

Target gene : C18A3.1

MDTEFAILDEEKYYDSVFKELNLKTRSELYEISSKFMPSQFEAIKRRGISNRKRKIKETSEN
SNRMEQMALKIKNVGTELKIFKKKSILDNNLKSARKAAETALNVSIPSASASSEQIIEFQKSE
SLSNLMSNGMINNWVRCSGDKPGIENS DGTKFYIPKSTFHVGDVKDIEQYSRAHDLLF
DLIIA **DPPW** FSKSVKRKRQTYQMDEEVLDCLDIPVILTHDALIAFWITNRIGIEEEMIERFDK
WGMEVVATWKLLKITTQGDPVYDFDNQKHKVPFESLMLAKKKDSMRKFELPENFVFAS
VPMSVHSHKPPLDLLRHFGIEFTEPLELFARSLLPSTHSVGYEPFLLQSEHVFTRNISL

DPPW → AAAA

www.idt.com



Search



GET HELP SIGN IN

0 ITEMS

PRODUCTS & SERVICES

APPLICATIONS & TECHNOLOGIES

SUPPORT & EDUCATION

TOOLS

COMPANY

ORDER MENU

You are using the MedClub Scientific- Taiwan IDT portal.

gene expression

IDT PrimeTime® 基因表現 qPCR探針反應混合液
Prime Time® Gene Expression Master Mix For probe-based assays

推薦使用於 Multiplex, Fast Protocol

Versatile two-step RT-qPCR master mix

PrimeTime® Gene Expression Master Mix is optimized to support probe-based qPCR assays for gene expression analysis. This master mix is guaranteed to provide assay efficiencies >90% in two-step RT-qPCR with PrimeTime 5' Nuclease Assays. It is also compatible with other qPCR primers and probes.

Each order includes 2X master mix (antibody-mediated, hot-start DNA polymerase; dNTPs; MgCl₂; enhancers; and stabilizers) and a separate reference dye stock solution.

Superior performance—under standard and fast cycling conditions

PrimeTime Gene Expression Master Mix performs well under standard or fast cycling conditions (Figure 1) on a variety of real-time qPCR instruments, including the 7900HT Real-Time (Thermo Fisher Scientific), QuantStudio™ 7 Flex (Thermo Fisher Scientific), CFX384 (BioRad), and LightCycler® 480 (Roche) qPCR systems.

5 x 1ml 只要 6500元

benefits

Achieve high efficiency qPCR under fast or standard cycling conditions

Multiplex without loss of sensitivity

Obtain consistent results from overnight experiments by capitalizing on exceptional benchtop stability

Discover more at
www.idtdna.com/qPCRmastermix

文檔下載:

- IDT帳戶設立簡介
- 訂購Oligo說明
- Oligo線上檢索QC資料說明
- Oligo設計與分析工具使用說明
- Oligo回溶計算程式使用說明



每得科技有限公司

MEDCLUB SCIENTIFIC CO., LTD.

桃園縣龜山鄉文七五街9號1F
1F No.9, Wenchi 5th St., Guishan Shiang, Taoyuan County 333, Taiwan (R.O.C.)
TEL: 03-3279-168
FAX: 03-3279-268
EMAIL: medclub@medclub.com.tw



SARS-CoV-2 COMPONENTS

- CDC assay
- Charité/Berlin assay
- Sherlock CRISPR kit
- Luminex assay
- Custom detection panels
- ARTIC V3 primer set
- NGS solutions
- Cas13 guide RNAs
- Affinity Plus ASOs
- Genes & gene fragments
- Media information

qPCR & PCR

- Gene expression
- Genotyping
- Custom probes
- Custom primers
- Master mixes & reagents
- SARS-CoV-2 reagents

OPTIONAL SERVICES

- PAGE & HPLC purification
- Formulation & Packaging
- Custom quality control

DNA & RNA

- Custom DNA oligos
- Custom RNA oligos
- Affinity Plus DNA & RNA oligos
- DNA oligo pools
- Large-scale synthesis
- SameDay oligos
- Inventoried oligos
- Oligo modifications

