

Guide RNA sequences :

sgRNA1 targeting stop elements: ACAGCAGAATATCACACAGC

sgRNA2 targeting stop elements: AATCCATGCAAAACTGACTG

Plasmids sequences:

Plasmid 1/2: LentiCRISPRV2-sgRNA1-Cas9+flag:

U6

Spacer (sgRNA1)

sgRNA

EF-1 α

Cas9

NLS

Flag (plasmid 2)

P2A

PuroR

WRPE

GAGGGCCTATTTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCT
GTTAGAGAGATAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGT
ACAAAATACGTGACGTAGAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTT
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GCAGTAGTCGCCGTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAAC
ACAG

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GACCCCAACTTCAAGAGCAACTTCGACCTGGCCGAGGATGCCAAACTGC
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ACGCCATCCTGCTGAGCGACATCCTGAGAGTGAACACCGAGATCACCAAG
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CCTGACCCTGCTGAAAGCTCTCGTGCGGCAGCAGCTGCCTGAGAAGTACA
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CATTCTGAAGGACAACCGGAAAAGATCGAGAAGATCCTGACCTTCCGC
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GAGCTCGTGAAAGTGATGGGCGGCACAAGCCCGAGAACATCGTGATCG
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CGACGAGAATGACAAGCTGATCCGGGAAGTGAAAGTGATCACCTGAAG
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GAGATCAACA ACTACCACCACGCCACGACGCCTACCTGAACGCCGTCGT
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GCAGGAAATCGGCAAGGCTACCGCCAAGTACTTCTTCTACAGCAACATCA
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CCGCCTGCCTTGCCCGCTGCTGGACAGGGGCTCGGCTGTTGGGCACTGAC
AATTCGGTGGTGTGTCGGGGAAATCATCGTCCTTTCCTTGGCTGCTCGCC
TGTGTTGCCACCTGGATTCTGCGCGGGACGTCCTTCTGCTACGTCCCTTCG
GCCCTCAATCCAGCGGACCTTCCTTCCC GCGGCCTGCTGCCGGCTCTGCGG
CCTCTTCCGCGTCTTCGCCTTCGCCCTCAGACGAGTCGGATCTCCCTTTGG
GCCGCCTCCCCG

Plasmid 3: pEGFP-HA-CD63:

CMV

Kozak sequence

HA

CD63

EGFP

GTGATGCGGTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTTGACTC
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GCACCAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTCCGCCCAT
TGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAG
AGCT
GTTTGGAGTAATAGCAGAGCTGGTTTTAGTGAACCGTCAGATCCGCTAGCG
CTACCGGACTCAGATCTCGAGGCCACCATGTACCCATACGATGTTCCAGA
TTACGCTGCGGTGGAAGGAGGGATGAAATGTGTGAAGTTCTTGCTCTACG
TCCTCTGCTGGCCTTTTGCGCCTGTGCAGTGGGACTGATTGCCGTGGGTG
TCGGGGTACAGCTTGTCTGAGTCAGACCATAATCCAGGGGGCTACCCCT
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Plasmid 4: LentiCRISPRV2-sgRNA1-Cas9+flag-GFPnanobody:

U6

Spacer (sgRNA1)

sgRNA

EF-1 α

Cas9

NLS

Flag

Nanobody

P2A

PuroR

WRPE

GAGGGCCTATTTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCT
GTTAGAGAGATAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGT
ACAAAATACGTGACGTAGAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTT
AAAATTATGTTTTAAAATGGACTATCATATGCTTACCGTAACTTGAAAGTA
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Plasmid 4*: LentiCRISPRV2-sgRNA2-Cas9+flag-GFPnanobody:

U6

Spacer (sgRNA2)

sgRNA

EF-1 α

Cas9

NLS

Flag

Nanobody

P2A

PuroR

WRPE

GAGGGCCTATTTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCT
GTTAGAGAGATAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGT
ACAAAATACGTGACGTAGAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTT
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