

Table S1 Summary of current and published editing frequencies using 3' GG and non-GG guides

Our Guide Efficiencies

GG Guides

| Target Gene | Guide RNA | Protospacer Sequence (PAM) | sgRNA Bases 19,20 | Mutagenesis Rate (%) | Publication |
|-------------------|-----------|----------------------------|----------------------|-------------------------|-------------|
| <i>lir-2</i> | 3' GG | GGCTGATTTCCGAGTCGG (GGG) | GG | 72 | This study |
| <i>Y62E10A.17</i> | 3' GG | CGCACCGATGCTCTCGAGG (AGG) | GG | 57 | This study |
| <i>sex-1</i> | 3' GG (1) | GGATGAGAACCTGACAAAGG (TGG) | GG | 54 | This study |
| <i>cpsf-2</i> | 3' GG | CACTTCAATTGATAATGG (AGG) | GG | 52 | This study |
| <i>sex-1</i> | 3' GG (2) | AACATTCCACAACGAGAGG (AGG) | GG | 51 | This study |
| <i>fox-1</i> | 3' GG (1) | ATATGAGGGAGTGAGCGG (TGG) | GG | 29 | This study |
| <i>fox-1</i> | 3' GG (3) | ATTACAGTGAAGTACAGCGG (AGG) | GG | 21 | This study |
| <i>fox-1</i> | 3' GG (2) | AATATCGTTACAAACGG (GGG) | GG | 13 | This study |
| <i>xol-1</i> | 3' GG | AGCGATTCTGGCGATTGGG (GGG) | GG | 10 | This study |
| | | | | median: | 51 |

Non-GG Guides

| Target Gene | Guide RNA | Protospacer Sequence (PAM) | sgRNA Bases 19,20 | Mutagenesis Rate (%) | Publication |
|-------------------|-----------------|----------------------------|----------------------|-------------------------|-------------|
| <i>sex-1</i> | 3' GG-shift (1) | AACGGATGAGAACCTGACAA (AGG) | AA | 21 | This study |
| <i>fox-1</i> | 3' GG-shift (1) | CATTGATATGAGGGGAGTG (AGG) | TG | 20 | This study |
| <i>Y62E10A.17</i> | 3' GG-shift | ATACGCACCGATGCTCTCCG (AGG) | CG | 14 | This study |
| <i>sex-1</i> | 3' GG-shift (2) | TGGAACATTCCACAACGAG (AGG) | AG | 8 | This study |
| <i>lir-2</i> | 3' GG-shift | CTCGCTGATTTTCGCACTT (CGG) | TT | 1 | This study |
| <i>cpsf-2</i> | 3' GG-shift | AAACACTTCAATTGATAAA (TGG) | AA | 0 | This study |
| <i>fox-1</i> | 3' GG-shift (2) | TTGAATATCGTTTACAAAAA (CGG) | AA | 0 | This study |
| <i>fox-1</i> | 3' GG-shift (3) | ACAATTACAGTGAAGTACAG (CGG) | AG | 0 | This study |
| <i>xol-1</i> | 3' GG-shift | TCTAGCGATTCTGGCGATT (GGG) | TT | 0 | This study |
| <i>cpsf-2</i> | 3' non-GG (1) | GTGTTGGGATGAGCGATT (GGG) | TC | 0 | This study |
| <i>lir-2</i> | 3' non-GG (1) | AATCAGCCGAGATGTAAGTT (TGG) | TT | 0 | This study |
| <i>lir-2</i> | 3' non-GG (2) | TTGACTCGTCCATTTCAGC (TGG) | GC | 0 | This study |
| <i>sex-1</i> | 3' non-GG (1) | AAACCTGCCTCCTCTCGTTG (TGG) | TG | 0 | This study |
| | | | | median: | 0 |

Published Guide Efficiencies

GG Guides

| Target Gene | Guide RNA | Protospacer Sequence (PAM) | sgRNA Bases 19,20 | Mutagenesis Rate (%) | Publication |
|---------------|-----------|-----------------------------|----------------------|-------------------------|------------------------------|
| <i>klp-12</i> | | GATCCACAAAGTTACAATTGG (TGG) | GG | 80 ± 3 | Friedland <i>et al.</i> 2013 |
| <i>vet-2</i> | | GTTGGATCATAGGATACCGG (TGG) | GG | 38 | Kim <i>et al.</i> 2014 |
| | | | | median: | 59 |

