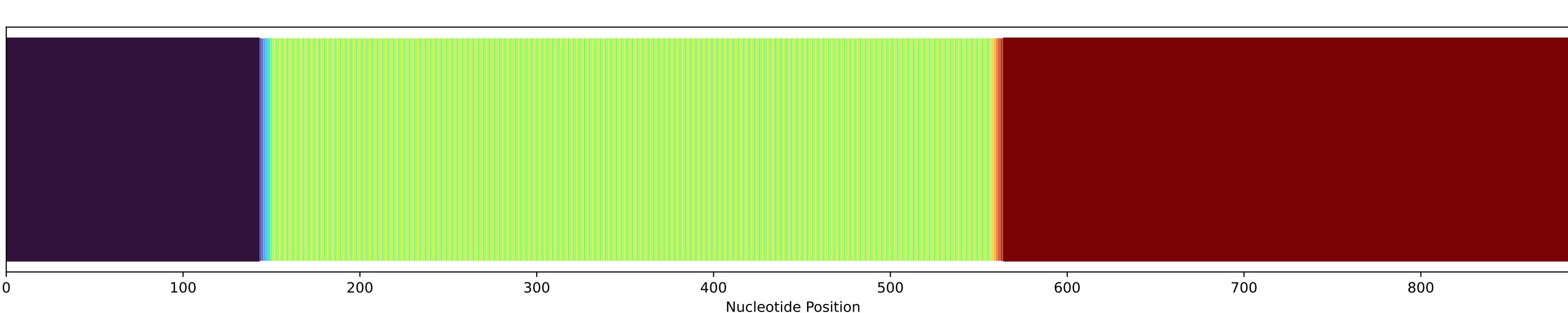


Example: 83th Percentile (by TPM) Transcript (ENST00000261479.9)  
Total Reads: 692 | TPM: 1548.30

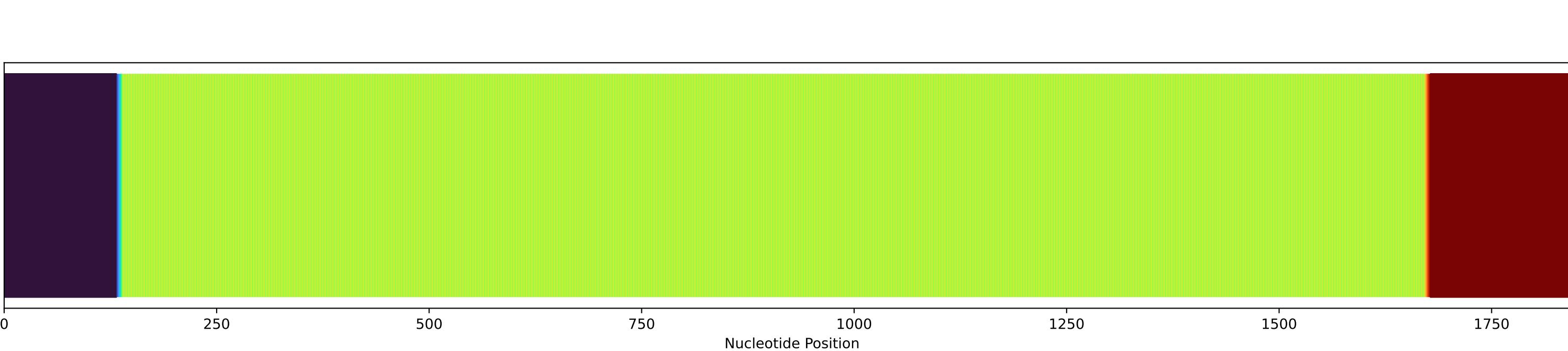
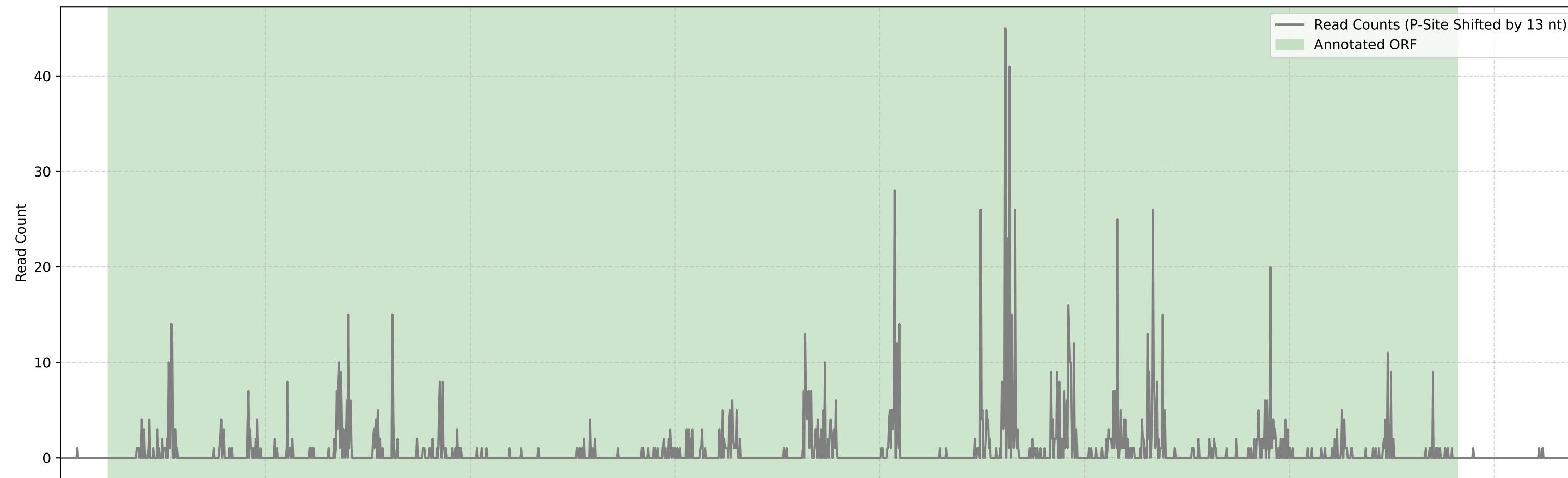


