

Table S1. Sequences and scores of target sites used in this work.

| Group | Name | Sequence | On-Target Score [21] | Off-Target Score [22] | Number of Analyzed Embryos |
|--------------|--------------|--------------------------|----------------------|-----------------------|----------------------------|
| LbCas1 2a | slc6a4a 1 | TGCTGCTCTCCCCGTAC TC | NA | 49.6 | 9 |
| | slc6a4a 2 | AGGAGATGTACTGCGAT AAC | NA | 49.5 | 7 |
| | slc6a4a 3 | TGATCCTTCTCCGGAACG CT | NA | 49.9 | 5 |
| | slc6a4 b1 | GAGGACCCGGGGCACAG AGG | NA | 49.7 | 9 |
| | slc6a4 b2 | CTCCATTTATCGCGGGAC TC | NA | 49.9 | 5 |
| | slc6a4 b3 | TTTTATCGGTCATTGGAT TT | NA | 48.3 | 7 |
| SpCas9 | slc6a4a 4 | ATGATGAATCAAGAGTA CGG | 78.6 | 48.5 | 10 |
| | slc6a4a 5 | TGCGGGCACTGGGACGG ACA | 66.1 | 48.6 | 10 |
| | slc6a4a 6 | CAGAGTCCTAAATGTTCC AG | 75.2 | 46.6 | 10 |
| | slc6a4 b4 | TTGGAGGACCCGGGGCA CAG | 67.7 | 48.5 | 10 |
| | slc6a4 b5 | CGCCGGGTACAACAGCA ACC | 61.6 | 49.5 | 10 |
| | slc6a4 b6 | ATTGGATTTGCGGTAGAC CT | 62.7 | 48.3 | 10 |

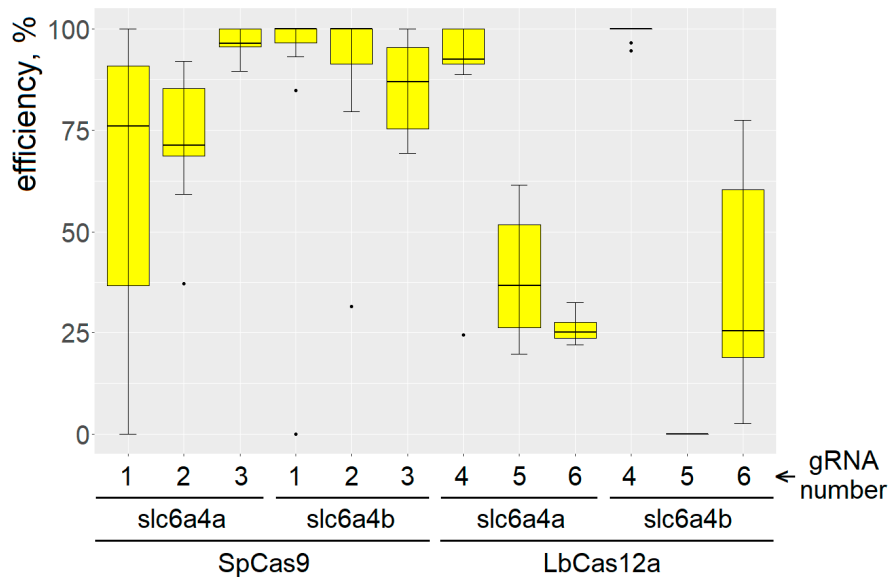


Figure S1. Efficiencies of editing by different groups of RNP complexes. LbCas12a with slc6a4b-crRNA2 did not demonstrate any editing efficiency in any embryo of the group.

