

Fourier Spectral Analysis of Coding Sequences

Automated Report

November 20, 2025

Contents

1	Group 1: Single Peak at 0.33	2
2	Group 2: Single Peak Elsewhere	2
3	Group 3: Multiple Peaks	2
3.1	SCFR_NC.060931.1_1380634_1385743	2
3.1.1	Protein: frame2	2
3.2	SCFR_NC.060931.1_1295463_1304679	3
3.2.1	Protein: frame-1	3
3.3	SCFR_NC.060931.1_1295698_1304692	4
3.3.1	Protein: frame-3	4
3.4	SCFR_NC.060931.1_1295714_1304672	5
3.4.1	Protein: frame-2	5
3.5	SCFR_NC.060931.1_159806340_159822717	6
3.5.1	Protein: frame-1	6
3.6	SCFR_NC.060931.1_159806198_159822557	7
3.6.1	Protein: frame-2	7
3.7	SCFR_NC.060931.1_159806178_159822525	8
3.7.1	Protein: frame1	8
3.8	SCFR_NC.060931.1_159805334_159822644	9
3.8.1	Protein: frame3	9

- 1 Group 1: Single Peak at 0.33
- 2 Group 2: Single Peak Elsewhere
- 3 Group 3: Multiple Peaks

3.1 SCFR_NC_060931.1_1380634_1385743

3.1.1 Protein: frame2

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 5109 bp

Protein Description:

Stop-codon-free region (1380634-1385743)

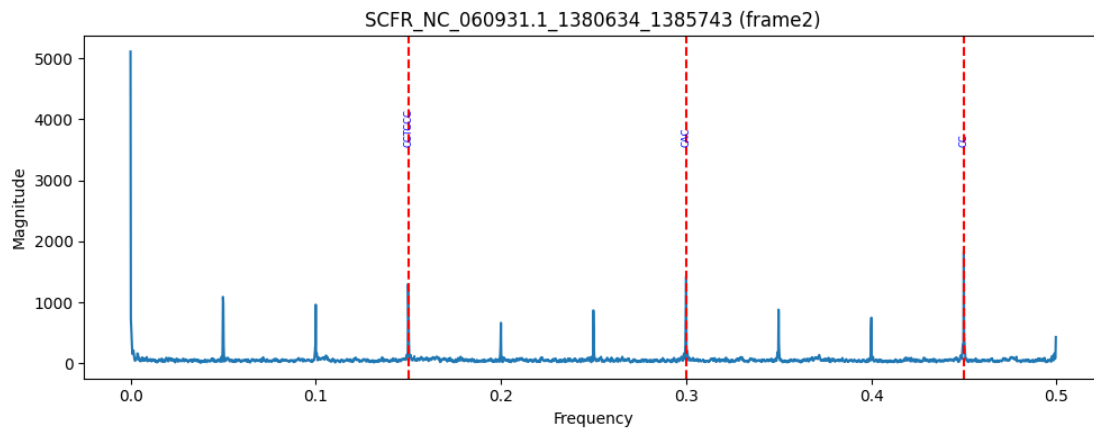


Figure 1: FFT Spectrum for frame2

Frequency	Motifs
0.45	CC (1007), CA (872), AC (866), CT (470), TC (347)
0.3	CAC (626), ACA (425), CCA (420), CCC (332), TCC (326)
0.15	CCTCCC (212), CCACAG (211), CTCCCA (210), TCCCAC (210), CCCACA (210)

3.2 SCFR_NC_060931.1_1295463_1304679

3.2.1 Protein: frame-1

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 9216 bp

Protein Description:

Stop-codon-free region (1295463-1304679)

