

# Fourier Spectral Analysis of Coding Sequences

Automated Report

November 20, 2025

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## 1 Group 1: Single Peak at 0.33

## 2 Group 2: Single Peak Elsewhere

## 3 Group 3: Multiple Peaks

### 3.1 SCFR\_NC\_060943.1\_16062466\_16067851

#### 3.1.1 Protein: frame-1

Gene ID: SCFR

Nucleotide Accession: NC\_060943.1

Sequence Length: 5385 bp

Protein Description:

Stop-codon-free region (16062466-16067851)

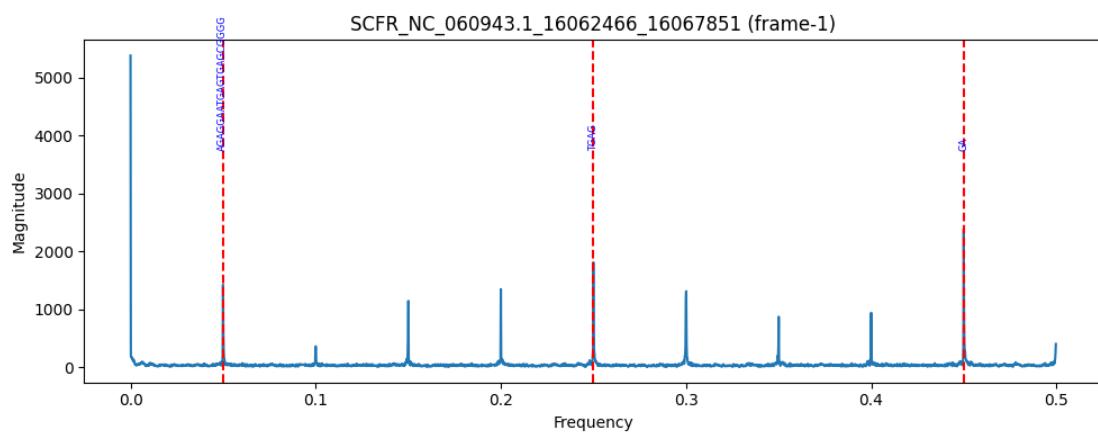


Figure 1: FFT Spectrum for frame-1

Frequency	Motifs
0.45	GA (1281), AG (1114), GG (855)
0.25	TGAG (539), AGGA (308), GAGG (307)
0.05	AGAGGAATGAGTGAGCGGGG (123), GAGGAATGAGTGAGCGGGGA (123), AGGAATGAGTGAGCG

## 3.2 SCFR\_NC\_060943.1\_61634235\_61640661

### 3.2.1 Protein: frame1

Gene ID: SCFR

Nucleotide Accession: NC\_060943.1

Sequence Length: 6426 bp

Protein Description:

Stop-codon-free region (61634235-61640661)

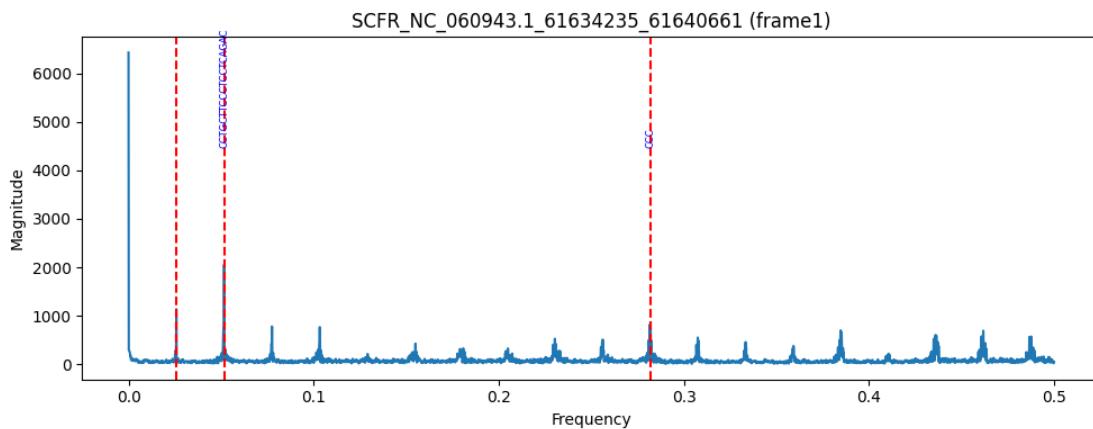


Figure 2: FFT Spectrum for frame1

Frequency	Motifs
0.052	CCTGCTTCCCTCCTCAGAC (113), CTGCTTCCCTCCTCAGACA (110), TGCTTCCCTCCTCAGACAG
0.282	CCC (657), ACA (487), CCT (451), CAC

### 3.3 SCFR\_NC\_060943.1\_16062735\_16067886

#### 3.3.1 Protein: frame-2

Gene ID: SCFR

Nucleotide Accession: NC\_060943.1

Sequence Length: 5151 bp

Protein Description:

Stop-codon-free region (16062735-16067886)