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

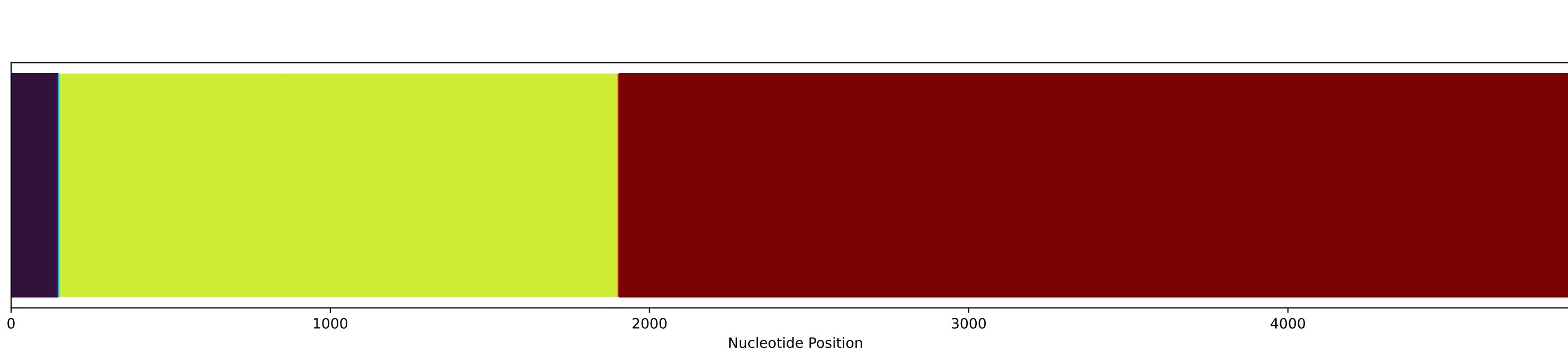
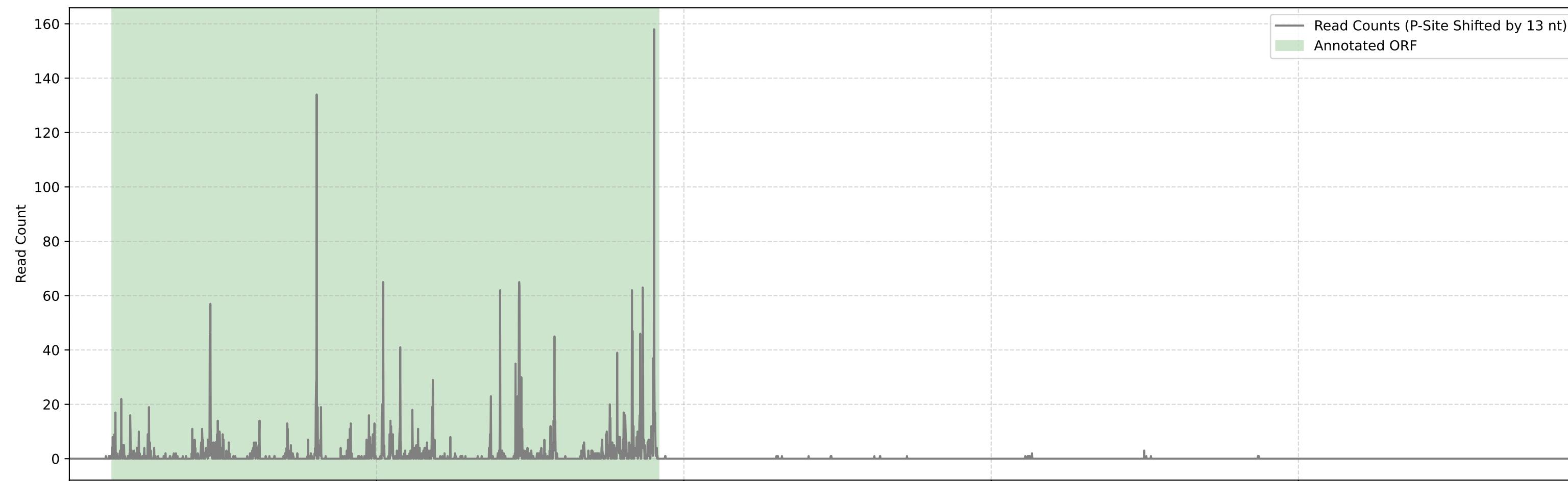
Example: 84th Percentile (by TPM) Transcript (ENST00000393196.8)  
Total Reads: 639 | TPM: 1643.38



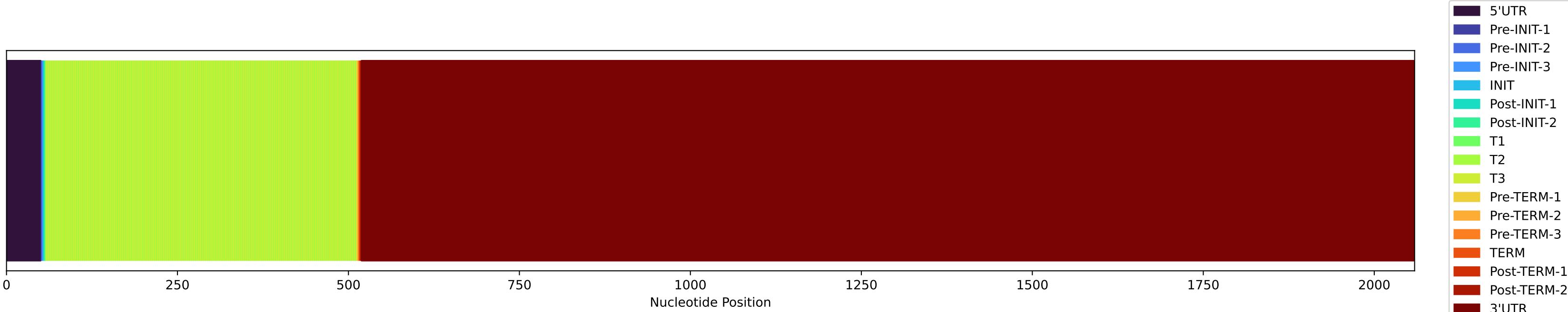
Example: 85th Percentile (by TPM) Transcript (ENST00000286788.9)  
Total Reads: 1,411 | TPM: 1741.98



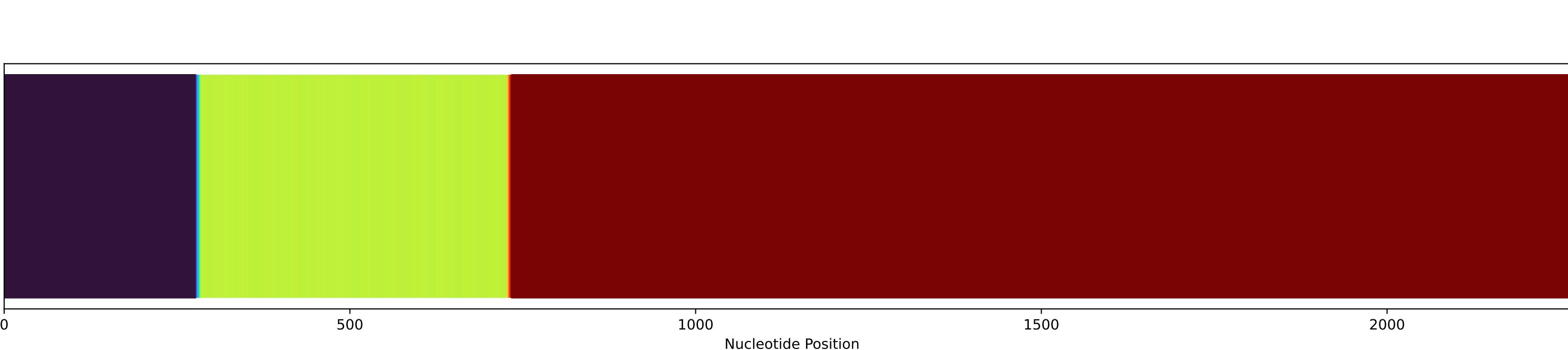
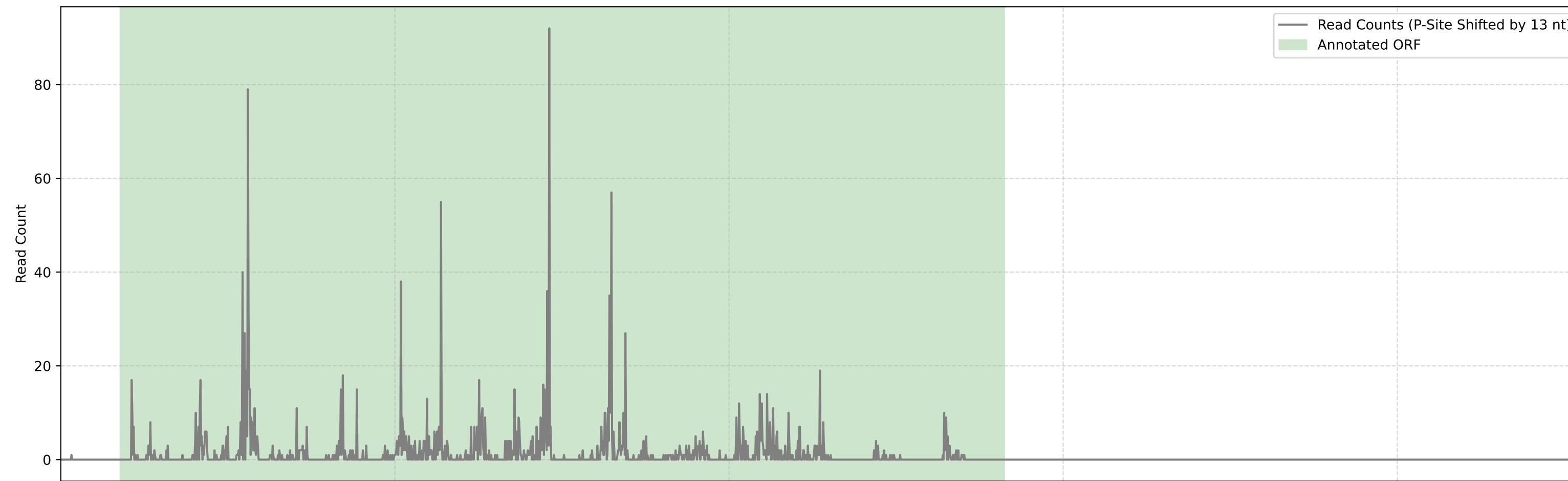
Example: 86th Percentile (by TPM) Transcript (ENST00000247461.9)  
Total Reads: 3,888 | TPM: 1810.63



