

ALICUT (*Kück unpubl.*)

An amplification tool for the ALISCORE software

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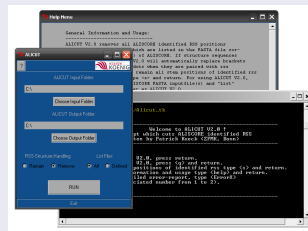
Forschungsmuseum Koenig, Bonn

ALICUT features

- cut of ALISCORE identified random sequence similarity (RSS)
- considers structure sequences (dot-bracket format)
 - RSS corresponding non-RSS stem positions changes to loops
 - alternatively RSS identified stems can be remained
- additional info files
 - number and percent of remained positions
 - list of loop & stem corresponding alignment positions
 - percentage distribution of stem & loop positions

Script info

- written in Perl
- terminal version (V2.2)
- start via menu/command line
- Windows-GUI version (V2.0)
- GUI needs Perl-tk Modul



ALICUT Input

- original ALISCORE input file (*.fas)
- original ALISCORE fasta input file corresponding list output file (*.List_random.txt)
- equal prefix (*) of both files essential
- input files must be located in the ALICUT folder (terminal version)
- ALICUT handles unlimited input files in one single run
- wrong input files not executed ↪ error message

ALICUT Output

- RSS restricted fasta file(s) (ALICUT_*.fas)
- ALICUT_info.xls
- ALICUT_Struc_info_*.txt

Common Info File

	A	B	C	D	E
1					
2	Used List File	Used Fasta file	bp before	bp after	remaining bp [%]
3	mafft_Set1_COI.fas_List_random.txt	mafft_Set1_COI.fas	588	505	85,9
4	mafft_Set1_COII.fas_List_random.txt	mafft_Set1_COII.fas	375	224	59,7
5	mafft_Set1_COIII.fas_List_random.txt	mafft_Set1_COIII.fas	339	264	77,9
6	mafft_Set1_Cytb.fas_List_random.txt	mafft_Set1_Cytb.fas	446	384	86,1
7	mafft_Set1_ND1.fas_List_random.txt	mafft_Set1_ND1.fas	482	299	62
8	mafft_Set1_ND2.fas_List_random.txt	mafft_Set1_ND2.fas	659	159	24,1
9	mafft_Set1_ND3.fas_List_random.txt	mafft_Set1_ND3.fas	678	116	17,1
10	mafft_Set1_ND4.fas_List_random.txt	mafft_Set1_ND4.fas	644	290	45
11	mafft_Set1_ND4L.fas_List_random.txt	mafft_Set1_ND4L.fas	108	60	55,6
12	mafft_Set1_ND5.fas_List_random.txt	mafft_Set1_ND5.fas	779	369	47,4
13	mafft_Set1_ND6.fas_List_random.txt	mafft_Set1_ND6.fas	331	45	13,6
14					

Structure Info File

Datei Bearbeiten Format Ansicht ?

```
|
Original structure information identified in testfile.:

- Number of characters:          19
- Number of single loop characters: 9 [52.6315789473684 %]
- Number of paired stem characters: 5 [47.3684210526316 %]

- Paired stem positions:
                                1:19
                                2:18
                                3:16
                                6:14
                                7:13

- Loop positions:
                                4
                                5
                                8
                                9
                                10
                                11
                                12
                                15
                                17
```