CRISPR GENOME EDITING

- CRISPR-Cas9
- CRISPR-Cas12a (Cpf1)
- CRISPR enzymes
- HDR donor oligos
- Genome editing detection

GMP, OEM & INTEGRATIONS

- GMP services
- GMP products
- OEM services
- Integrations

GENES & GENE FRAGMENTS

- Double-stranded DNA fragments
- Single-stranded DNA fragments
- Custom gene synthesis
- DNA Origami

FUNCTIONAL GENOMICS

- RNA interference
- Antisense oligos
- miRNA inhibitors

OLIGOCARD PAYMENT CARD

NEXT GENERATION SEQUENCING

- Adapters
- Library preparation
- Hybridization capture
- Amplicon sequencing
- IDT Align Program
- xGen Exome Research Panel v2

REAGENTS & KITS

- Mutation detection
- Microbial detection
- Oligo length standards
- Nuclease detection and control
- Buffers and solutions



C
RNAs

We make them better, and deliver them faster

[More genome editing products](#)

CRISPR-Cas13 guide RNAs

We make them better, and deliver them faster

[TALK TO OUR EXPERTS](#)

CRISPR genome editing

Use of the CRISPR (clustered regularly interspaced short palindromic repeats) and associated Cas9 enzyme for genome editing has been a major technological breakthrough, making genome modification in cells or organisms faster, more efficient, and more robust than previous genome editing methods. The Alt-R CRISPR-Cas9 System is an optimized genome editing solution that outperforms other CRISPR approaches for producing on-target, double-stranded DNA breaks.

We have also developed an alternative Alt-R CRISPR-Cas12a (Cpf1) System to open up CRISPR editing to additional areas in genomes.

The Alt-R CRISPR Systems were developed through comprehensive research on each component of the CRISPR-driven, double-stranded break generation critical for gene disruption and DNA insertion by homologous recombination.

Webinar available on demand



Update on SARS-CoV-2 technology

[REGISTER AND WATCH NOW](#)

2019 Novel Coronavirus (2019-nCoV)



Solutions for your research needs.

OLIGO DESIGN & HANDLING

OligoAnalyzer Tool
UNAFold Tool
Resuspension Calculator
Dilution Calculator

CRISPR GENOME EDITING

Alt-R Predesigned Cas9 crRNA Selection Tool
Alt-R Custom Cas9 crRNA Design Tool
CRISPR-Cas9 Design Checker
Alt-R HDR Design Tool

qPCR ASSAY DESIGN

PrimerQuest Tool
Realtime PCR Tool
Predesigned qPCR Assays
PrimeTime Multiplex Dye Selection

GENE REGULATION AND RNAi

Predesigned DsiRNA Selection Tool
RNAi Design Tool

GENOTYPING

rhAmp Genotyping Design Tool

GENES & GENE FRAGMENTS

Codon Optimization Tool
gBlocks Gene Fragments Entry Tool
Order status (Genes & gene fragments only)

NGS TOOLS

Target Capture Probe Design & Ordering Tool
Custom Adapter Configurator tool
rhAmpSeq Design Tool

[Browse all tools »](#)



CRISPR genome editing

Use of the CRISPR (clustered regularly interspaced short palindromic repeats) and associated Cas9 enzyme for genome editing has been a major technological breakthrough, making genome modification in cells or organisms faster, more efficient, and more robust than previous genome editing methods. The Alt-R CRISPR-Cas9 System is an optimized genome editing solution that outperforms other CRISPR approaches for producing on-target, double-stranded DNA breaks.

We have also developed an alternative Alt-R CRISPR-Cas12a (Cpf1) System to open up CRISPR editing to additional areas in genomes.

The Alt-R CRISPR Systems were developed through comprehensive research on each component of the CRISPR-driven, double-stranded break generation critical for gene disruption and DNA insertion by homologous recombination.



Update on SARS-CoV-2 technology

[REGISTER AND WATCH NOW](#)

2019 Novel Coronavirus (2019-nCoV)




Solutions for your research needs.
Available now. Ready to ship.


ORDER MENU You are using the MedClub Scientific- Taiwan IDT portal.