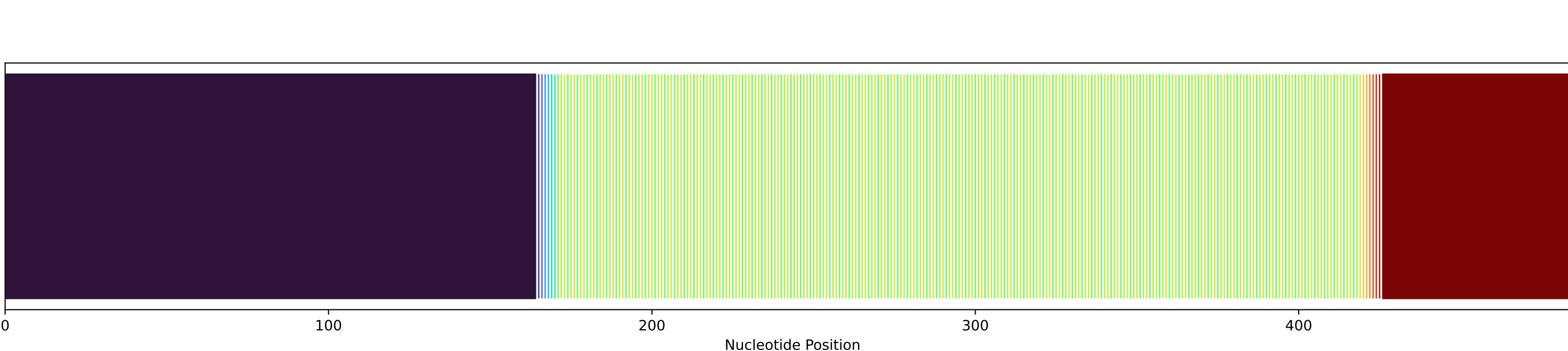
Example: 87th Percentile (by TPM) Transcript (ENST00000531188.6)  
Total Reads: 1,742 | TPM: 1936.50



Example: 88th Percentile (by TPM) Transcript (ENST00000272227.8)  
Total Reads: 2,096 | TPM: 2105.10

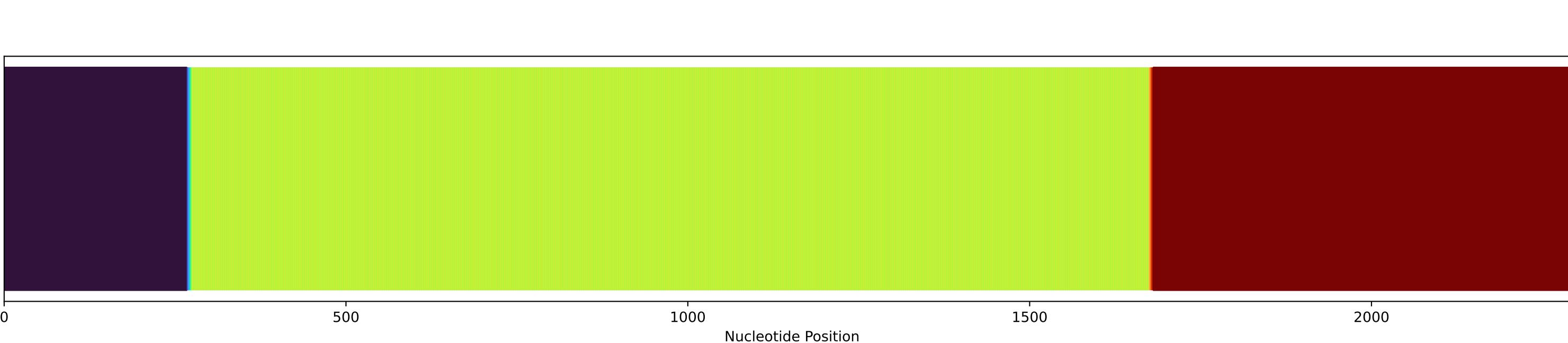
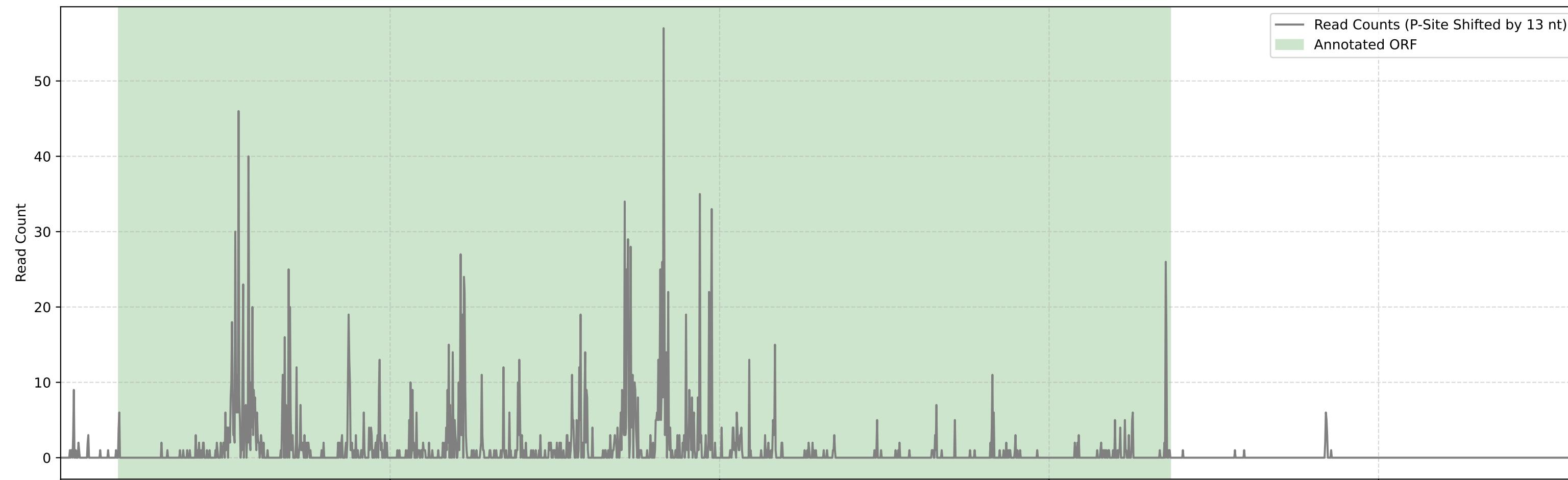


Example: 89th Percentile (by TPM) Transcript (ENST00000359611.4)  
Total Reads: 473 | TPM: 2223.10

