

Estimating Evolutionary Parameters for Protein Low Complexity Regions using an Approximate Bayesian Computation

Alexander Turco

November 23, 2022

Overview

Background information

Research Questions/Explorations

Experimental Approach

Results

Conclusion and Future Work

What are LCR's?

Saccharomyces cerevisiae SRP40 Protein LCRs

>CAA82171.1(25-125) complexity=0.92 (15/1.90/2.20)

```

sssssssssssssssssssssssgsssssssssssssdssdssdsessssssss
sssssdssssesdsssgsssssssssdesssesede

```

>CAA82171.1(149-282) complexity=1.33 (15/1.90/2.20)

```

essssessssgsssssesgsgesdsdssssssssdsesdsesdsqsssssssdsss
dsdssssdsdssdsdssssssssssdsdssdsdssdsdssgssdsssssdsdssdestssds
dsdssdsdsgssse

```

>CAA82171.1(298-316) complexity=2.18 (15/1.90/2.20)

tpassnestpsasssssan

Information and Entropy Content - MAYBE

LCR's Present in Unique Ways

LCR's are Hypermutable

Proposed Mechanisms of LCR Evolution

Why Care about LCRs and Their Evolution?

What will this Study Explore?

What Approach will be Taken?

Why use an ABC-MCMC

ABC-MCMC Algorithm

ABC-MCMC Algorithm - MY VERSION

Simulation Step

Results

Conclusion/Future Work

Blocks in Beamer

Standard Block

This is a standard block.

Alert Message

This block presents alert message.

An example of typesetting tool

Example: MS Word, \LaTeX