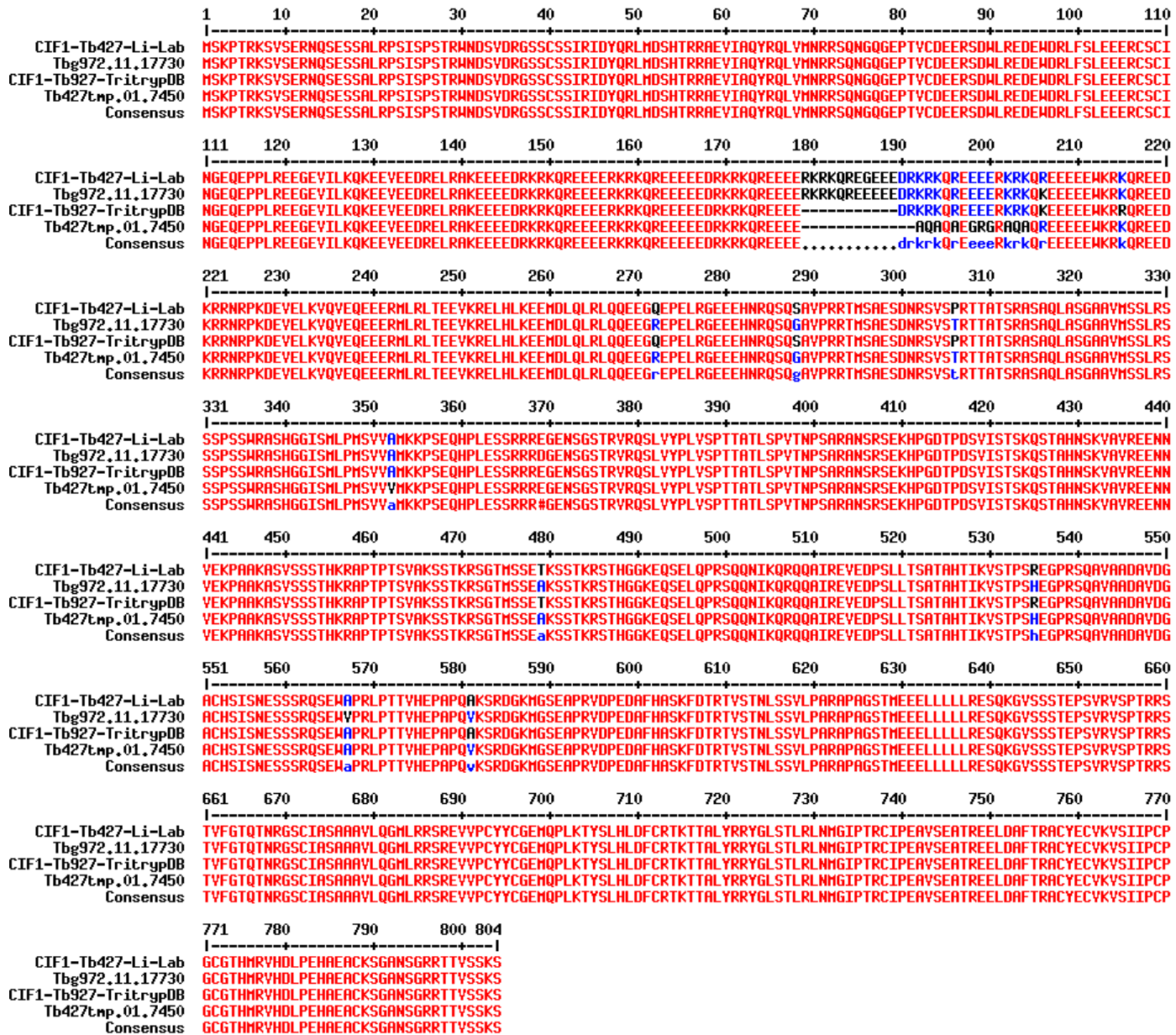


Figure S1. Protein sequence alignment of CIF1 from different *T. brucei* strains.



