**S1 Table .**

**Information on engineered TALEN for lipoxygenase *LOX3***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TALEN ID** | **exon** | **Repeat number** | **Spacer length** | **RVDs** | **Target sequence** |
| **LOX-T1** | 4 | 20 | 19 | NN HD HD NN HD HD NN NN HD NN NI HD NG NI NG NI NG HD HD NG | GCCGCCGGCGACTATATCCT-caagctccccatgcctcag-ATTATCAAACGTGAGCGC |
| **LOX-T2** | 18 | NN HD NN HD NG HD NI HD NN NG NG NG NN NI NG NI NI NG |
|  |  |  |  |  |  |
| **LOX-T3** | 3 | 15 | 17 | NI HD HD NG NN HD HD NN NI NN HD HD NI NN NI | ACCTGCCGAGCCAGA-tgccggcggcgctgaagc-CGTACCGCGACGACG |
| **LOX-T4** | 15 | HD NN NG HD NN NG HD NN HD NN NN NG NI HD NN |
|  |  |  |  |  |  |
| **LOX-T5** | 4 | 20 | 20 | HD HD NN NN NI HD NG HD NN NN NI NN NI NN NG NI NN NN HD NG | CCGGACTCGGAGAGTAGGCT-gtcgctggtggagcagatct-ACGTGCCGCGGGACG |
| **LOX-T6** | 15 | HD NN NG HD HD HD NN HD NN NN HD NI HD NN NG |