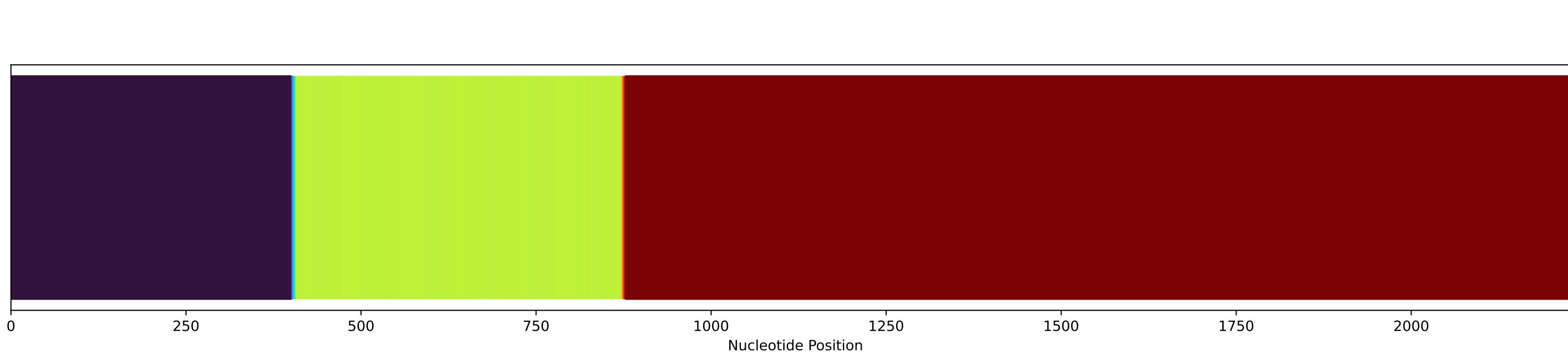
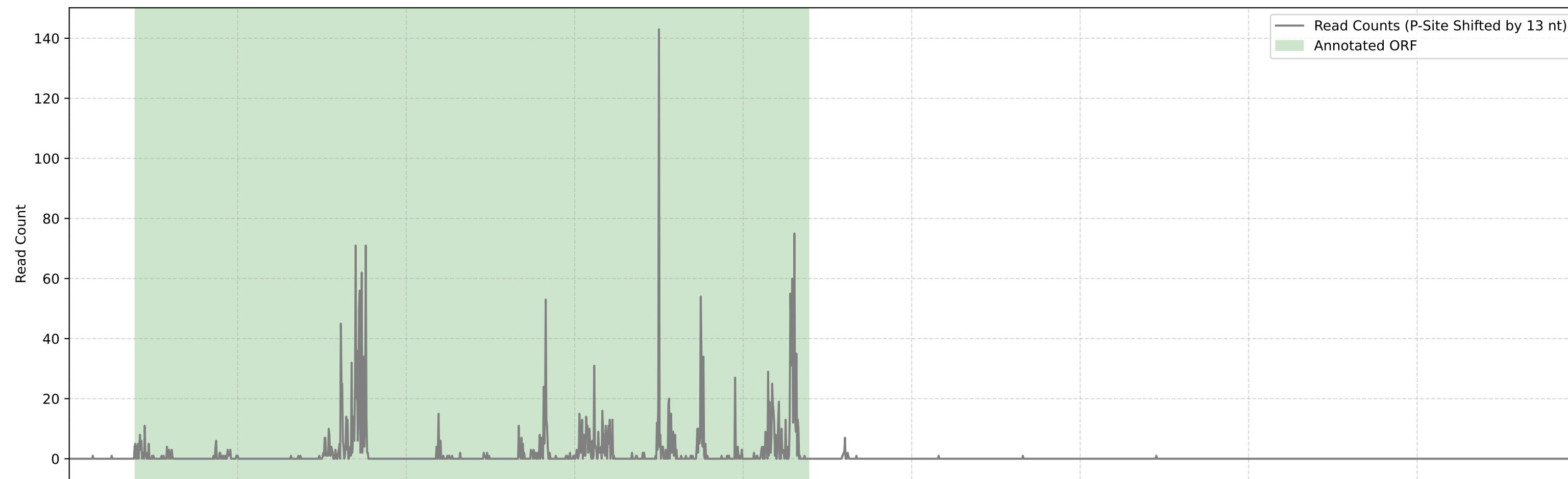


5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

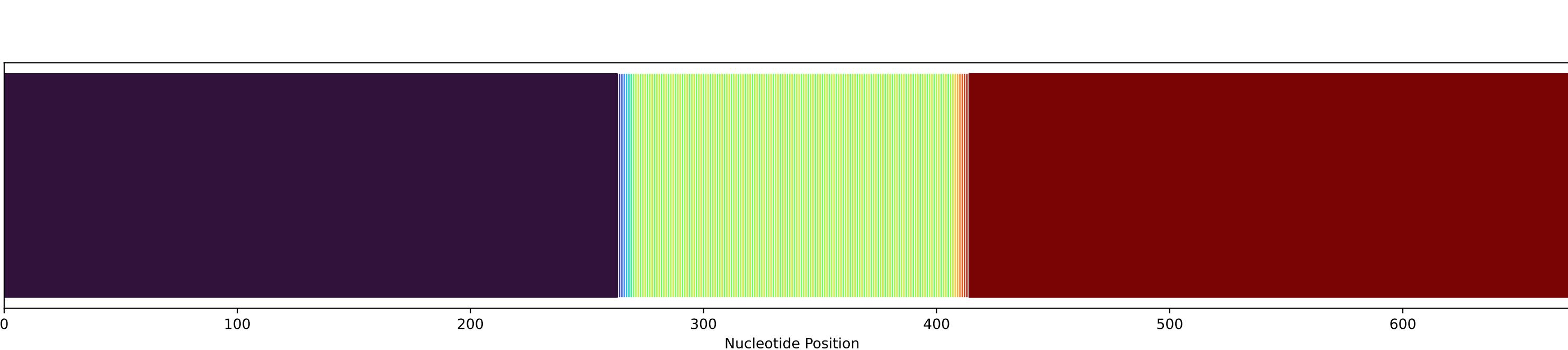
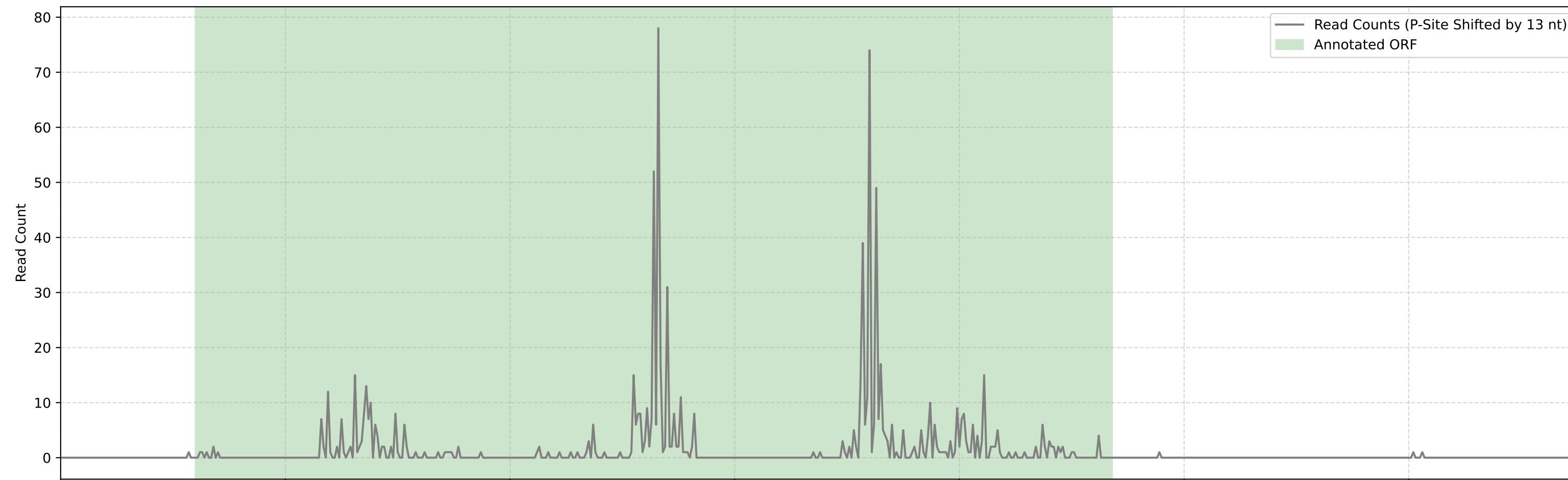
Example: 90th Percentile (by TPM) Transcript (ENST00000335181.10)  
Total Reads: 2,368 | TPM: 2351.46