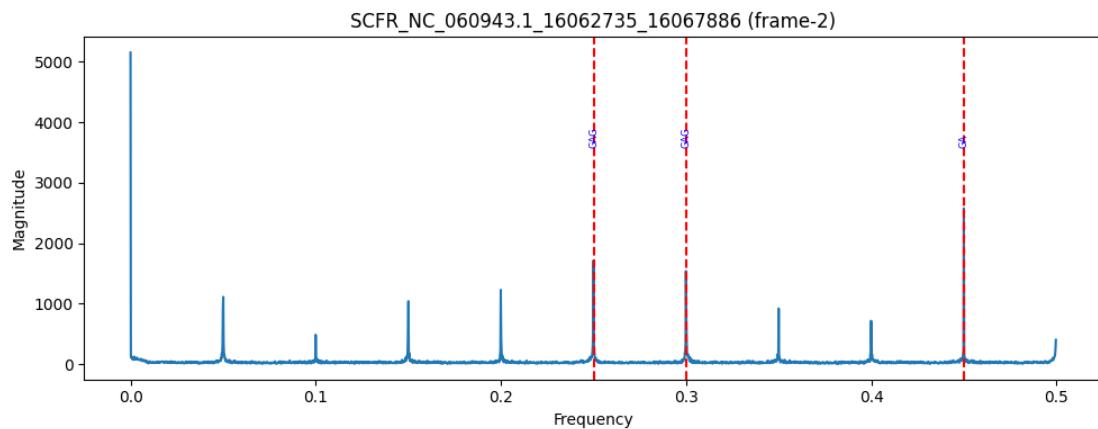


Figure 3: FFT Spectrum for frame-2

Frequency	Motifs
0.45	GA (1254), AG (1074), GG (825), TG (563), GT (306)
0.25	GAG (995), TGA (538), GGA (430), GGG (324), GTG (305)
0.3	GAG (995), TGA (538), GGA (430), GGG (324), GTG (305)

## 3.4 SCFR\_NC\_060943.1\_61634819\_61640612

### 3.4.1 Protein: frame3

Gene ID: SCFR

Nucleotide Accession: NC\_060943.1

Sequence Length: 5793 bp

Protein Description:

Stop-codon-free region (61634819-61640612)

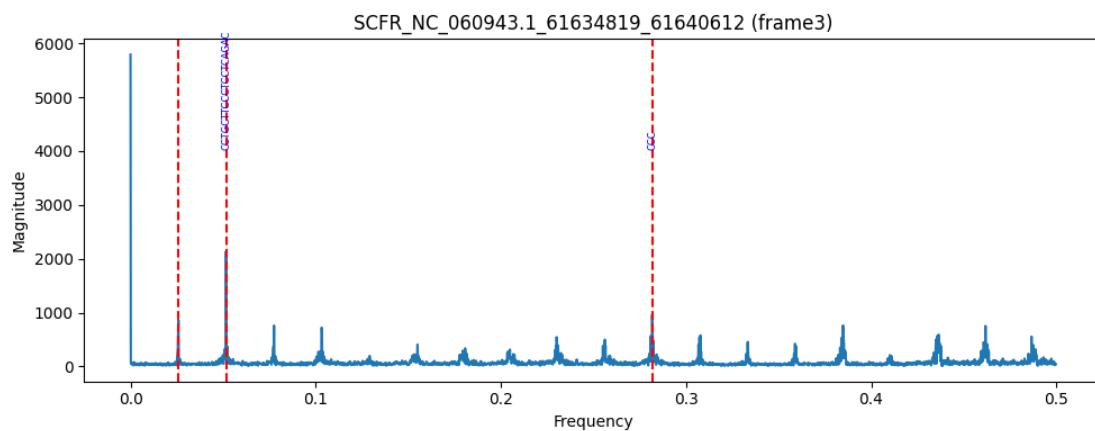


Figure 4: FFT Spectrum for frame3

Frequency	Motifs
0.052	CCTGCTTCCCTCCTCAGAC (113), CTGCTTCCCTCCTCAGACA (110), TGCTTCCCTCCTCAGACAG
0.282	CCC (618), ACA (480), CCT (436), CTC

### 3.5 SCFR\_NC\_060943.1\_56998926\_57004200

#### 3.5.1 Protein: frame1

Gene ID: SCFR

Nucleotide Accession: NC\_060943.1

Sequence Length: 5274 bp

Protein Description:

Stop-codon-free region (56998926-57004200)

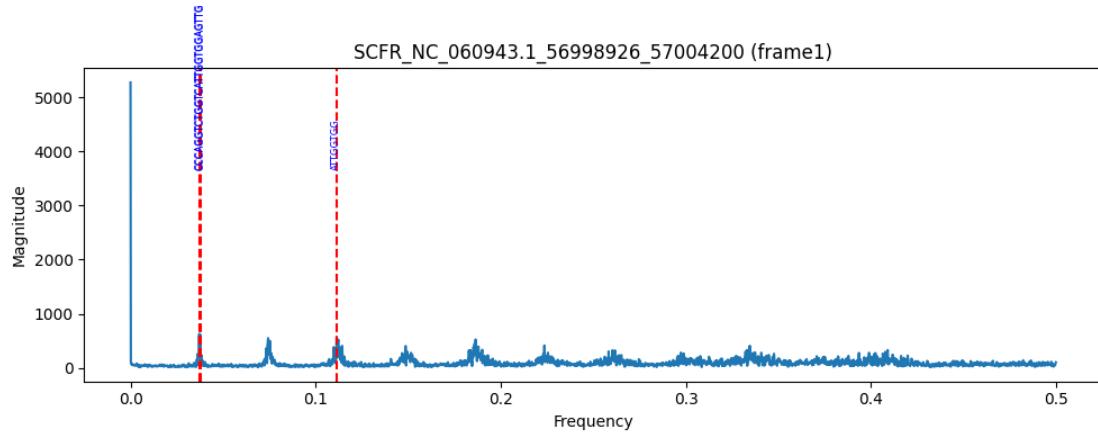


Figure 5: FFT Spectrum for frame1

Frequency	
0.037	CCCAGGTCTGGTCATTGGTGGAGTTG (58), TTGCCCCAGGTCTGGTCATTGGTGGGA (53), CTGGT
0.038	CCCAGGTCTGGTCATTGGTGGAGTTG (58), TTGCCCCAGGTCTGGTCATTGGTGGGA (53), CTGGT
0.111	ATTGGTGG (176), TTGGTGGGA