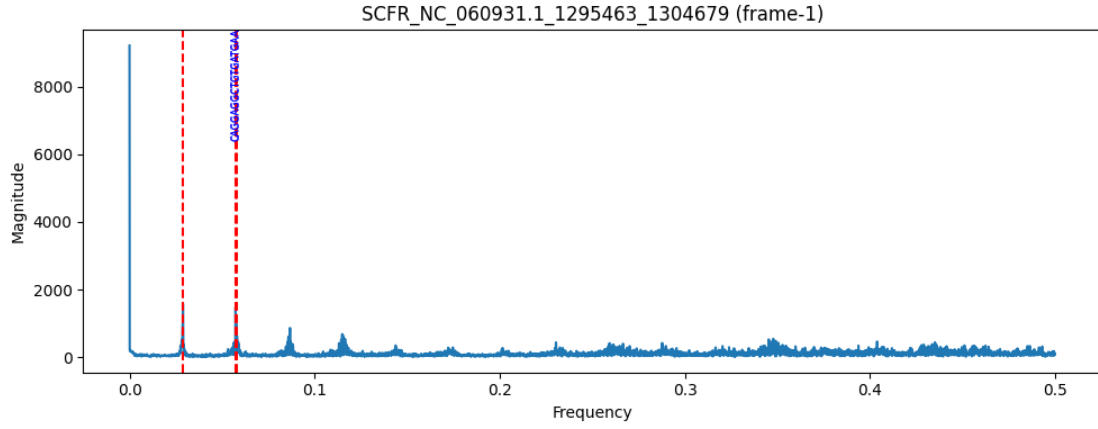


Figure 2: FFT Spectrum for frame-1

Frequency	Motifs
0.057	CAGGAGGCTGTGATGAA (206), AGGAGGCTGTGATGAAG (206), GGTGGGGGGACACAGGA (205),
0.058	CAGGAGGCTGTGATGAA (206), AGGAGGCTGTGATGAAG (206), GGTGGGGGGACACAGGA (205),

3.3 SCFR_NC_060931.1_1295698_1304692

3.3.1 Protein: frame-3

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 8994 bp

Protein Description:

Stop-codon-free region (1295698-1304692)

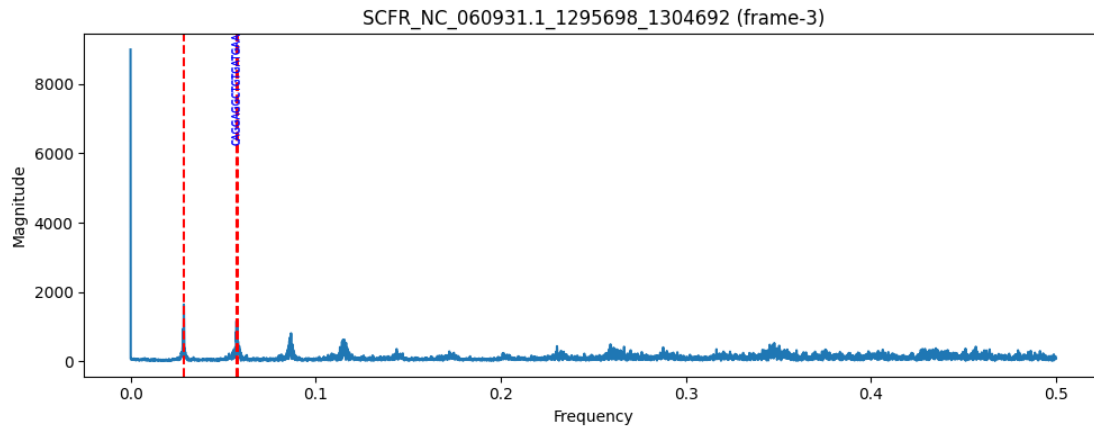


Figure 3: FFT Spectrum for frame-3

Frequency	Motifs
0.057	CAGGAGGCTGTGATGAA (206), AGGAGGCTGTGATGAAG (206), GGTGGGGGGACACAGGA (205),
0.058	CAGGAGGCTGTGATGAA (206), AGGAGGCTGTGATGAAG (206), GGTGGGGGGACACAGGA (205),

3.4 SCFR_NC_060931.1_1295714_1304672

3.4.1 Protein: frame-2

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 8958 bp

Protein Description:

Stop-codon-free region (1295714-1304672)

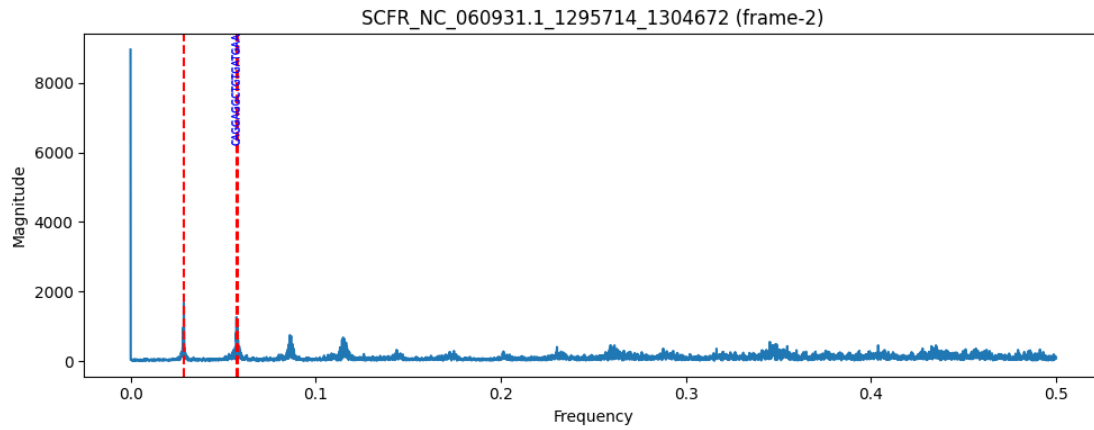


Figure 4: FFT Spectrum for frame-2

Frequency	Motifs
0.057	CAGGAGGCTGTGATGAA (206), AGGAGGCTGTGATGAAG (206), GGTGGGGGGACACAGGA (205),
0.058	CAGGAGGCTGTGATGAA (206), AGGAGGCTGTGATGAAG (206), GGTGGGGGGACACAGGA (205),

