Fourier Spectral Analysis of Coding Sequences

Automated Report

November 20, 2025

Contents

1 Group 1: Single Peak at 0.33

2 Group 2: Single Peak Elsewhere

3 Group 3: Multiple Peaks

3.1 SCFR_NC_060932.1_1969750_1975381

3.1.1 Protein: frame2

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5631 bp
Protein Description:
Stop-codon-free region (1969750-1975381)

Figure 1: FFT Spectrum for frame2

Frequency	Motifs
0.266	CCT (1257), TCC (1255), CCC (1222), CTC (753), TTC (516)
0.267	CCT (1257), TCC (1255), CCC (1222), CTC (753), TTC (516)
0.265	CCT (1257), TCC (1255), CCC (1222), CTC (753), TTC (516)

3.2 SCFR_NC_060932.1_1969802_1975421

3.2.1 Protein: frame-3

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5619 bp
Protein Description:
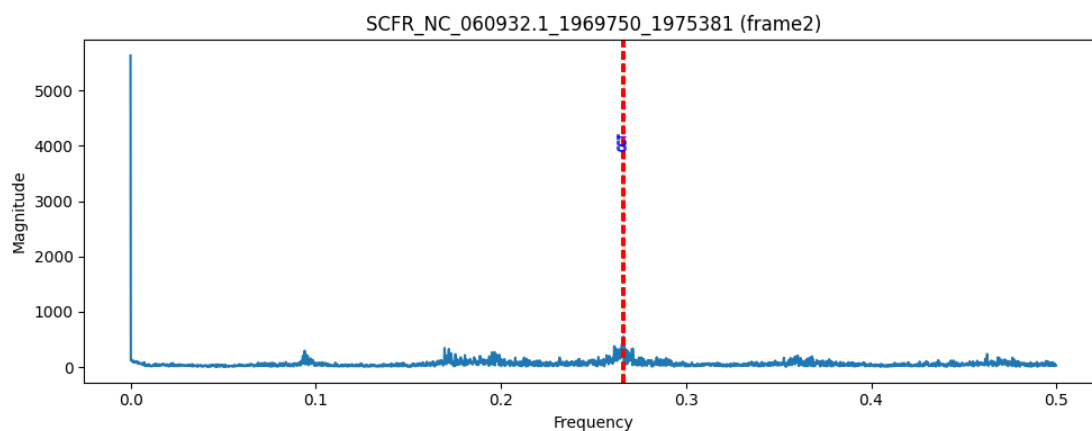Stop-codon-free region (1969802-1975421)

Figure 2: FFT Spectrum for frame-3

Frequency	Motifs
0.266	CCT (1256), TCC (1254), CCC (1223), CTC (750), TTC (515)
0.266	CCT (1256), TCC (1254), CCC (1223), CTC (750), TTC (515)
0.267	CCT (1256), TCC (1254), CCC (1223), CTC (750), TTC (515)

3.3 SCFR_NC_060932.1_1969757_1975385

3.3.1 Protein: frame3

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5628 bp
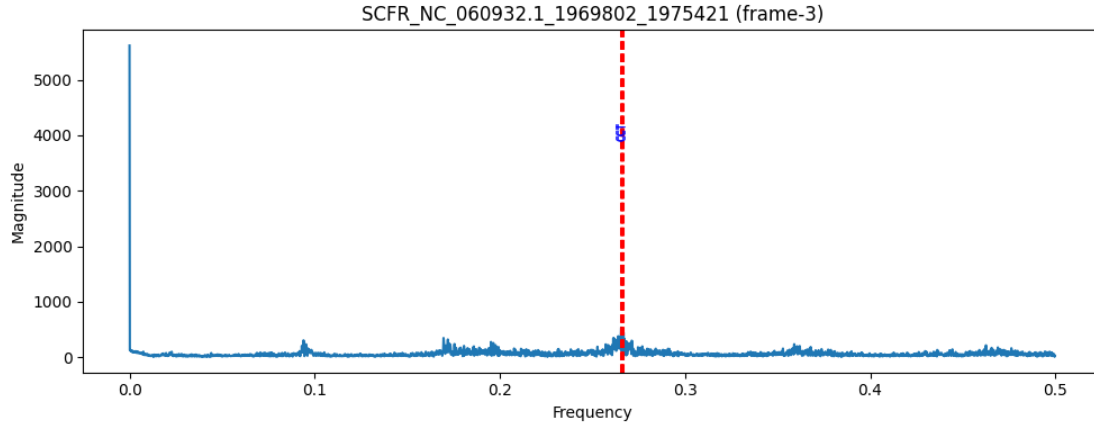**Protein Description**:
Stop-codon-free region (1969757-1975385)

