**ProtParam Protein Analysis - Results Summary**

**Normal Sequence:**

- Length: 53 amino acids

- Molecular Weight (MW): 5324.10 Da

- Theoretical pI: 3.77

- Instability Index: 27.35 (Stable)

- Aliphatic Index: 115.85

- GRAVY (Hydropathicity): 0.774

**Mutant Sequence:**

- Length: 53 amino acids

- Molecular Weight (MW): 5325.09 Da

- Theoretical pI: 4.10

- Instability Index: 25.75 (Stable)

- Aliphatic Index: 106.60

- GRAVY (Hydropathicity): 0.636

**Observation:**

The mutation caused a slight shift in the isoelectric point (pI) and reduced the aliphatic index and GRAVY value,

indicating minor changes in protein stability and hydrophobicity. However, the protein remains classified as stable overall.