

Supplemental Information

Table S1. Plasmid and codon-optimized Cpf1-family protein sequences. Related to Figures 1, 2 and 6.

FnCpf1 locus sequences

pFnCpf1

pFnCpf1_min

pFnCpf1_ΔCas

(permanent sequence links)

<https://benchling.com/s/Yz1hC8BN/edit>

<https://benchling.com/s/UZ2wCOF2/edit>

<https://benchling.com/s/ctaThKG6/edit>

Human codon optimized Cpf1-family proteins

1- Francisella tularensis subsp. Novicida U112 (FnCpf1)

<https://benchling.com/s/0xgyNBMK/edit>

2- Lachnospiraceae bacterium MC2017 (Lb3Cpf1)

<https://benchling.com/s/Oo2fP2pu/edit>

3- Butyrivibrio proteoclasticus (BpCpf1)

<https://benchling.com/s/b9izZiQ3/edit>

4- Peregrinibacteria bacterium GW2011_GWA_33_10 (PcCpf1)

<https://benchling.com/s/JcCPhiWB/edit>

5- Parcubacteria bacterium GWC2011_GWC2_44_17 (PbCpf1)

<https://benchling.com/s/yAlizdZH/edit>

6- Smithella sp. SC_K08D17 (SsCpf1)

<https://benchling.com/s/bUG7ykgA/edit>

7- Acidaminococcus sp. BV3L6 (AsCpf1)

<https://benchling.com/s/wXO8WZJ7/edit>

8- Lachnospiraceae bacterium MA2020 (Lb2Cpf1)

<https://benchling.com/s/R9HC1JbY/edit>

9- Candidatus Methanoplasma termitum (CMtCpf1)

<https://benchling.com/s/ZC673QLc/edit>

10- Eubacterium eligens (EeCpf1)

<https://benchling.com/s/0DPsrCES/edit>

11- Moraxella bovoculi 237 (MbCpf1)

<https://benchling.com/s/bCMe5bII/edit>

12- Leptospira inadai (LiCpf1)

<https://benchling.com/s/pqFOk5Rn/edit>

13- Lachnospiraceae bacterium ND2006 (LbCpf1)

<https://benchling.com/s/HVIyGqQs/edit>

14- Porphyromonas crevioricanis (PcCpf1)

<https://benchling.com/s/wDDn4cBS/edit>

15- Prevotella disiens (PdCpf1)

<https://benchling.com/s/B8eGa0Ky/edit>

16- Porphyromonas macacae (PmCpf1)

<https://benchling.com/s/NDZsqgFs/edit>

Table S2. List of primer sequences used in this study. Related to all figures.

See separate Excel file.

Table S3. Accession information for all unique Cpf1-family proteins. Related to Figure 6.

See separate Excel file.