Figure 3: FFT Spectrum for frame3

Frequency	Motifs
0.266	CCT (1257), TCC (1255), CCC (1222), CTC (753), TTC (516)
0.265	CCT (1257), TCC (1255), CCC (1222), CTC (753), TTC (516)
0.266	CCT (1257), TCC (1255), CCC (1222), CTC (753), TTC (516)

3.4   SCFR_NC_060932.1_1970125_1975417

3.4.1   Protein: frame-1

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5292 bp
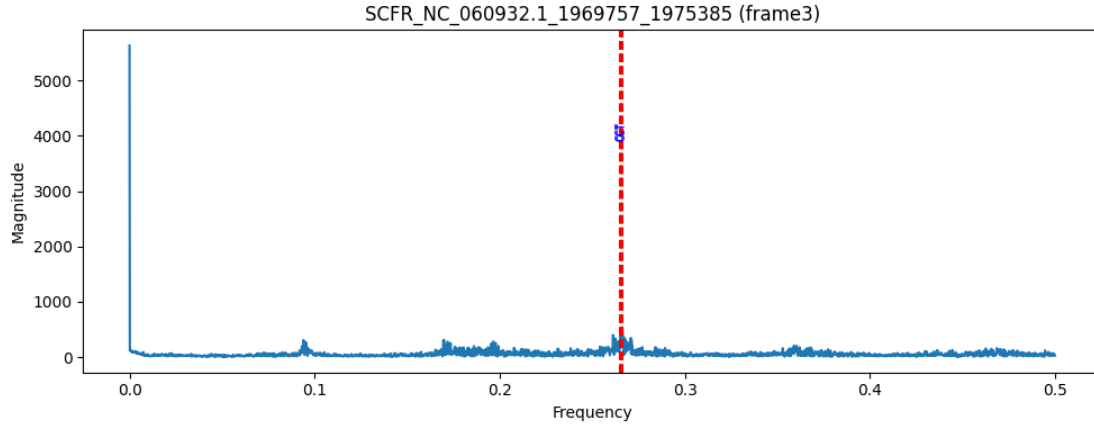**Protein Description**:
Stop-codon-free region (1970125-1975417)

Figure 4: FFT Spectrum for frame-1

Frequency	Motifs
0.266	CCC (1185), CCT (1184), TCC (1183), CTC (700), TTC (489)
0.265	CCC (1185), CCT (1184), TCC (1183), CTC (700), TTC (489)
0.264	CCC (1185), CCT (1184), TCC (1183), CTC (700), TTC (489)

3.5 SCFR_NC_060932.1_145286249_145291868

3.5.1 Protein: frame3

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5619 bp
Protein Description:
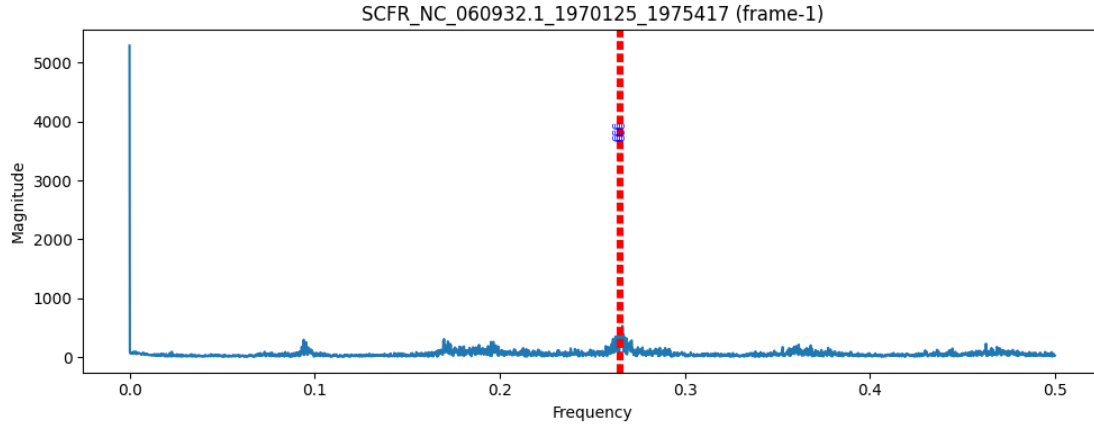Stop-codon-free region (145286249-145291868)

