

target Exon 1 ATG

Plasmid ID	Gene targeted	Talen Sequence (Left talen/spacer/right talen)	binding sequences				tag	Method
			Segment I.	Segment II.	Segment III.	Segment IV.		
SD_18	SORT1_ATG-Left Set1	T CGGCGGCATTCGGCG gcgatggagcggc CCTGGGGAGCTGCGG A	CGGC	GGCA	TTCG	GCG	GFP	Musunuru-Cowan
SD_19	SORT1_ATG-right Set1	T CGGCGGCATTCGGCG gcgatggagcggc CCTGGGGAGCTGCGG A	CCGC	AGCT	CCCC	AGG	RFP	Musunuru-Cowan

NI-A NK/NN-G NG-T HD-C

SD\_18 GFP SORT1 ATG

forward

AVHAWRNALTGAPLNLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQAL  
ETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQAL  
ETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQAL  
ETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNIGGKQAL  
ETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQAF  
GNRTTDC

HD-NN-NN-HD NN-NN-HD-NI NG-NG

CGGC GGCA TT

reverse

PEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLT  
PEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNIGGKQALETVQRLLPVLCQAHGLT  
PEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLT  
PEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLT  
PEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLT  
PEQVVAIASNKGGRPALESIVAQ

NN-NN-HD-NI NG-NG-HD-NN NN-HD-NK

GGCA TTCG GCG

CGGC GGCA TTCG GCG

NI-A NK/NN-G NG-T HD-C

SD\_19 RFP SORT1 ATG

forward

MRSRGAPLNLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRL  
LPVLCQAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRL  
LPVLCQAHGLTPEQVVAIASNIGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRL  
LPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNNGGKQALETVQRL  
LPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGRKASLWKQ

HD-HD-NN-HD NI-NN-HD-NG HD-HD

CCGC AGCT CC

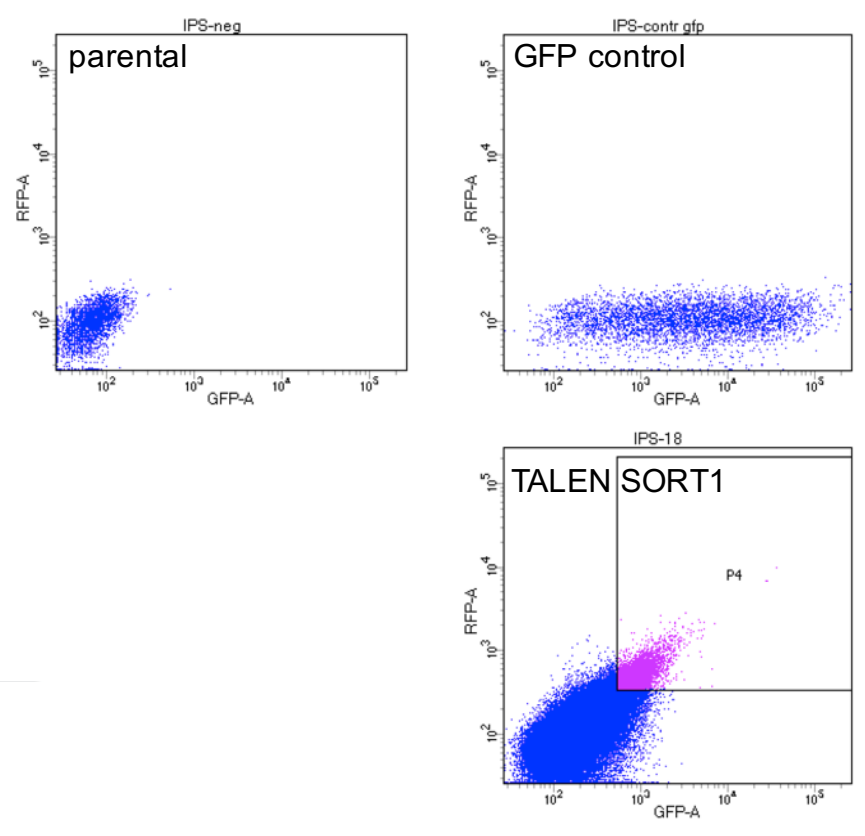
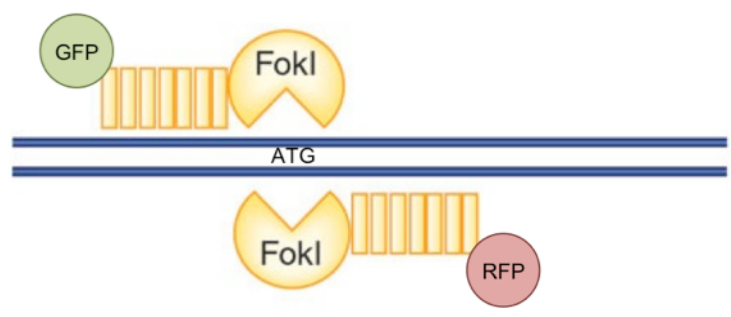
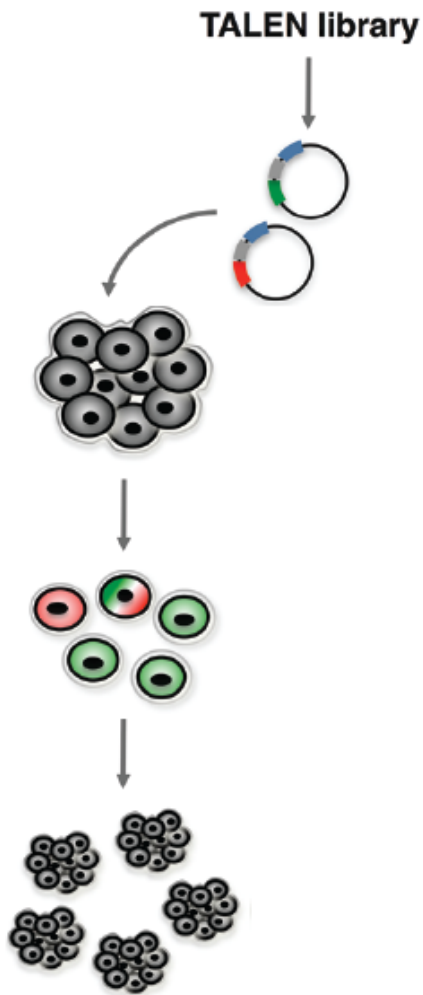
reverse

QAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLC  
QAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLC  
QAHGLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASHDGGKQALETVQRLLPVLC  
QAHGLTPEQVVAIASHDGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNIGGKQALETVQRLLPVLC  
QAHGLTPEQVVAIASNNGGKQALETVQRLLPVLCQAHGLTPEQVVAIASNKGGRPALESIVAQ

NN-HD-NG HD-HD-HD-ND NI-NN-NK

GCT CCCC AGG

CCGC AGCT CCCC AGG

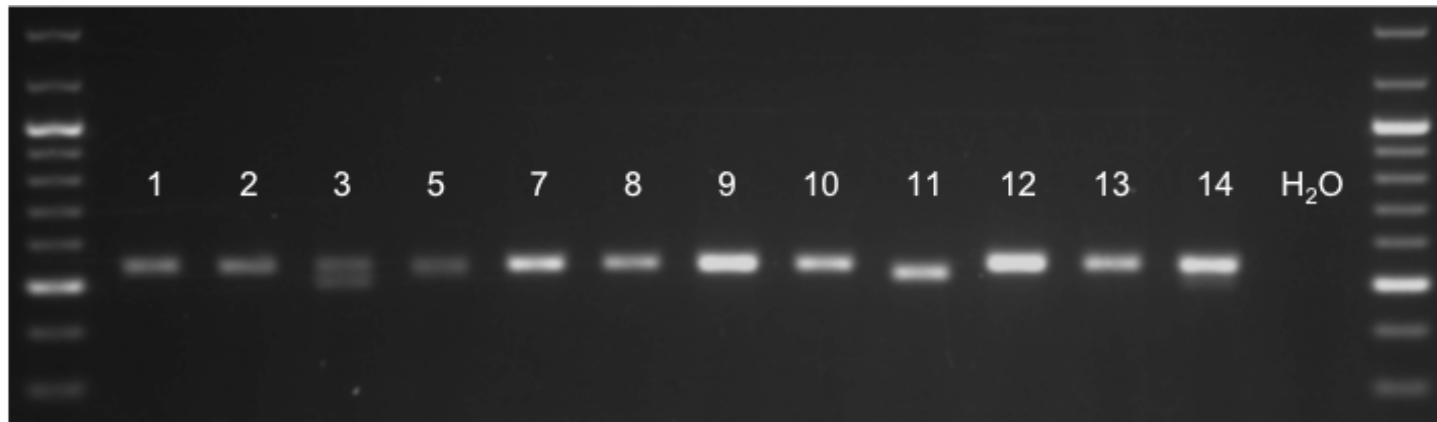


Primer for screening

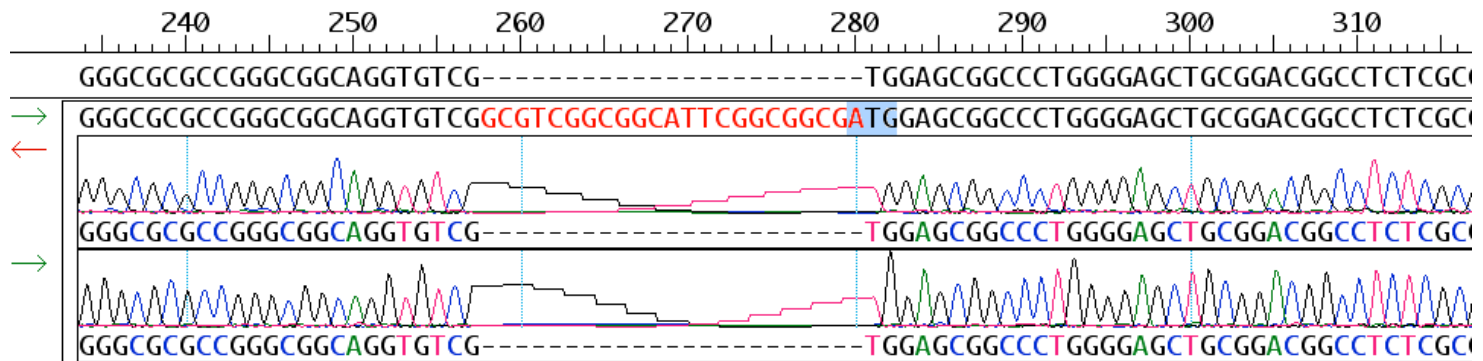
TALsortilinfw: CGTTCCAGCCAATCAGTCCC 241 bp vor ATG

TALsortilinrev: AGCTTGGCGACGAAGTCC 287 bp nach ATG

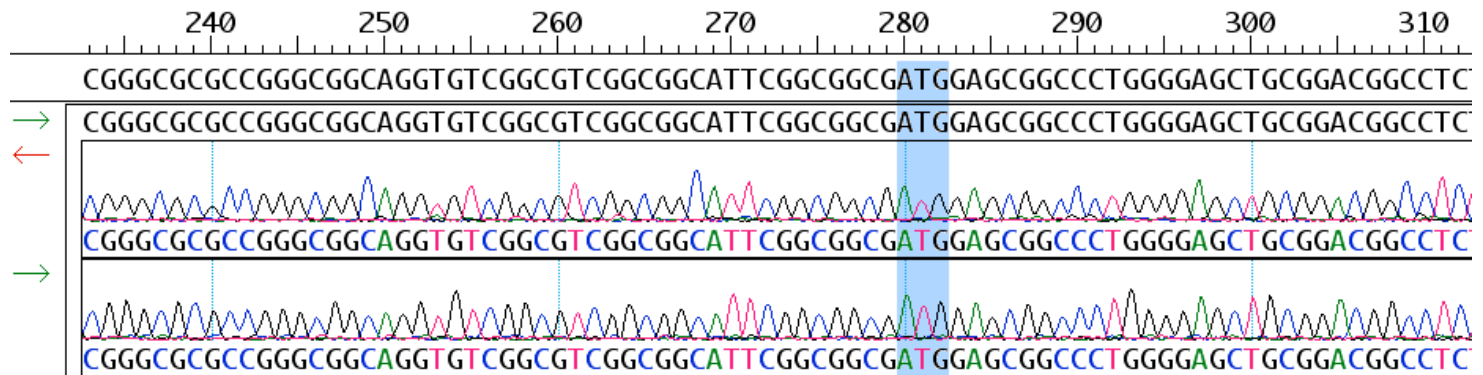
Produkt: 528 bp



clone 11



clone 13



parental iPSC (Pt5)  
Clone 11 (KO)  
Clone 13 (WT)