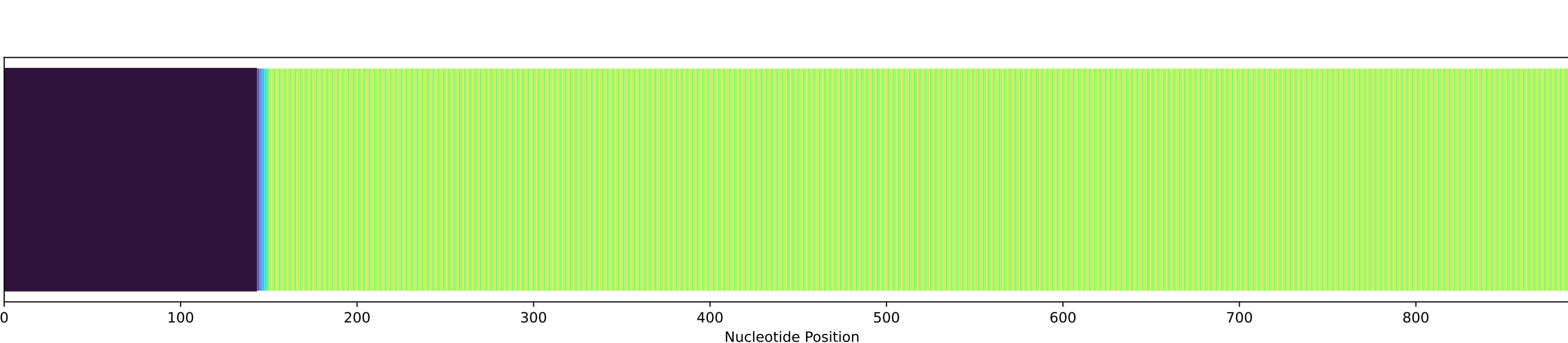
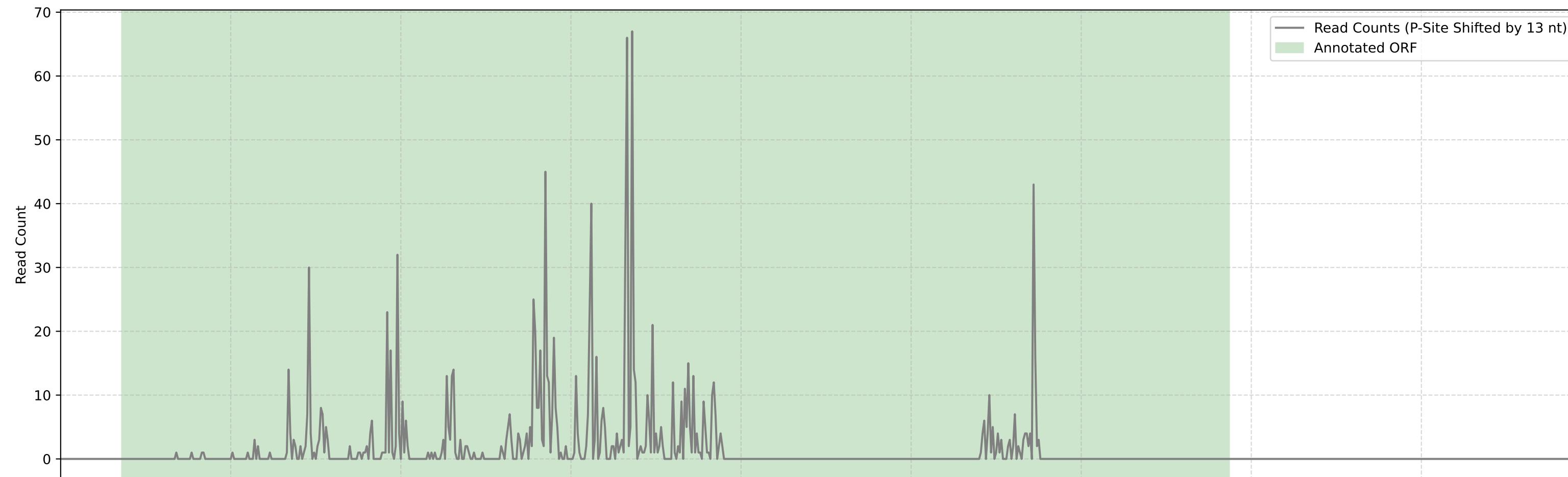
Example: 91th Percentile (by TPM) Transcript (ENST00000422447.8)  
Total Reads: 2,642 | TPM: 2698.47



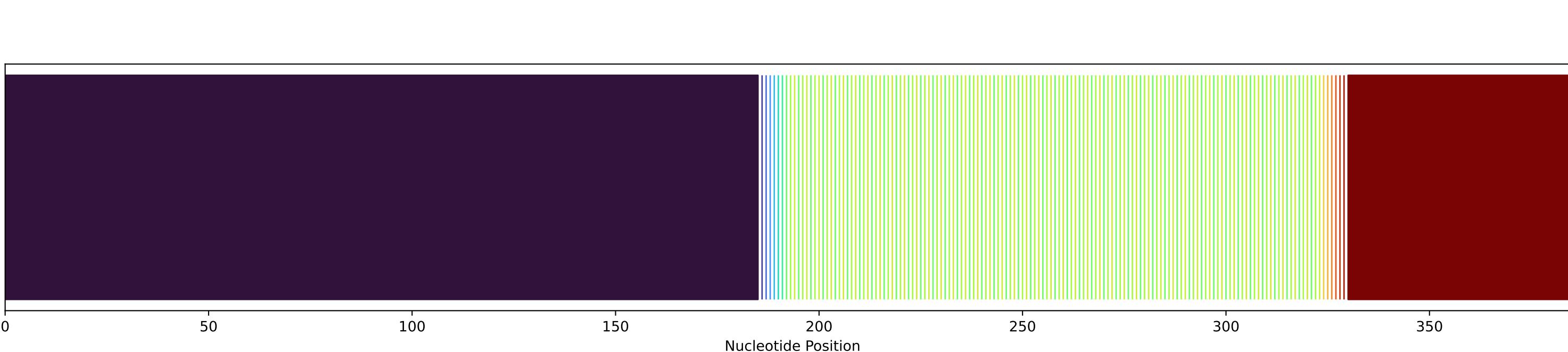
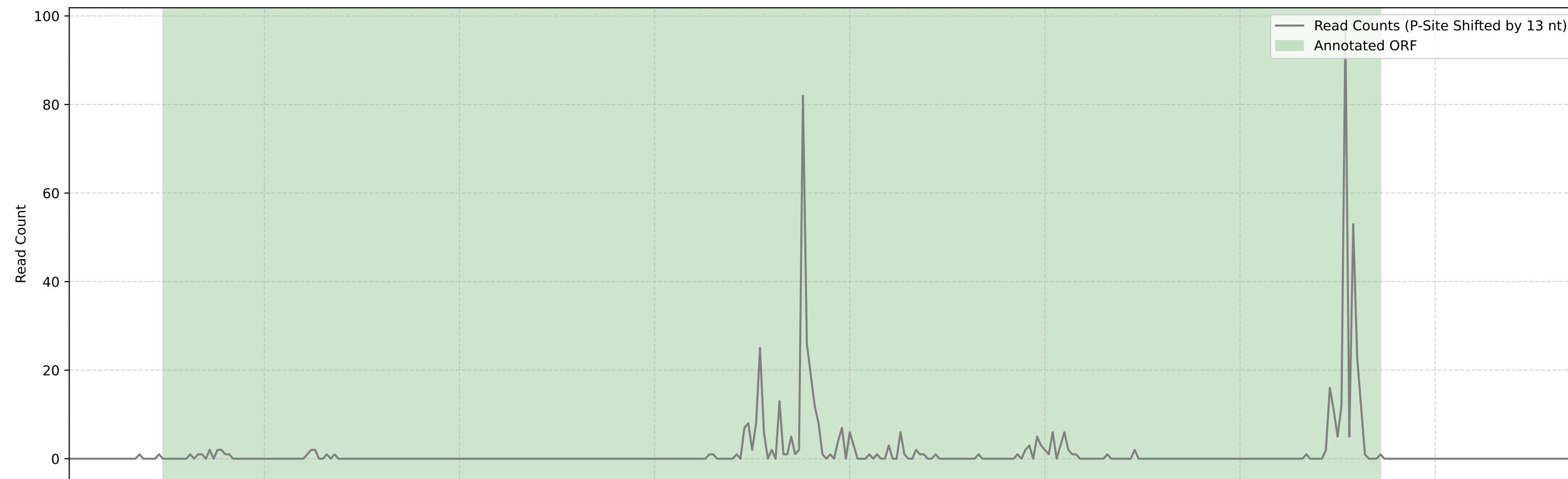
Example: 92th Percentile (by TPM) Transcript (ENST00000297258.11)  
Total Reads: 858 | TPM: 2905.14