Non-GG Guides

| Target Gene | Guide RNA | Protospacer Sequence (PAM) | sgRNA Bases 19,20 | Mutagenesis Rate (%) | Publication |
|------------------|-----------|-----------------------------|----------------------|-------------------------|------------------------------|
| <i>C35E7.6</i> | | GGGCACCATACCGAGTGATG (GGG) | TG | 100 | Kim <i>et al.</i> 2014 |
| <i>lon-2</i> | | GGGAAACTATACCCCTACTG (TGG) | TG | 30 | Kim <i>et al.</i> 2014 |
| <i>pie-1</i> | a | GGCTCAGATTGACGAGGCGC (CGG) | GC | 24 | Kim <i>et al.</i> 2014 |
| <i>lin-5</i> | | GGAGCTTACTGAGACTCTTC (GGG) | TC | 20 ± 8 | Waaijers <i>et al.</i> 2013 |
| <i>avr-14</i> | (2) | GATGGAGAGTAGACCAACG (TGG) | CG | 20 | Kim <i>et al.</i> 2014 |
| <i>Y61A9LA.1</i> | | GGATGGATGTGAGTCATT (CGG) | TT | 18 ± 1 | Friedland <i>et al.</i> 2013 |
| <i>pie-1</i> | b | GCTGAGAGAAGAACATCG (GGG) | CG | 15 | Kim <i>et al.</i> 2014 |
| <i>avr-14</i> | (1) | GAATATTGAAAGACTATGAT (TGG) | AT | 10 | Kim <i>et al.</i> 2014 |
| <i>unc-4</i> | (1) | GTTATCGTCATCCGGTGACG (TGG) | CG | 10 | Kim <i>et al.</i> 2014 |
| <i>dpy-11</i> | | GCAAGGATCTCAAAAAGCA (TGG) | CA | 10 | Waaijers <i>et al.</i> 2013 |
| <i>pie-1</i> | c | GGACAAAGAGAGGGGTGAG (TGG) | AG | 7.5 | Kim <i>et al.</i> 2014 |
| <i>unc-22</i> | (2) | GAACCCGTTGCCAATACAC (AGG) | AC | 5 | Kim <i>et al.</i> 2014 |
| <i>pie-1</i> | d | GTTGAGTGCAGCCTTTGCT (CGG) | CT | 5 | Kim <i>et al.</i> 2014 |
| <i>unc-119</i> | | GTATTAGCCCTTCGGTTAC (CGG) | AC | 4.9 | Waaijers <i>et al.</i> 2013 |
| <i>unc-119</i> | | GAATTTCTGAAATTAAAGA (CGG) | GA | 3.7 | Friedland <i>et al.</i> 2013 |
| <i>rol-1</i> | | GGAGGTTGACTCCAATCTA (AGG) | TA | 1.4 | Waaijers <i>et al.</i> 2013 |
| <i>dpy-13</i> | | GGACATTGACACTAAAATCA (AGG) | CA | 0.5 | Friedland <i>et al.</i> 2013 |
| <i>dpy-11</i> | (2) | GCAAGGATCTCAAAAAGCA (CGG) | CA | 0.4 | Kim <i>et al.</i> 2014 |
| <i>ben-1</i> | (5) | GGGAGAAAGTGTAGTTGCAGT (TGG) | GT | 0 | Kim <i>et al.</i> 2014 |
| <i>ben-1</i> | (3) | GGATATCACTTCCCAGAAC (TGG) | CT | 0 | Kim <i>et al.</i> 2014 |
| <i>bli-2</i> | (2) | GATGGACGGGATGGTAGAGA (TGG) | GA | 0 | Kim <i>et al.</i> 2014 |
| <i>bli-2</i> | (1) | GGATTTGCTGCTACTGAATC (CGG) | TC | 0 | Kim <i>et al.</i> 2014 |
| <i>dpy-5</i> | (2) | GTCGGATTCCGGCCTGCATG (CGG) | TG | 0 | Kim <i>et al.</i> 2014 |
| <i>dpy-5</i> | (3) | GGTTTCCTGGAGCTCCGGCT (GGG) | CT | 0 | Kim <i>et al.</i> 2014 |
| <i>dpy-11</i> | (4) | GATGCTTGATGACTGGAAC (GGG) | CT | 0 | Kim <i>et al.</i> 2014 |
| <i>unc-22</i> | (9) | GCCTTTGCTCGATTTCCT (TGG) | TT | 0 | Kim <i>et al.</i> 2014 |
| <i>unc-32</i> | (1) | GATAGGAAGCATCAGATTGA (AGG) | GA | 0 | Kim <i>et al.</i> 2014 |
| <i>unc-32</i> | (2) | GTTGCTGAACCTGGGAGAGCT (CGG) | CT | 0 | Kim <i>et al.</i> 2014 |
| | | | | median: | 4.3 |