Custom Alt-R® CRISPR-Cas9 guide RNA

Generate CRISPR-Cas9 guide RNAs (gRNAs, such as crRNA and sgRNA) targeting any sequence from any species. Currently, analysis of off-target effects against human, mouse, rat, zebrafish, or *C. elegans* genes are available. For HDR experiment designs, please see the following [HDR design tool](#).

Search for predesigned gRNA [Design custom gRNA](#) CRISPR-Cas9 gRNA checker

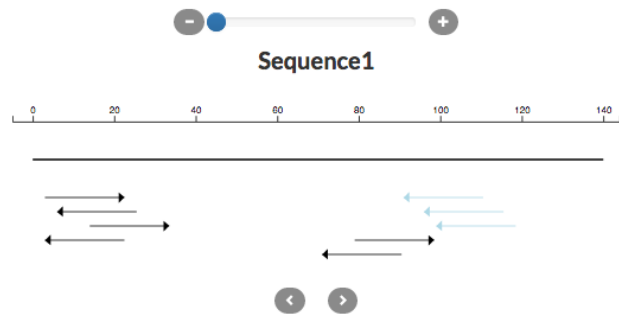
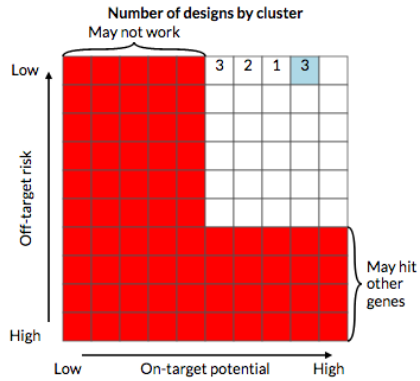
Species 

Input format 

Enter up to 10 FASTA Sequences.
Please enter sequences in standard FASTA formatting.
No more than 1000 bases accepted.

```
>HPRT1
GGCGGGGCGCTGCTTCTCCTCAGCTTCAGGCGGCTGCGACGAGCCCTCAGGCGAACCTCTCGGCTTCCCGCGGGCGCC
GCCTCTTGCTGCGCCTCCGCTCCTCCTGCTCCGCCACCGGCTTCTCCTCTGAGCAGTCAGCCCGCGCGCGGCCG
```

This field is required.



Your search returned 9 results. [Clear results](#)

Result sets ▾

Search results >

My design set (0 items) >

Design tool help ⓘ

Select all
ACTIONS ▾ SORT ▾ ⓘ
QUICK ORDER ⓘ

■ Design ID: Ce.Cas9.C18A3.1.1.AB **Sequence1** ✓ RECOMMENDED ⓘ **Predesigned Alt-R CRISPR-Cas9 gRNA**

Position	Strand	Sequence	PAM	On-target score ⓘ	Off-target score ⓘ
91	-	TTTACTGAACCATGGTGGAT	CGG 87		99

Show off-target details + | Show related products

[+ ADD TO DESIGN SET](#)

■ Design ID: Ce.Cas9.C18A3.1.1.AJ **Sequence1** **Predesigned Alt-R CRISPR-Cas9 gRNA**

Position	Strand	Sequence	PAM	On-target score ⓘ	Off-target score ⓘ
96	-	ACTGATTTACTGAACCATGG	TGG 83		99

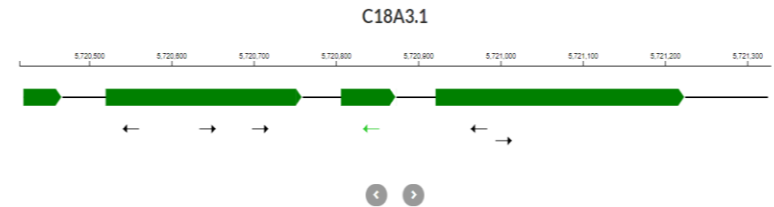
Show off-target details + | Show related products

[+ ADD TO DESIGN SET](#)

