

Evaluating the Efficiency of gRNAs in CRISPR/Cas9 Mediated Genome Editing in Poplars

T. Bruegmann*, K. Deecke, M. Fladung*

Thuenen Institute of Forest Genetics, Grosshansdorf, Germany

tobias.bruegmann@thuenen.de; matthias.fladung@thuenen.de

Online Resource 1

gRNA sequences and structures

The given sequences are colored in the following scheme: gRNA sequence green, hairpin sequence blue, tracrRNA grey.

gRNA1 sequence (targeting *SOC1*)

UUGGACAGCC ACAGAUGC CGC GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA2 sequence (targeting *SOC1* Paralog 1 and Paralog 2)

GUAAAUGCAU CUUCCUUCAC GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA3 sequence (targeting *AGL8.1*)

UUCCCGAAUG AGUUCAGGG GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA4 sequence (targeting *AGL8.2*)

UGCCCGAAUG UGUUUUAGGG GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA5 sequence (targeting *NFP-like1*)

AGUUGAUUUG GAAUAAAUGG UUUUAGAGC AGAAAUAGCA AGUUAAAAUA AGGCUAGUCC
GUUAUCAACU UGAAAAAGUG GCACCGAGUC GGUGCUUUUU UU

gRNA6 sequence (targeting *NFP-like1*)

UUCUUCUCGA UUCCACAUUU GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA7 sequence (targeting *NFP-like3* and *NFP-like4*)

CGAGAAAAGG UCACCGAUUG GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA8 sequence (targeting *NFP-like3* and *NFP-like4*)

UACUUGGUUU UGAUAUCAU GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

gRNA9 sequence (targeting *TOZ19*)

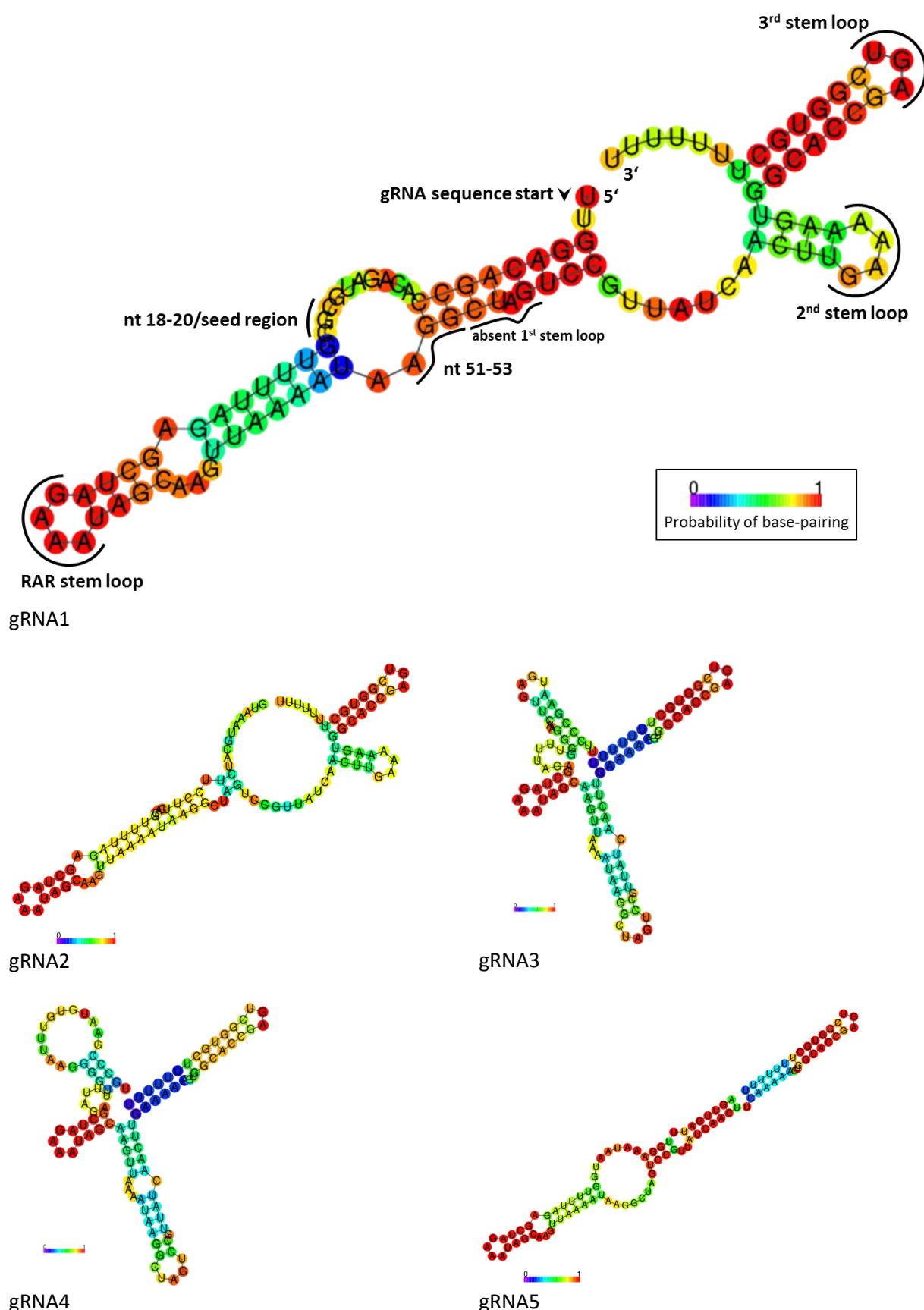
UCCAGAACGCA UGGCAAGCCA GUUUUAGAGC UAGAAAUAGC AAGUUAAAAU AAGGCUAGUC
CGUUUAUCAAC UUGAAAAAGU GGCACCGAGU CGGUGCUUUU UUU

Evaluating the Efficiency of gRNAs in CRISPR/Cas9 Mediated Genome Editing in Poplars

T. Bruegmann*, K. Deecke, M. Fladung*

Thuenen Institute of Forest Genetics, Grosshansdorf, Germany

tobias.bruegmann@thuenen.de; matthias.fladung@thuenen.de



Evaluating the Efficiency of gRNAs in CRISPR/Cas9 Mediated Genome Editing in Poplars

T. Bruegmann*, K. Deecke, M. Fladung*

Thuenen Institute of Forest Genetics, Grosshansdorf, Germany

tobias.bruegmann@thuenen.de; matthias.fladung@thuenen.de