3.5 SCFR_NC_060931.1_159806340_159822717

3.5.1 Protein: frame-1

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 16377 bp

Protein Description:

Stop-codon-free region (159806340-159822717)

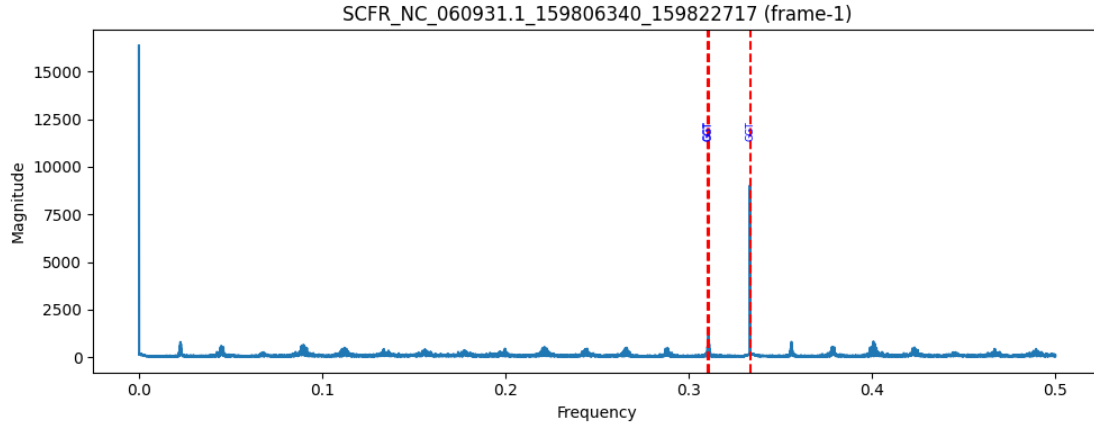


Figure 5: FFT Spectrum for frame-1

Frequency	Motifs
0.333	GGT (3378), TGG (3015), GTG (2664), ATG (885), GTA (744)
0.311	GGT (3378), TGG (3015), GTG (2664), ATG (885), GTA (744)
0.31	GGT (3378), TGG (3015), GTG (2664), ATG (885), GTA (744)

3.6 SCFR_NC_060931.1_159806198_159822557

3.6.1 Protein: frame-2

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 16359 bp

Protein Description:

Stop-codon-free region (159806198-159822557)

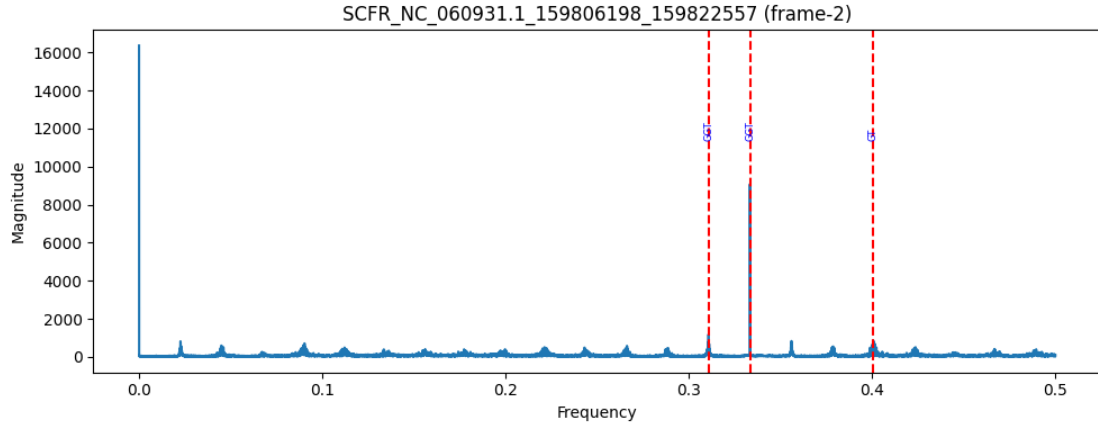


Figure 6: FFT Spectrum for frame-2

Frequency	Motifs
0.333	GGT (3397), TGG (3034), GTG (2682), ATG (885), TAG (744)
0.311	GGT (3397), TGG (3034), GTG (2682), ATG (885), TAG (744)
0.4	GT (3800), GG (3779), TG (3595), AG (1495), GA (1288)