Target gene : C18A3.1: DPPW -> APPA

AGTGGGTC TGGCGACAAGCCGGGTATCATTGAAAATTCAGACGGAACAAAATCTATATACCTCCTAAAATCTACATTTC
 ATGTTGGAGATGTGAAGGATATTGAACAGTATTCAAGAGCACATGgttagcttcaaattcctgttgaagttaaagtattagaccagATCTC
 PAM D P P W
 CTCTTCGACTTGATCATTGCCGATCCACCATGGTTCAGTAAATCAGTGAAACGAAAACGAACgtgcgtttgaaatttcaagaac
 tccacagatgcattttccagATATCAAATGGACGAAGAAGTTCTAGATTGTCTCGATATTCTGTGCATATTAACTCATGATGCTC
 TGATTGCTTTCTGGATCACAAATCGGATAGGAATTGAGGAAGAAATGATAGAAAGATTGATAAATGGGAATGGAA

DPPW (wild type) has a Nco1 site (CCATGG).



Your search returned 6 results. [Clear results](#)

Result sets

Select all results (1 selected) ACTIONS SORT QUICK ORDER

Search results >

My design set (0 items) >

Design tool help

Design ID: Ce-Cas9.C18A3.1.1.AB C18A3.1 RECOMMENDED Predesigned Alt-R CRISPR-Cas9 gRNA

Position	Strand	Sequence	PAM	On-target score	Off-target score	crRNA, 2 nmol tube	\$95.00 USD
5720634	+	ACGGTGCTCTGGCGACAAGC	CGG	63	100		ADD TO DESIGN SET

Show off-target details + | Show related products +

Design ID: Ce-Cas9.C18A3.1.1.AB C18A3.1 RECOMMENDED Predesigned Alt-R CRISPR-Cas9 gRNA

Position	Strand	Sequence	PAM	On-target score	Off-target score	crRNA, 2 nmol tube	\$95.00 USD
5720833	-	TTTACTGAACCATGGTGGAT	CGG	87	99		ADD TO DESIGN SET

crRNA-A: TTTACTGAACCATGGTGGAT

C18A3.1: DPPW -> APPA

GGTGCTCTGGCGACAAGCCGGGTATCATTGAAAATTCAGACGGAACAAAATTCTATATACCTCCTAAATCTACATTTC
ATGTTGGAGATGTGAAGGATATTGAACAGTATTCAAGAGCACATGgtagcttcaaatctctgttgaatgttaaagtattagattccagATCTC
PAM D P P W
CTCTTCGACTTGATCATTGCCGATCCACCATGGTTCAGTAAATCAGTGAAACGAAAACGAACgtgcgtttgaaatttcaagaaac
tccacagatgcattattccagATATCAAATGGACGAAGAAGTCTAGATTGTCTCGATATTCTGTGCATATTAACCTCATGATGCTC
TGATTGCTTTCTGGATCACAAATCGGATAGGAATTGAGGAAGAAATGATAGAAAAGATTGATAAAATGGGGAATGGAA

ssODN (repair template): A A A A

ATCTCCTCTTCGACTTGATCATTCCaGcTGCAGCAgcGTTTCAGTAAATCAGTGAAACGAAAACGAAC
*PAM

AAAA (mutant) has no Nco1 site (CCATGG).