Example: 93th Percentile (by TPM) Transcript (ENST00000300026.4)  
Total Reads: 1,212 | TPM: 3106.54

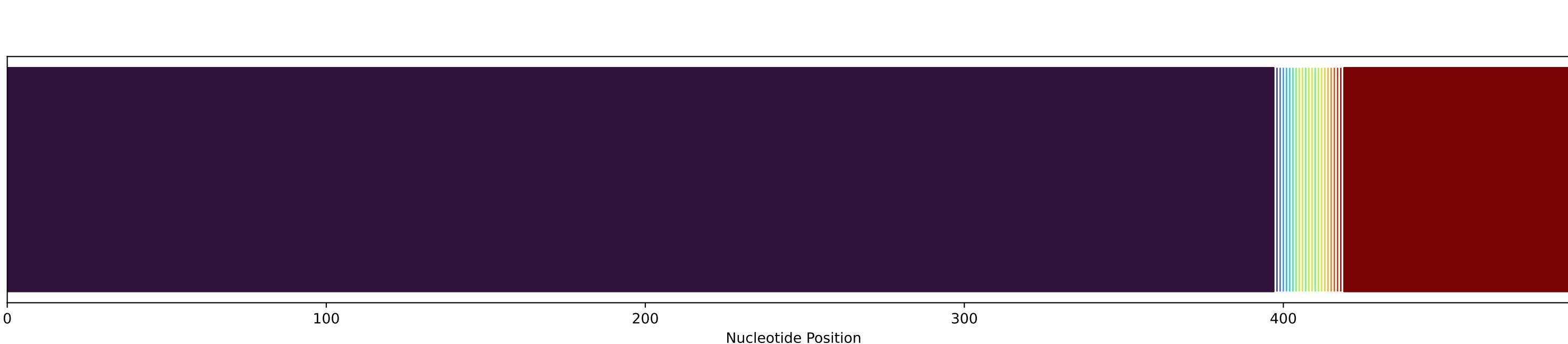
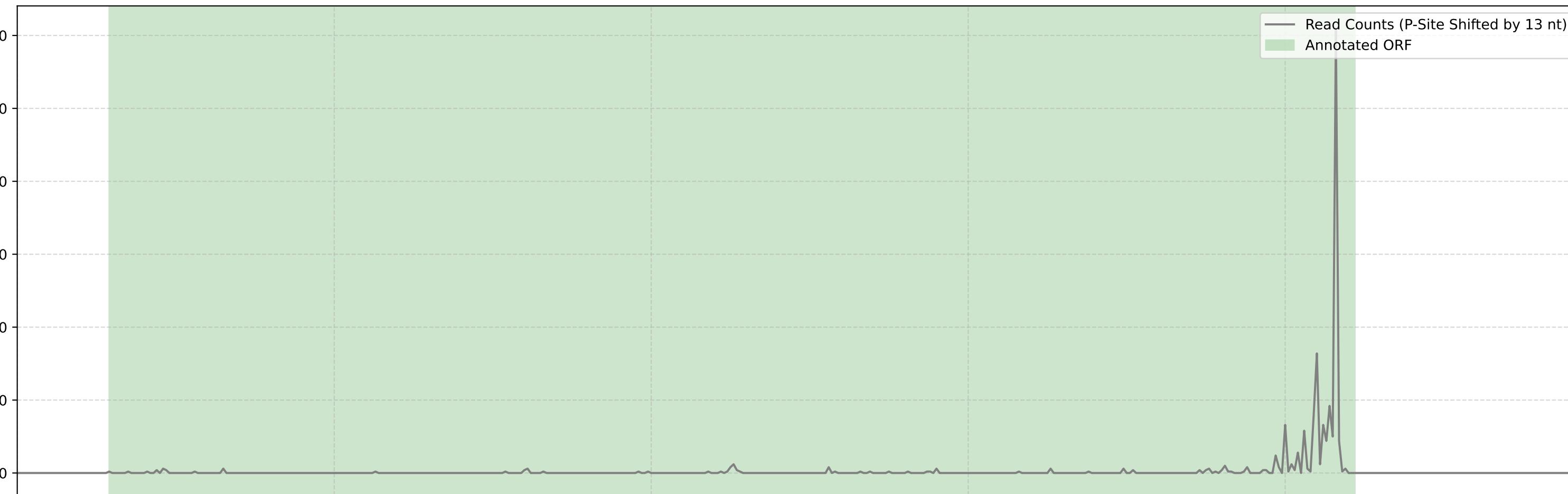


Example: 94th Percentile (by TPM) Transcript (ENST00000618305.2)  
Total Reads: 569 | TPM: 3365.33

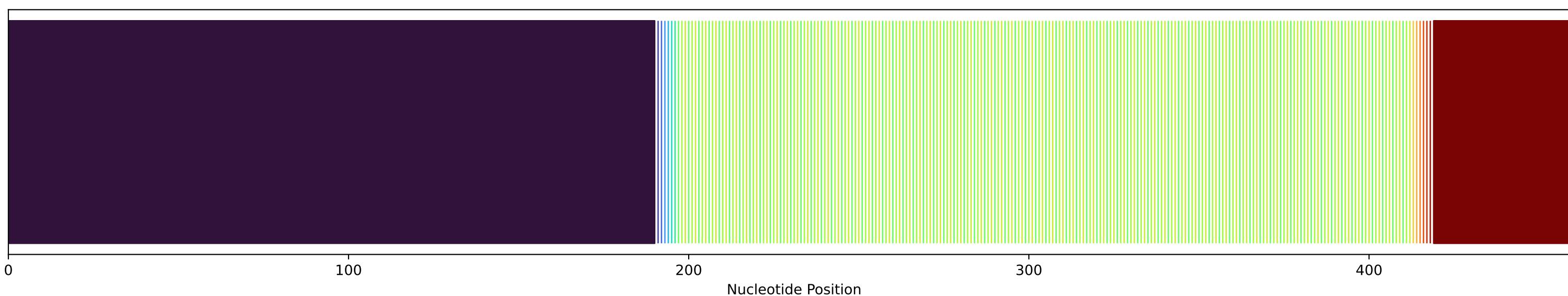
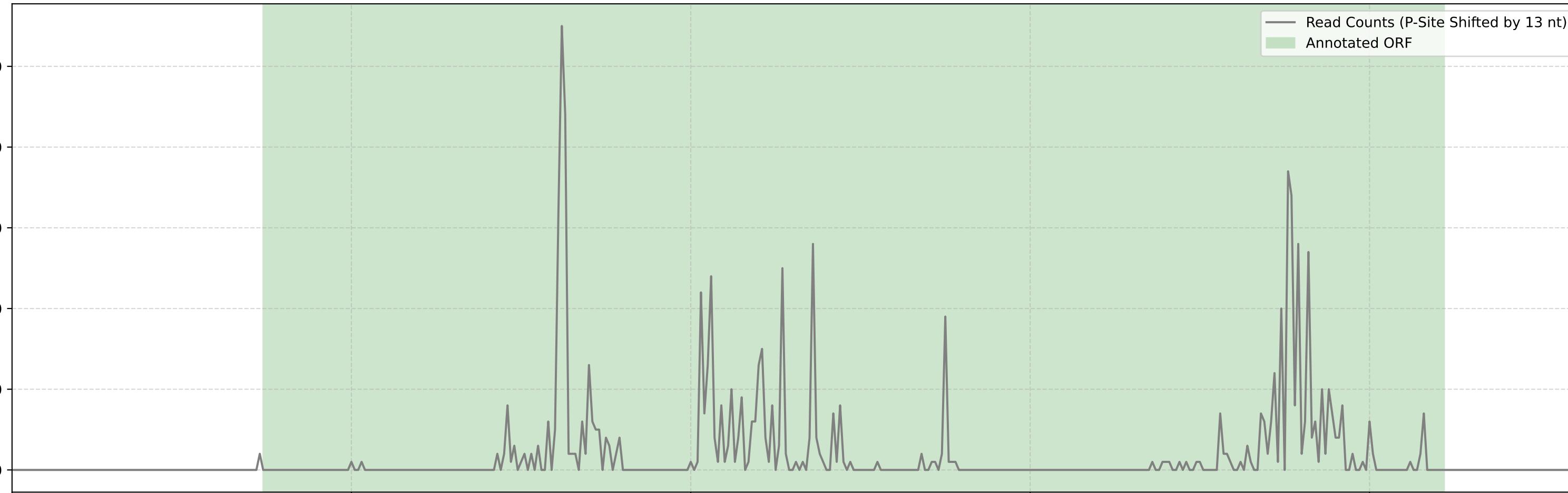


- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 95th Percentile (by TPM) Transcript (ENST00000359193.4)  
Total Reads: 780 | TPM: 3621.38

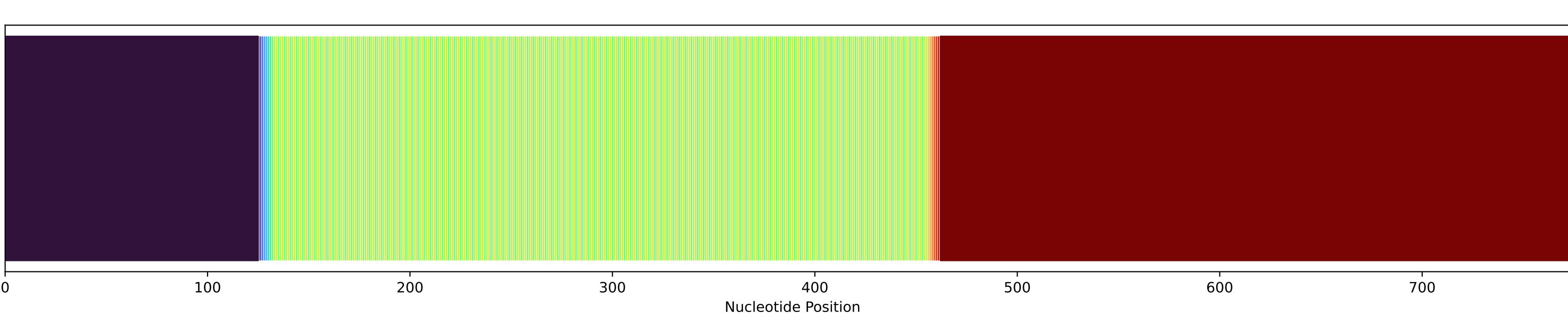
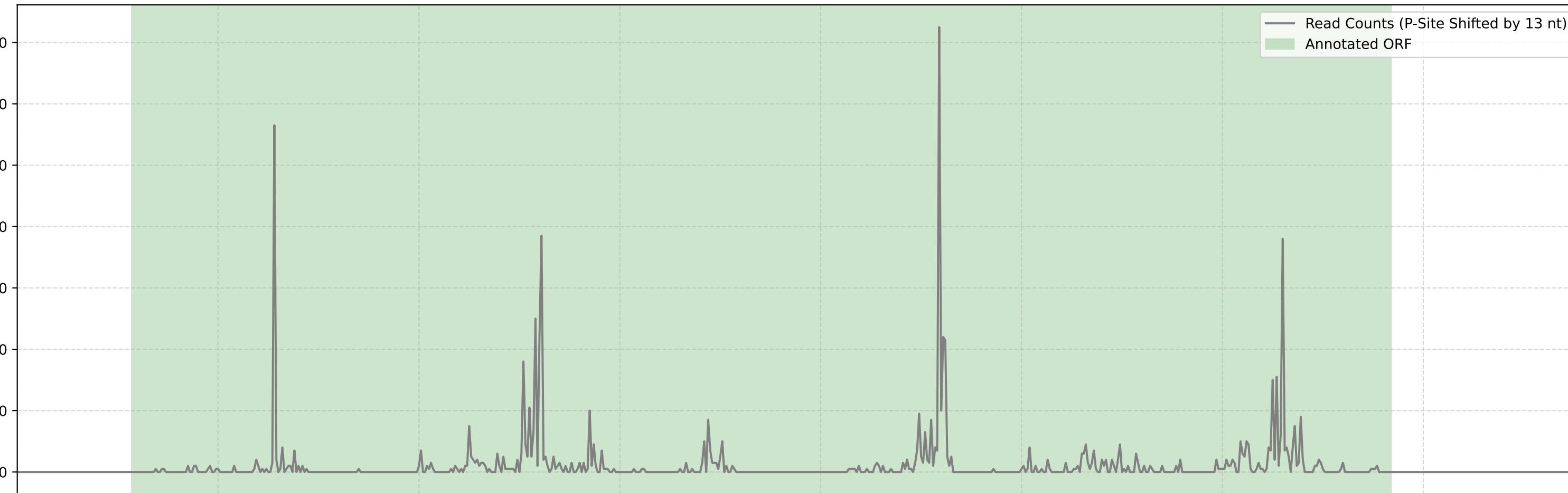


Example: 96th Percentile (by TPM) Transcript (ENST00000321153.9)  
Total Reads: 805 | TPM: 3988.23