3.7 SCFR_NC_060931.1_159806178_159822525

3.7.1 Protein: frame1

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 16347 bp

Protein Description:

Stop-codon-free region (159806178-159822525)

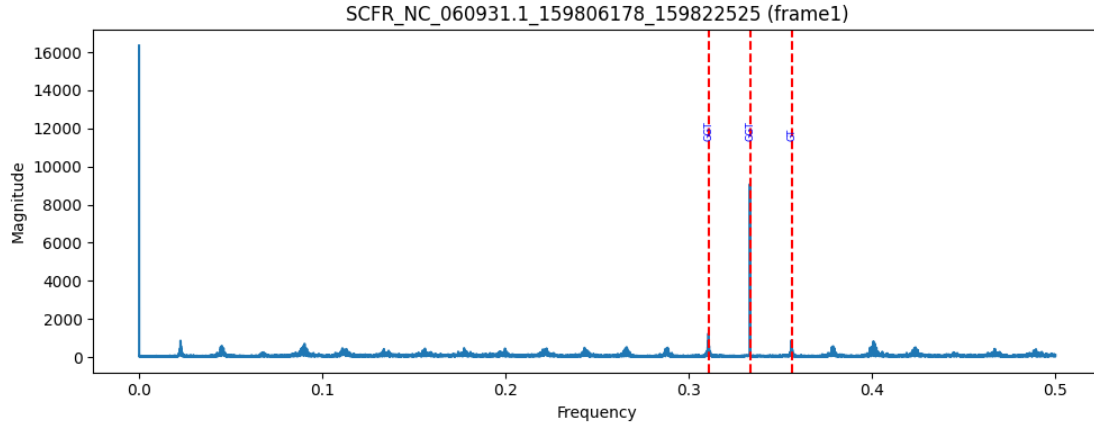


Figure 7: FFT Spectrum for frame1

Frequency	Motifs
0.333	GGT (3397), TGG (3034), GTG (2681), ATG (884), TAG (744)
0.311	GGT (3397), TGG (3034), GTG (2681), ATG (884), TAG (744)
0.356	GT (3799), GG (3778), TG (3593), AG (1493), GA (1285)

3.8 SCFR_NC_060931.1_159805334_159822644

3.8.1 Protein: frame3

Gene ID: SCFR

Nucleotide Accession: NC_060931.1

Sequence Length: 17310 bp

Protein Description:

Stop-codon-free region (159805334-159822644)

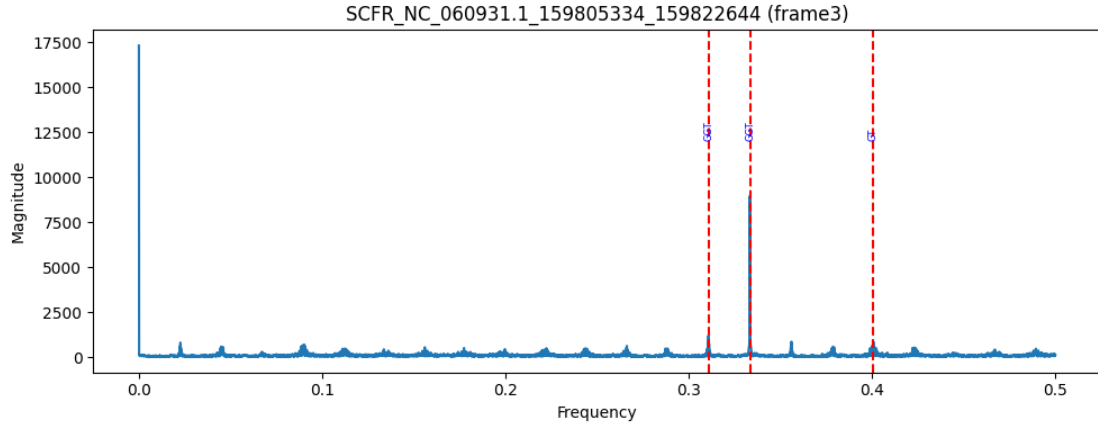


Figure 8: FFT Spectrum for frame3

Frequency	Motifs
0.333	GGT (3550), TGG (3194), GTG (2832), ATG (916), GAG (773)
0.311	GGT (3550), TGG (3194), GTG (2832), ATG (916), GAG (773)
0.4	GT (3989), GG (3983), TG (3805), AG (1557), GA (1346)