Wild type



NcoI site



PCR reaction

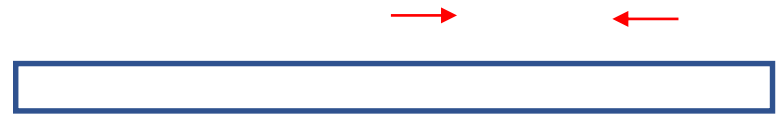
NcoI site



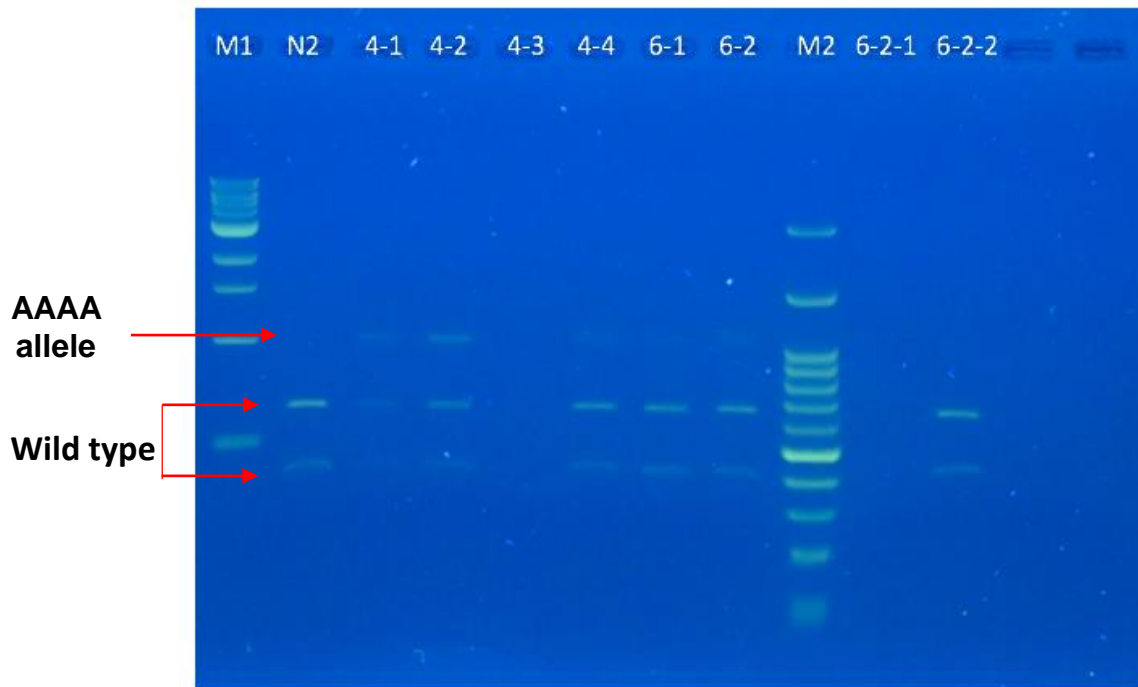
NcoI digestion



AAA mutant



PCR rx → Nco1 digestion



Wild type: 750/450 bps

AAAA mutants (Homozygous): 1100 bps

Target gene : C18A3.1: GFP knock in

```
3301 ctcgtgctag gacactatgc catgattaga atcaaaaatc acacttttta
3351 gggaatcgat aaaatagtag aaacatccaa taaaatacaa tttcagCGTT
3401 CCAATGTCAG TACACTCTCA CAAACCTCCA TTGCTCGATC TTCTCCGTC
3451 TTTTGGAAATC GAATTCACAG Agtcagattt tgaatttgg gattcaaaat
3501 ataataattg aaattacagA CCTCTGGAAC TCTTCGCCCG ATCTCTTCTT
3551 CCATCAACCC ACAGTGT TGG TTACGAACCA TTCCTTCTAC AATCTGAACA
3601 TGTTTTCACT CGAAATATCT CTTGTAAta aataatttat tatgcctcga
3651 aaataatttc ctccaaaatc aatctttcag cgggtgggtg taatcattgg
3701 gaactgggaa gtcactagga aataaggaaa tagagaaata caataaataa
3751 aataataata ataataggcg actatgatta gttagaaaac acagctctgg
3801 gaattgtttg gaagtgttga gagaaattgt tgatttttta caaatgggga
3851 atatgattga acgttggaat aagttaaaat attaataaaa atagcgctga
3901 atgaaaactt aataagtgac agtgaaaagg atttgaaaag ataattaaac
3951 caactacgcc ctaaaataaa ataagttaa tttaaaaaaa aacttacttt
4001 ccaaaaaatc atagaaattc gatttataag ttaatttacg atccatatat
4051 atggtgacta gatcttggaa gagggaaaa tggagactag gggcttttag
```

TAA: STOP codon

TGG: PAM site

Result sets

- Search results
- My design set (0 items)
- Design tool help

Design ID: CD.Cas9.HLFN8104.AA Sequence1 Custom Alt-R CRISPR-Cas9 gRNA

crRNA, 2 nmol tube

Position	Strand	Sequence	PAM	On-target score	Off-target score
28	+	CTTCATCAACCCACAGTGT	TGG 80	100	100