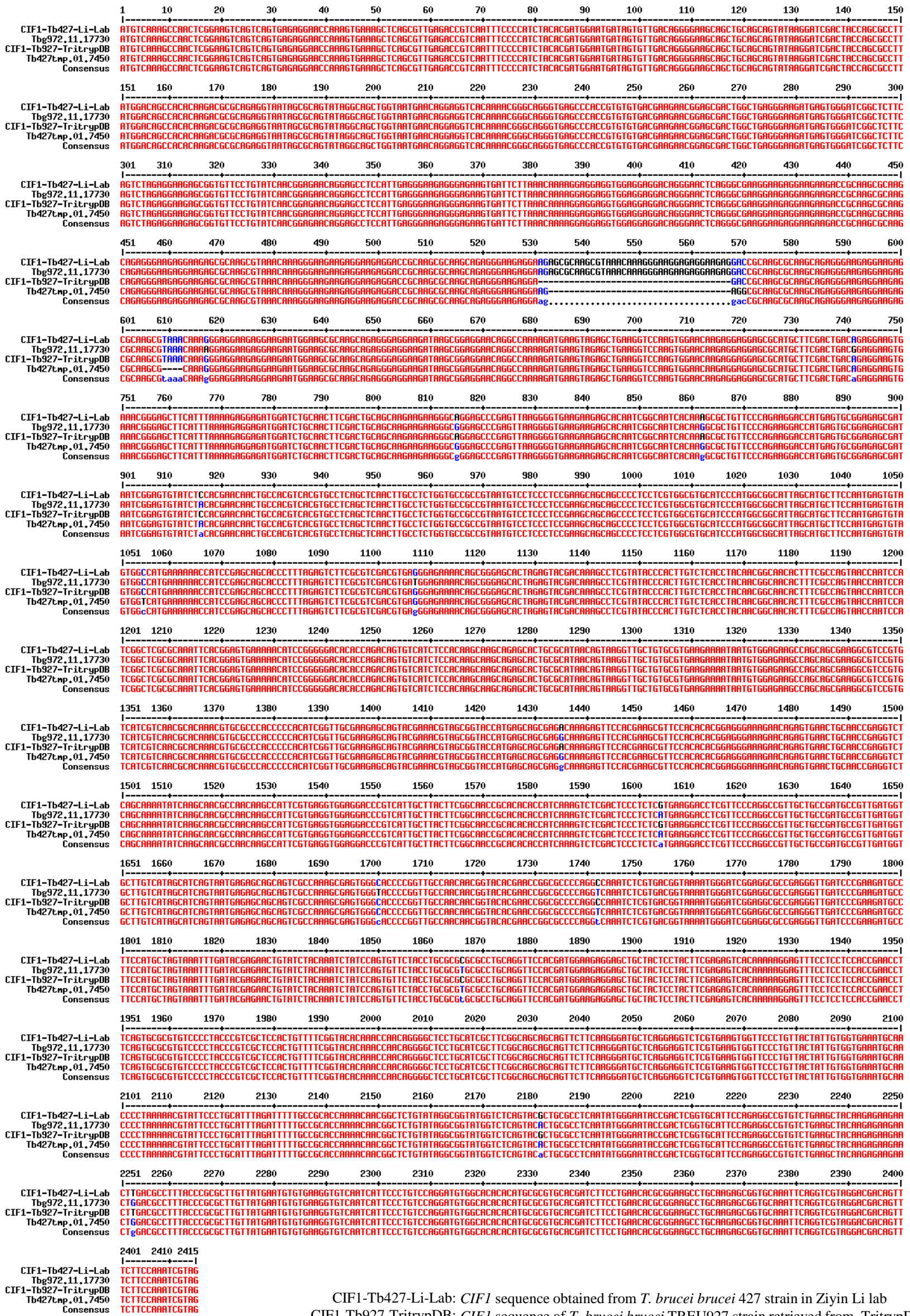
CIF1-Tb427-Li-Lab: CIF1 sequence obtained from *T. brucei brucei* 427 strain in Ziyin Li lab

CIF1-Tb927-TritrypDB: CIF1 sequence of *T. brucei brucei* TREU927 strain retrieved from TritrypDB

Tbg972.11.17730: CIF1 homolog of *T. brucei gambiense* DAL972 strain retrieved from TritrypDB

Tb427tmp.01.7450: CIF1 homolog of *T. brucei brucei* 427 strain retrieved from TritrypDB (there is a frame shift between a.a. 178-190)

Figure S2. DNA sequence alignment of *CIF1* genes from different *T. brucei* strains.