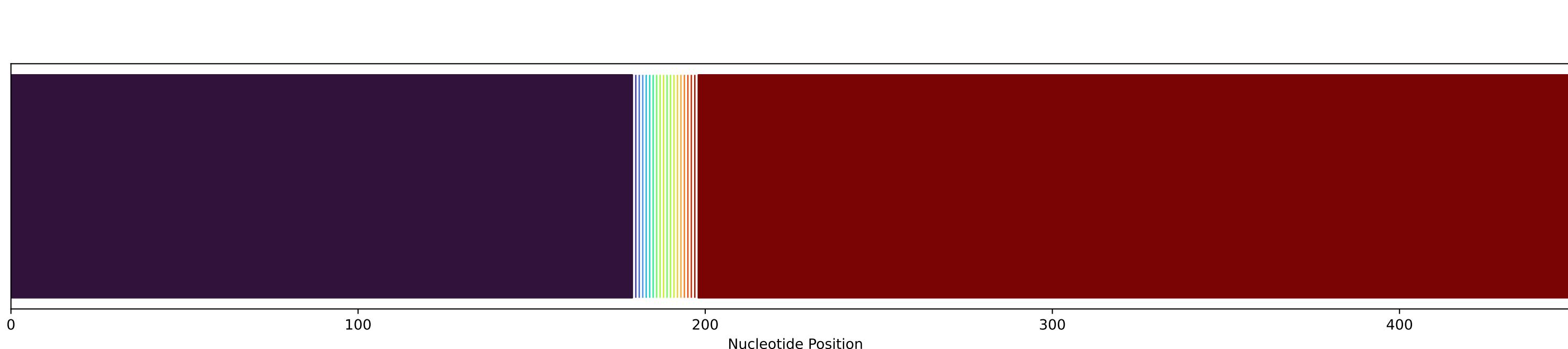
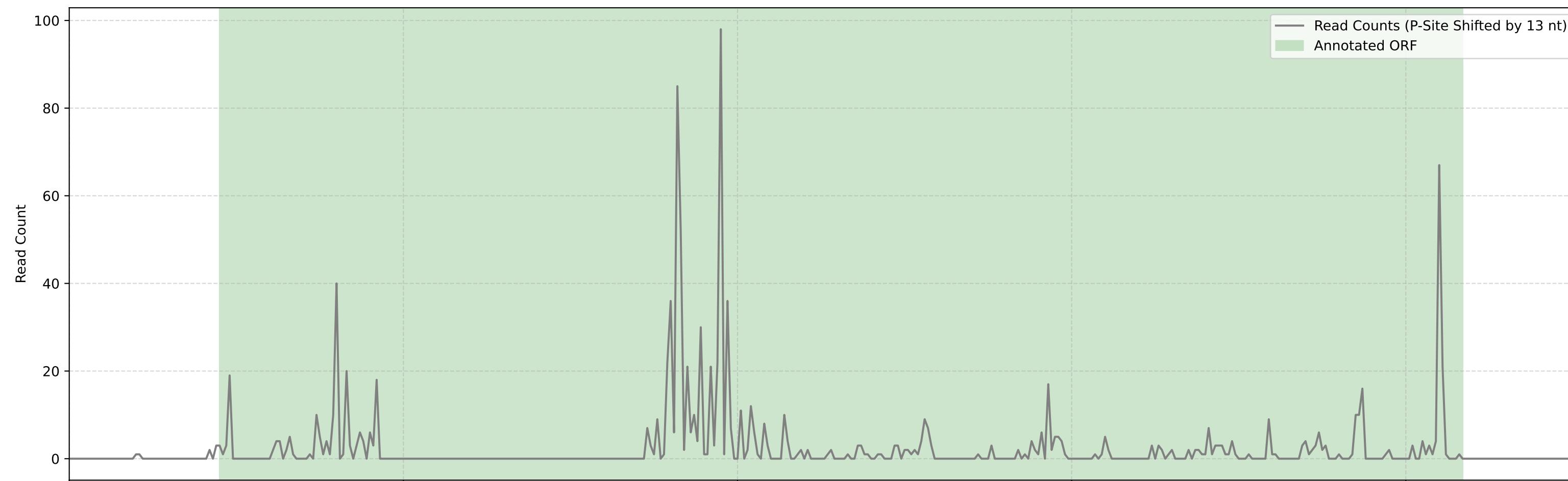
5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

Example: 97th Percentile (by TPM) Transcript (ENST00000396651.8)  
Total Reads: 1,517 | TPM: 4463.05



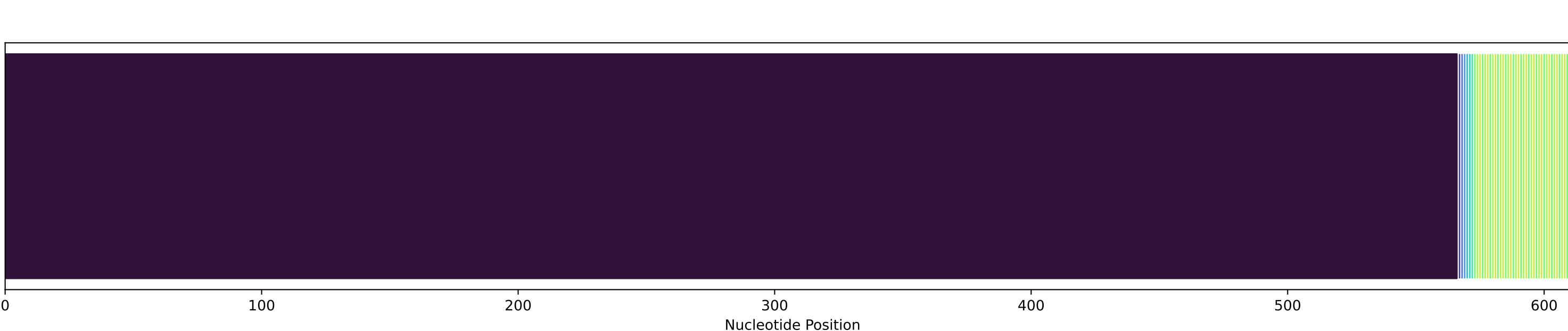
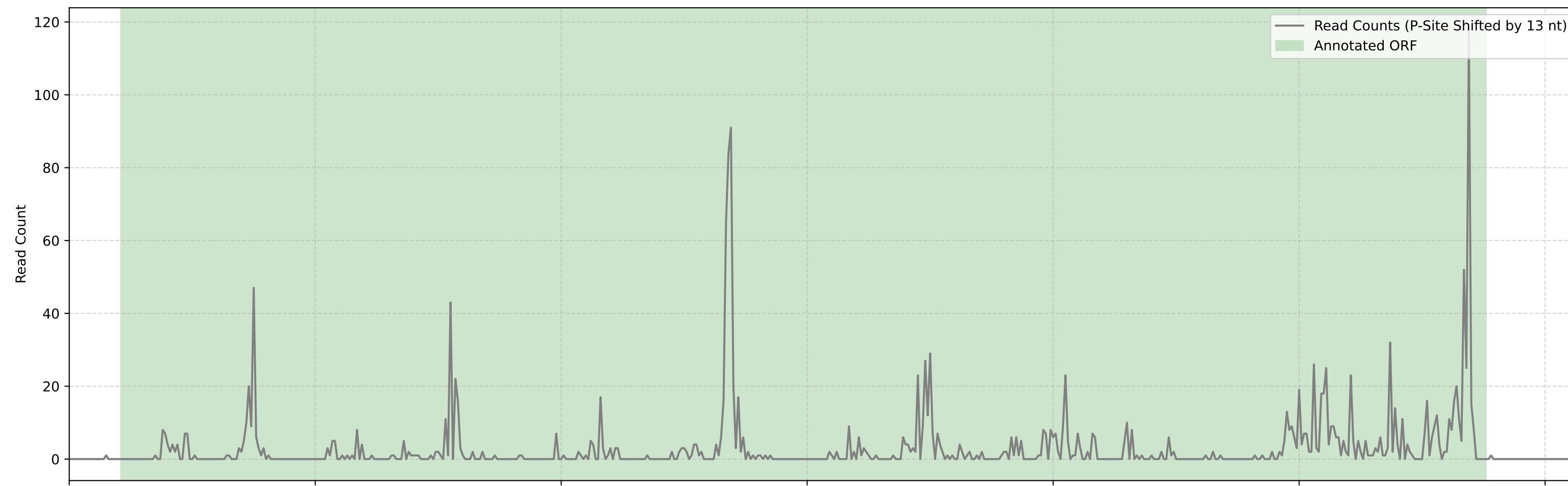
- 5'UTR
- Pre-INIT-1
- Pre-INIT-2
- Pre-INIT-3
- INIT
- Post-INIT-1
- Post-INIT-2
- T1
- T2
- T3
- Pre-TERM-1
- Pre-TERM-2
- Pre-TERM-3
- TERM
- Post-TERM-1
- Post-TERM-2
- 3'UTR

Example: 98th Percentile (by TPM) Transcript (ENST00000348462.6)  
Total Reads: 1,074 | TPM: 5438.66



5'UTR  
Pre-INIT-1  
Pre-INIT-2  
Pre-INIT-3  
INIT  
Post-INIT-1  
Post-INIT-2  
T1  
T2  
T3  
Pre-TERM-1  
Pre-TERM-2  
Pre-TERM-3  
TERM  
Post-TERM-1  
Post-TERM-2  
3'UTR

Example: 99th Percentile (by TPM) Transcript (ENST00000580261.6)  
Total Reads: 1,771 | TPM: 6602.01



Example: Max Expression Transcript (ENST00000451311.7)  
Total Reads: 6,432 | TPM: 23669.10

