Supplementary information, Table S1. Sequences of RVD libraries.

TALE-(XX')$_3$ DNA sequence:

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TALE-(XX')$_3$ amino acid sequence:

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TALE-(XX')$_6$ DNA sequence:

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TALE-(XX')$_6$ amino acid sequence:

MRTRLPSPPAPSPAFSAGSFSDLLRQFDPSLFNTSLFDSLPPFGAHHTEAATGEWDEVQSGLRAADAPPPTMRVAVTAA
RPPRAKPAPRRRAAQPSDASPAAQVDLRTLGYSQQQQEKIKPKVRSTVAQHHEALVGHGFTHAHIVALSQHPAALGTVA
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ADIPDYLKLSFPEGFKWERVMNFEDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSDGPVMQKKTMGWEASSERMYPED
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TALE-(XX')$_{12}$ DNA sequence:

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TALE-(XX')$_{12}$ amino acid sequence:

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LTPEQVVAIASXX'GGKQALETVQRLLPVLCQAHGLTPEQVVAIASXX'GGKQALETVQRLLPVLCQAHGLTPEQVVAIASX
X'GGKQALETVQRLLPVLCQAHGLTPEQVVAIASXX'GGKQALETVQRLLPVLCQAHGLTPEQVVAIASXX'GGKQALETVQ
RLLPVLCQAHGLTPEQVVAIASXX'GGKQALETVQRLLPVLCQAHGLTPEQVVAIASXX'GGKQALETVQRLLPVLCQAHG
LTPEQVVAIASXX'GGKQALETVQRLLPVLCQAHGLTPEQVVAIASXX'GGKQALESIVAQLSRPDPALAALTNDHLVALACL
GGRPALDAVKKGLPHAPALIKRTNRRIPERTSHRVADHAQVVRVLGFFQCHSHPAQAFDDAMTQFGMSRHGLLQLFRRV
GVTELEARSGTLPPASQRWDRILQASGMKRAKPSPTSTQTPDQASLHAFADSLERDLDAPSPMHEGDQTRASASPKKK
RKVEASGS**GRADALDDFDLDMLGSDALDDFDLDMLGSDALDDFDLDMLGSDALDDFDLDMLIN**SRGSGEGRGSLLTC
GDVEENPGPVSKGEEDNMAIIKEFMRFKVHMEGSVNGHEFEIEGEGEGRPYEGTQTAKLKVTKGGPLPFAWDILSPQFM
YGSKAYVKHPADIPDYLKLSFPEGFKWERVMNFEDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSDGPVMQKKTMGWE
ASSERMYPEDGALKGEIKQRLKLKDGGHYDAEVKTTYKAKKPVQLPGAYNVNIKLDITSHNEDYTIVEQYERAEGRHSTG
GMDELYK*

Notes:

RVD-coding sequences and RVDs (XX') are highlighted. Underlined NNNNNN and XX' indicate the DNA and amino acid sequences of the variable RVDs, respectively. The sequences in bold and in red indicate VP64 and mCherry, respectively.