CIF1-Tb427-Li-Lab: *CIF1* sequence obtained from *T. brucei brucei* 427 strain in Ziyin Li lab
CIF1-Tb927-TritypDB: *CIF1* sequence of *T. brucei brucei* TREU927 strain retrieved from TritypDB
Tb972.11.17730: *CIF1* homolog of *T. brucei gambiense* DAL972 strain retrieved from TritypDB
Tb427tmp.01.7450: *CIF1* homolog of *T. brucei brucei* 427 strain retrieved from TritypDB

Table S1. List of primers used in this study

(Note: Restriction sites used for cloning are highlighted in red. Mutated nucleotide sequences are highlighted in green. CIF1 and CIF2 sequences used for PCR are underlined)

1. pZJM-CIF1-3'UTR-PAC:

Forward primer: ATCTAGCCCCTCGAGCACAGTGCTTGTGTCGCCGG

Reverse primer: TTCGATATCAAGCTTTGTTTTCTTCACTGCGTCG

2. pZJM-CIF2-3'UTR-PAC:

Forward primer: ATCTAGCCCCTCGAGTTCGGTAGAGCGATATTTTT

Reverse primer: TTCGATATCAAGCTTGGTGACCTGGTCCCTCCCCT

3. Primers for endogenous tagging of PTP-CIF1:

Forward primer:

TATTTCCCATCCGTGTCATTGCTCATATATTGGTAGGGAGGGATTTCTAAGTTGACGCGAGAAA
GGAGCTTCCGGCACCCAACAATGCCTTTGTCTCAAGAAGAATCC

Reverse primer:

CGTGTAGATGGGAAATTGACGGTCTCAACGCTGAGCTTTCCTTTGGTTCCTCTCATGACTGAC
TTCCGAGTTGGCTTTGACATCGCGGCCGCTTCCCATCAATAAG

4. Primers for endogenous tagging of PTP-CIF2:

Forward primer:

TTCTTTTCTTTTTTTTCTTCGGCTCGTTGAACACTTATTATTGTGTATAGTTGACATATATATA
TATATCTACGTATTCTTCCCAATGCCTTTGTCTCAAGAAGAATCC

Reverse primer:

CCATCAGGTGCGACAATATGAAAGGTGTTGAAAACGTCCCCAGCCATTGCCTTAATCACACCTGA
TCCCCTCGCTGAGGCGGTCATCGCGGCCGCTTCCCATCAATAAG

5. pGADT7-CIF1

Forward primer: GGAGGCCAGTGAATTCATGTCAAAGCCAACCTCGGAAG

Reverse primer: CGAGCTCGATGGATCCCTACGATTTGGAAGAACTG

(Note: the same primers were used to amplify CIF1- Δ ACC, CIF1-ZnF1^{mut} and CIF1-ZnF2^{mut} from the pLew100-CIF1- Δ ACC-3HA-BLE, pLew100-CIF1-ZnF1^{mut}-3HA-BLE, pLew100-CIF1-ZnF2^{mut}-3HA-BLE vectors for cloning into the pGADT7 vector)

6. pGBKT7-CIF1

Forward primer: CATGGAGGCCGAATTCATGTCAAAGCCAACCTCGGAAG

Reverse primer: GCAGGTCGACGGATCCCTACGATTTGGAAGAACTG

(Note: the same primers were used to amplify CIF1- Δ ACC, CIF1-ZnF1^{mut} and CIF1-ZnF2^{mut} from the pLew100-CIF1- Δ ACC-3HA-BLE, pLew100-CIF1-ZnF1^{mut}-3HA-BLE, pLew100-CIF1-ZnF2^{mut}-3HA-BLE vectors for cloning into the pGBKT7 vector)