Figure 5: FFT Spectrum for frame3

Frequency	
0.033	GCCCGCGGTGGAGGAATATTGTACCGGAC (51), TACCGGACAGCCCGCGGTGGAGGAATATT (44),
0.067	CGGTGGAGGAATAT (105), GGTGGAGGAAT
0.101	GTGGAGGAA (128), GGA

3.6   SCFR_NC_060932.1_1969830_1975482

3.6.1   Protein: frame-2

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5652 bp
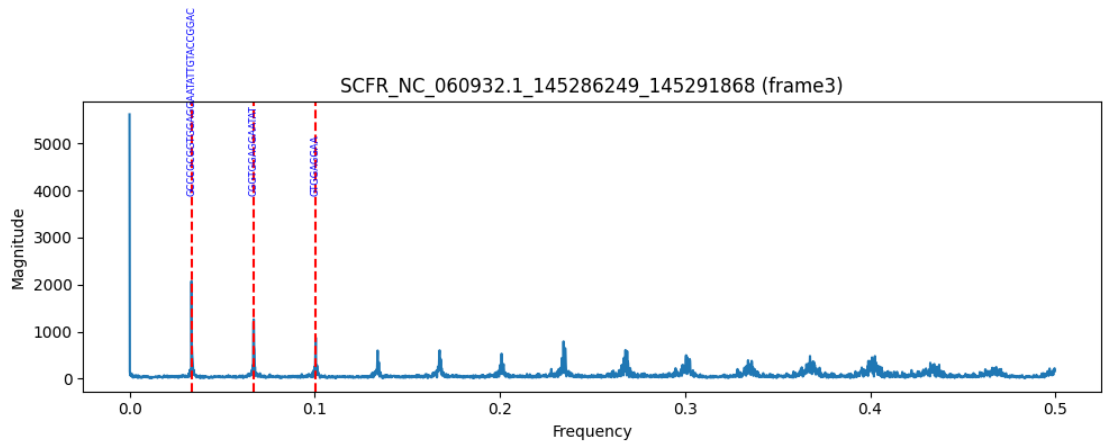**Protein Description**:
Stop-codon-free region (1969830-1975482)

Figure 6: FFT Spectrum for frame-2

Frequency	Motifs
0.266	CCT (1255), TCC (1253), CCC (1223), CTC (749), TTC (517)
0.266	CCT (1255), TCC (1253), CCC (1223), CTC (749), TTC (517)
0.265	CCT (1255), TCC (1253), CCC (1223), CTC (749), TTC (517)