Show off-target details + | Show related products

+ ADD TO DESIGN SET

Design ID: CD.Cas9.HLFN8104.AB Sequence1 Custom Alt-R CRISPR-Cas9 gRNA

crRNA, 2 nmol tube

Position	Strand	Sequence	PAM	On-target score	Off-target score
41	-	TGGTTCGTAACCAACTGT	GGG 94	94	99

Show off-target details + | Show related products

+ ADD TO DESIGN SET

Design ID: CD.Cas9.HLFN8104.AC Sequence1 Custom Alt-R CRISPR-Cas9 gRNA

crRNA, 2 nmol tube

Position	Strand	Sequence	PAM	On-target score	Off-target score
34	-	TAACCAACTGTGGGTGA	TGG 68	68	100

Show off-target details + | Show related products

+ ADD TO DESIGN SET

Design ID: CD.Cas9.HLFN8104.AD Sequence1 Custom Alt-R CRISPR-Cas9 gRNA

crRNA, 2 nmol tube

Position	Strand	Sequence	PAM	On-target score	Off-target score
42	-	ATGGTTCGTAACCAACTGT	TGG 77	77	99

Show off-target details + | Show related products

+ ADD TO DESIGN SET

Design ID: CD.Cas9.HLFN8104.AE Sequence1 Custom Alt-R CRISPR-Cas9 gRNA

crRNA, 2 nmol tube

Position	Strand	Sequence	PAM	On-target score	Off-target score
146	-	ACCCGCTGAAAGATTGATT	TGG 44	44	98

CRISPR-Cas9 guide RNA design checker

Assess on- and off-targeting potential of protospacer designs of your own or from publications before ordering guide RNAs (gRNAs, such as crRNA and sgRNA) that are synthesized using our Alt-R gRNA modifications. For HDR experiment designs, please see the following [HDR design tool](#).

[Search for predesigned gRNA](#) [Design custom gRNA](#) **[CRISPR-Cas9 gRNA checker](#)** ←

Species:

Input format:

Paste/Type input Upload file

Enter up to 99 FASTA Sequences.
Please enter sequences in standard FASTA formatting.

```
>Sequence1
CTTCCATCAACCCACAGTGT
```

Your search returned **1** result. [Clear results](#)

- Result sets
- Search results
- My design set (0 items)
- Design tool help

Select all ACTIONS SORT QUICK ORDER

Checker analysis: Sequence1 Custom checker Alt-R CRISPR-Cas9 gRNA

Sequence	On-target score	Off-target score
CTTCCATCAACCCACAGTGT	80	100

Show off-target details + | Show related products

Note these comments before continuing
This gRNA is expected to be good.

crRNA, 2 nmol tube

+ ADD TO DESIGN SET CREATE NEW DESIGN

Target gene : C18A3.1: GFP knock in

```
3301 ctcgtgctag gacactatgc catgattaga atcaaaaatc acacttttta
3351 gggaatcgat aaaatagtag aaacatccaa taaaatacaa tttcagCGTT
3401 CCAATGTCAG TACACTCTCA CAAACCTCCA TTGCTCGATC TTCTCCGTC
3451 TTTTGGAAATC GAATTCACAG Agtcagattt tgaaatttgg gattcaaaat
3501 ataataattg aaattacagA CCTCTGGAAC TCTTCGCCCG ATCTCTTCTT
3551 CCATCAACCC ACAGTGT TGG TTACGAACCA TTCCTTCTAC AATCTGAACA
3601 TGTTTTCACT CGAAATATCT CTTGTAAta aataatttat tatgcctcga
3651 aaataatttc ctccaaaatc aatctttcag cgggtgggtg taatcattgg
3701 gaactgggaa gtcactagga aataaggaaa tagagaaata caataaataa
3751 aataataata ataataggcg actatgatta gttagaaaac acagctctgg
3801 gaattgtttg gaagtgttga gagaaattgt tgatttttta caaatgggga
3851 atatgattga acgttggaat aagttaaaat attaataaaa atagcgctga
3901 atgaaaactt aataagtgac agtgaaaagg atttgaaaag ataattaaac
3951 caactacgcc ctaaaataaa ataagttaaa tttaaaaaaa aacttacttt
4001 ccaaaaaatc atagaaattc gatttataag ttaatttacg atccatatat
4051 ctggtgacta gatgttggaa gagggaagaa tagagagtag ggggttttag
```

crRNA

TAA: STOP codon

TGG: PAM site

damt-1-gfp-crRNA:

CTTCCATCAACCCACAGTGT

damt-1-gfp-F1:

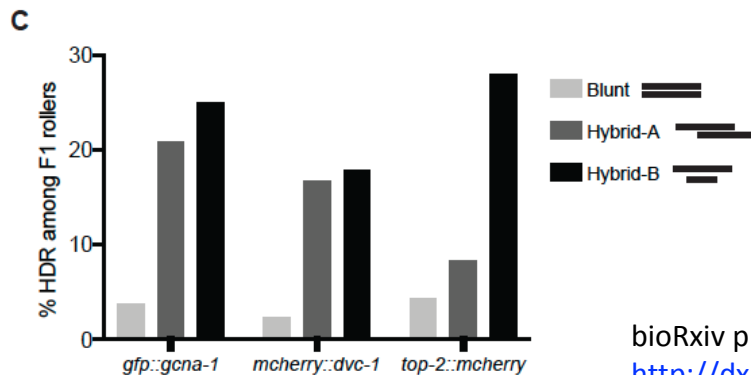
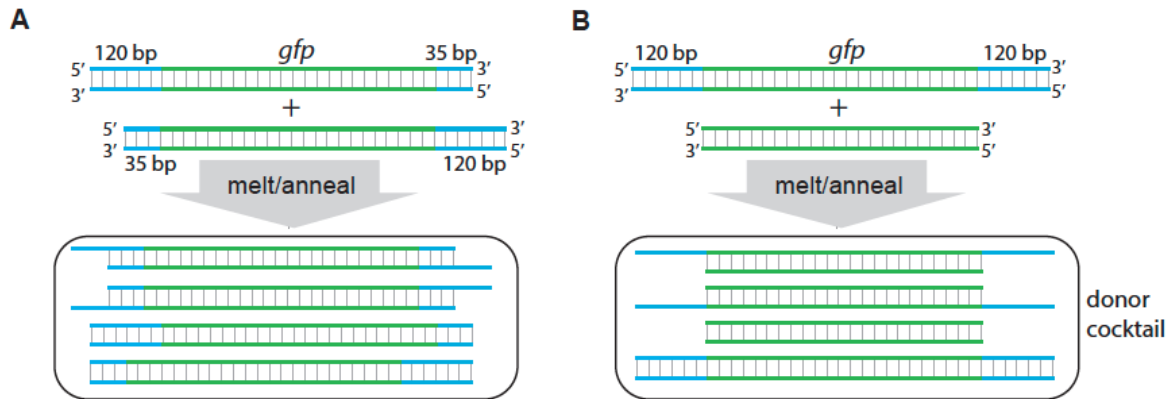
crRNA

aattgaaattacagACCTCTGGA ACTCTTCGCCCCGATCTCTTCTTCCAT
CAACCCACAGTGT TGcTTACGAACCATTCTTCTACAATCTGAAC
ATGTTTTCACTCGAAATATCTCTTTG atgagtaaaggagaagaactttc

damt-1-gfp-R1:

ATTTATTGTATTTCTCTATTTCTTATTTCTTAGTGACTTCCCAGT
TCCAATGATTACACCCACCCGCTGAAAGATTGATTTTGGAGGA
AATTATTTTCGAGGCATAATAAATTATTTA TTA CTGTATGGCCG
GCTAG

Employment of hybrid PCR-based donors with single-stranded homology arms for consistent, high-efficiency insertion of large constructs.



bioRxiv preprint first posted online Jun. 20, 2018; doi: <http://dx.doi.org/10.1101/352260>.

Wild type



GFP knockin mutants



GFP



PCR reaction