7. pGADT7-CIF2

Forward primer: GGAGGCCAGTGAATTCATGACCGCCTCAGCGAGGGGA

Reverse primer: CGAGCTCGATGGATCCCTAAAACATTGCACAGCATGGCGA

8. pGADT7-CIF2- Δ EF1
Forward primer: GAGGCCAGTGAATTCATGTACTATCCCACTGCTCAC
Reverse primer: CGAGCTCGATGGATCCCTAAAACATTGCACAGCATGGCGA
9. pGADT7-CIF2- Δ EF1-2
Forward primer: GAGGCCAGTGAATTCATGACGAGGGCGCTTGATGAC
Reverse primer: CGAGCTCGATGGATCCCTAAAACATTGCACAGCATGGCGA
10. pGADT7-CIF2- Δ EF1-3
Forward primer: GAGGCCAGTGAATTCATGGCGTCAGAATTAACATCTTG
Reverse primer: CGAGCTCGATGGATCCCTAAAACATTGCACAGCATGGCGA
11. pGADT7-CIF2- Δ EF1-4
Forward primer: GAGGCCAGTGAATTCATGGAGCCTGTGGATCCAGTCGTC
Reverse primer: CGAGCTCGATGGATCCCTAAAACATTGCACAGCATGGCGA
12. pGBDT7-CIF2
Forward primer: CATGGAGGCCGAATTCATGACCGCCTCAGCGAGGGGA
Reverse primer: GCAGGTCGACGGATCCCTAAAACATTGCACAGCATGGCGA
13. pLew100-CIF1-3HA-BLE
Forward primer: CATTCTTGACTCGAGATGTCAAAGCCAACCTCGGAAG
Reverse primer: AGGATATTCCTTAAGCGATTTGGAAGAACTGTTCGT
14. pLew100-CIF1- Δ CC-3HA-BLE
Primer 1: CATTCTTGACTCGAGATGTCAAAGCCAACCTCGGAAG
Primer 2: AGGATATTCCTTAAGCGATTTGGAAGAACTGTTCGT
Primer 3: GAGCCTCCATTGAGGGAACAGGAGCCCGAGTTAAG
Primer 4: CCTTAACCTCGGGCTCCTGTTCCCTCAATGGAGGCT
15. pLew100-CIF1-ZnF1^{mut}-3HA-BLE
Forward primer:
CGTGAAGTGGTTCCCGCTTACTATGCTGGTGAAATGCAACCCCTAAAACGTATTCCTGGCTTT
AGATTTTGCCCGCACCAAAACAACG

Reverse primer:
CGTTGTTTTGGTGC GGCAAATCTAAAGCCAGGGAATACGTTTTTAGGGGTTGCATTTACCCAG
CATAGTAAGCGGGAACCACTTCACG
16. pLew100-CIF1-ZnF2^{mut}-3HA-BLE
Forward primer: CATTCTTGACTCGAGATGTCAAAGCCAACCTCGGAAG

Reverse primer (H784A-C788A):
AAGGATATTCCTTAAGCGATTTGGAAGAACTGTCGTCCTACGACCTGAATTTGCACCGCTCTTG
GGGCTTCCGCGGCTTCAGGAAGATCGTGCACGCG

Forward primer (C769A-C772A):
GTGTCAATCATTCCCGCTCCAGGAGCTGGCACACACATGCGC

Reverse primer (C769A-C772A):
GCGCATGTGTGTGCCAGCTCCTGGAGCGGGAATGATTGACAC

17. pLew100-CIF2-3HA-BLE

Forward primer: CATTCTTGACTCGAGATGACCGCCTCAGCGAGGGG
Reverse primer: AGGATATTCCTTAAGAAACATTGCACAGCATGGCG

18. pLew100-CIF2-ΔEF1-3HA-BLE

Forward primer: CATTCTTGACTCGAGATGTACTATCCCACTGCTCAC
Reverse primer: AGGATATTCCTTAAGAAACATTGCACAGCATGGCG

19. pLew100-CIF2-ΔEF1-2-3HA-BLE

Forward primer: CATTCTTGACTCGAGATGACGAGGGCGCTTGATGAC
Reverse primer: AGGATATTCCTTAAGAAACATTGCACAGCATGGCG

20. pLew100-CIF2-ΔEF1-3-3HA-BLE

Forward primer: CATTCTTGACTCGAGATGGCGTCAGAATTAACATCTTG
Reverse primer: AGGATATTCCTTAAGAAACATTGCACAGCATGGCG

21. pLew100-CIF2-ΔEF1-4-3HA-BLE

Forward primer: CATTCTTGACTCGAGATGGAGCCTGTGGATCCAGTCGTC
Reverse primer: AGGATATTCCTTAAGAAACATTGCACAGCATGGCG

22. pET29a-CIF1-CTD

Forward primer: GCAGCTGCATATGACCAACAGGGGCTCCTGC
Reverse primer: GACCGGATCCCTACGATTTGGAAGAAACTGTC

23. pET15b-CIF2-NTD

Forward primer: GCAGCTGCATATGACCGCCTCAGCGAGGG
Reverse primer: GACCGATCTACCCGTCGACGGCCAGGC