3.7   SCFR_NC_060932.1_144819682_144825631

3.7.1   Protein: frame2

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5949 bp
Protein Description:
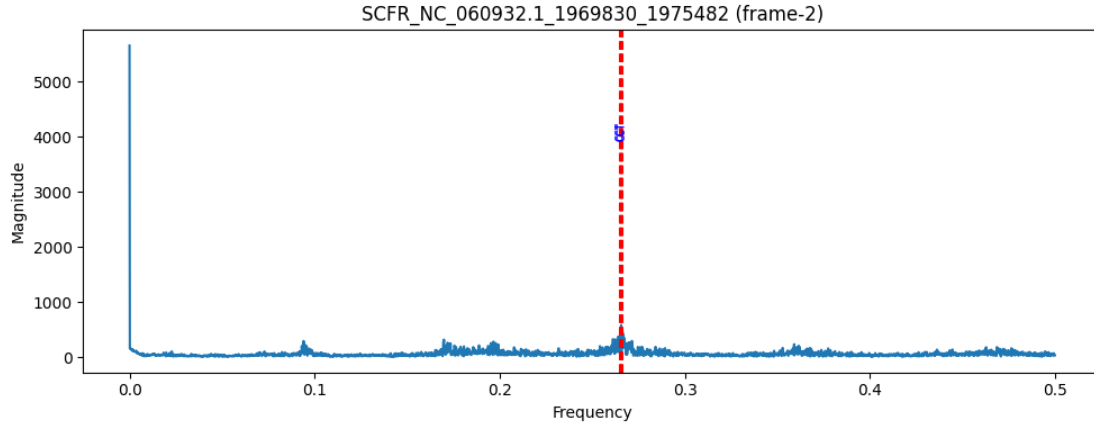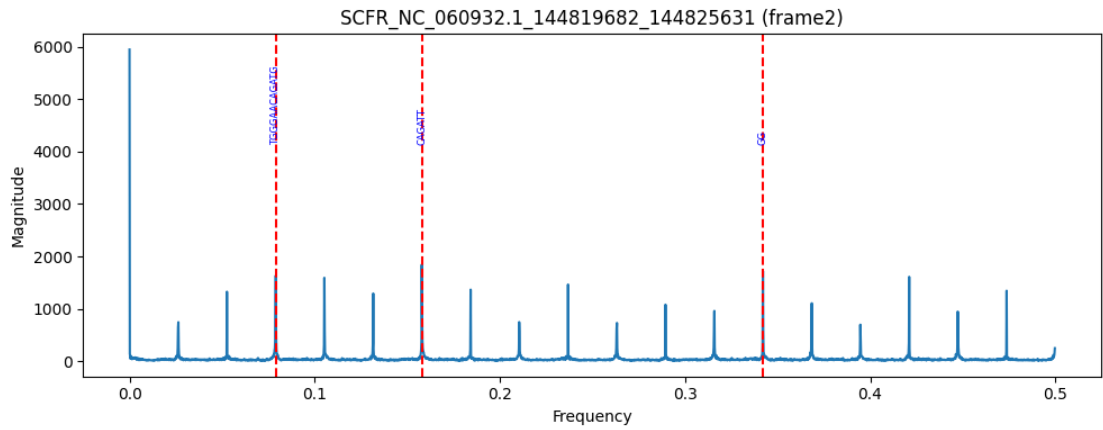Stop-codon-free region (144819682-144825631)

Figure 7: FFT Spectrum for frame2

Frequency	Motifs
0.158	CAGATT (239), AGATTG (238), ATTGGG (237), GATTGG (235), ACAGAT (19
0.342	GG (977), TT (761), TG (723), GA (564), CA (473)
0.079	TGGGAACAGATG (148), TGGGCTGCAGAT (147), GGGCTGCAGATT (147), GGCTGCAGATTG (146)

3.8 SCFR_NC_060932.1_1969824_1975374

3.8.1 Protein: frame1

Gene ID: SCFR
Nucleotide Accession: NC_060932.1
Sequence Length: 5550 bp
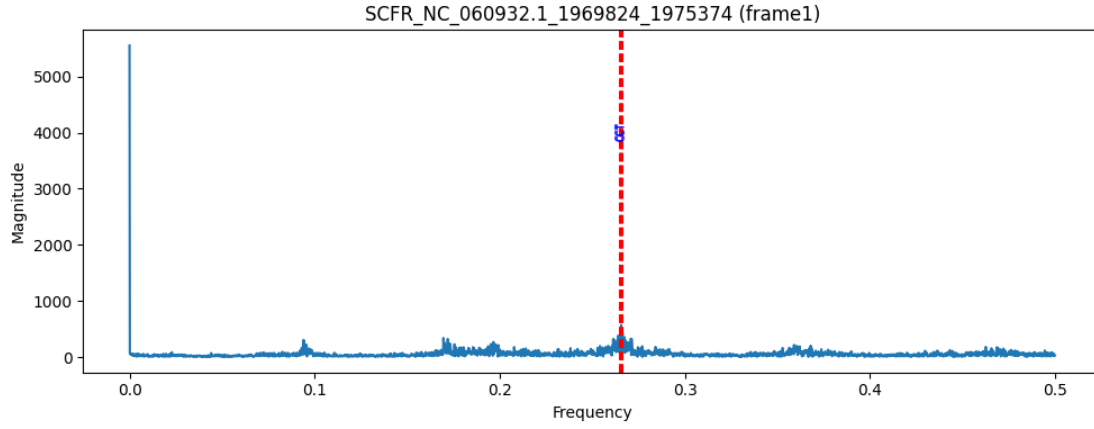**Protein Description**:
Stop-codon-free region (1969824-1975374)

Figure 8: FFT Spectrum for frame1

Frequency	Motifs
0.266	CCT (1256), TCC (1254), CCC (1222), CTC (750), TTC (515)
0.265	CCT (1256), TCC (1254), CCC (1222), CTC (750), TTC (515)
0.266	CCT (1256), TCC (1254), CCC (1222), CTC (750), TTC (515)