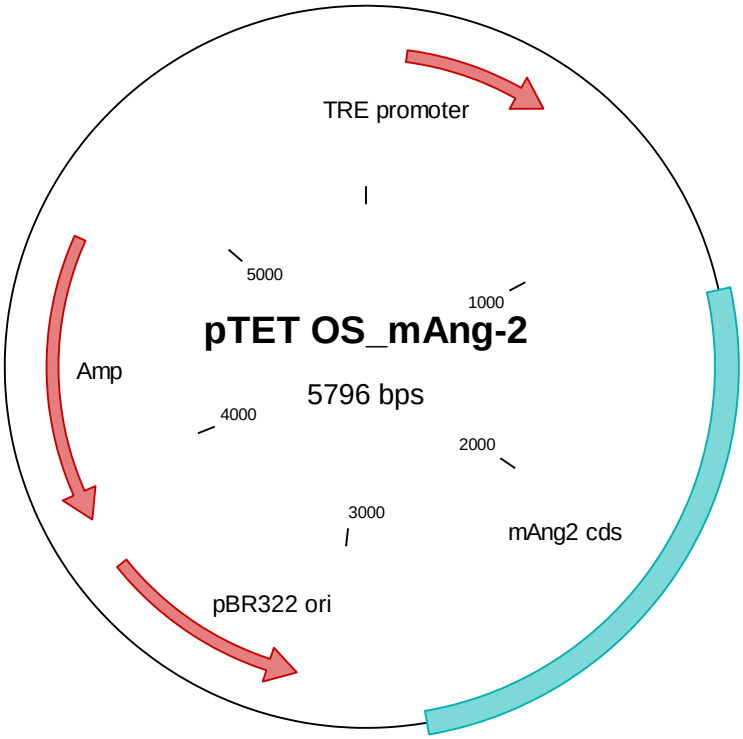
Supplementary Table 1. Primer Sequences*

Construct	Sequence
Primers used for cloning mTie2-ECD	
mTie2-F1	CTTGTGTCTGATGCCGAAAC
mTie2-F2	GACCCTTACGGGTGTTCCTG
mTie2-F3	ACATCAAAGTGCCTGGGAAC
mTie2(VSV-G)-F	CTGAGGACGCTTCCACATTC
mTie2-R1	GGGCACTGAGTGGATGAAGG
mTie2-R2	GGAGGTAAGACTCGGTTGAC
mTie2-R3	TTGCCCTGAACCTTATACCG
mTie2(VSV-G)-R	CGCACGCGTCTACTTTCCCAGCCTGTTCATCTCGATGTCGGTGTATAGCATCTTTCCC
Primers used for verification of the ready mTie2-ECD construct and AAV quantification	
pCMV	GACCTCCATAGAAGACAC
WPRE-R1	GGCATTAAAGCAGCGTATCC
WPRE-F	TGAGTTTGGACAAACCACAAC
WPRE-R	TTGTTGTTAACTTGTTTATTGCAGC
Primers for TET-OS-Ang2 responder construct	
mTET-OS-Ang2 TG F	ATCCTGCCTTTCTCTTTATGGTT
mTET-OS-Ang2 TG R	AGCCTTTGCACTGAGTCGTCGTA
mAng2-F1	GGCGTCGA CGAAGACGGAGCTTGC TGACCATGATGTCATC
mAng2-R1	GGCACGCGTTTAGAAATCTGCTGGCCGGAT

*****mTie2 = mouse Tie2 (Tyrosine kinase with immunoglobulin like and EGF like domains 2); F = forward primer; R = reverse primer; VSV-G = vesicular stomatitis virus - glycoprotein G; p = plasmid; CMV = cytomegalovirus; WPRE = Woodchuck hepatitis virus posttranscriptional regulatory element; mTET-OS-Ang2 = mouse tetracycline inducible angiopoietin-2; TG = transgenic; ECD = extracellular domain; AAV = adeno-associated virus.

Supplementary Table 2. Sequences of pTet-OS-mAng2 and pCR2.1-TOPO-mAng2 Plasmids*



pTet_OS_mAng2 5796 bp DNA circular

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CDS complement (3877..4737)

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121 atcgagttta ccactcccta tcagtgatag agaaaagtga aagtcgagtt taccactccc

181 tatcagtgat agagaaaagt gaaagtcgag tttaccactc cctatcagtg atagagaaaa

241 gtgaaagtcg agtttaccac tccctatcag tgatagagaa aagtgaaagt cgagtttacc

301 actccctatc agtgatagag aaaagtgaaa gtcgagttta ccactcccta tcagtgatag

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481 agtgaaccgt cagatcgcct ggagacgcca tccacgctgt tttgacctcc atagaagaca

541 ccgggaccga tccagcctcc gatcctgaga acttcagggt gagtttgggg acccttgatt

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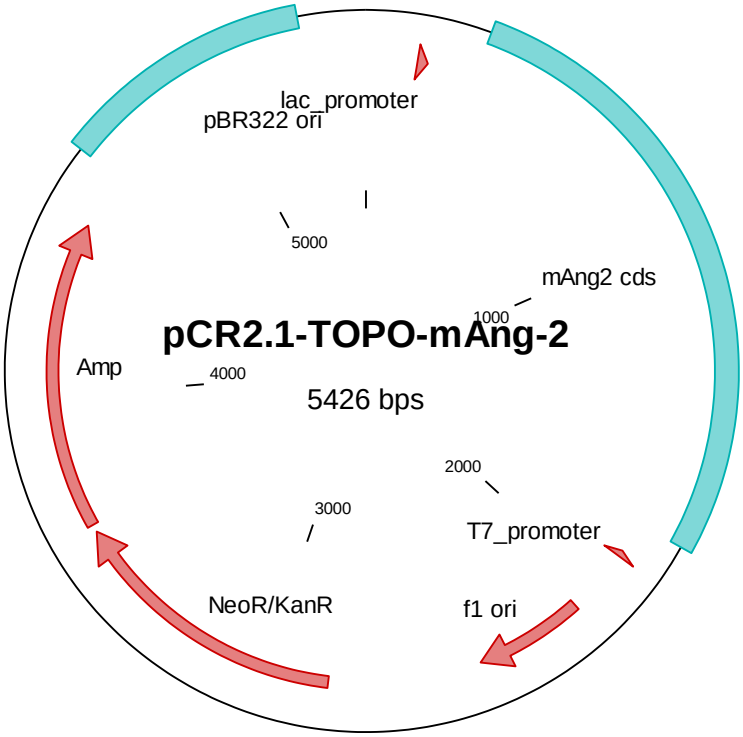

pCR2.1-TOPO-mAng2 5426 bp DNA circular

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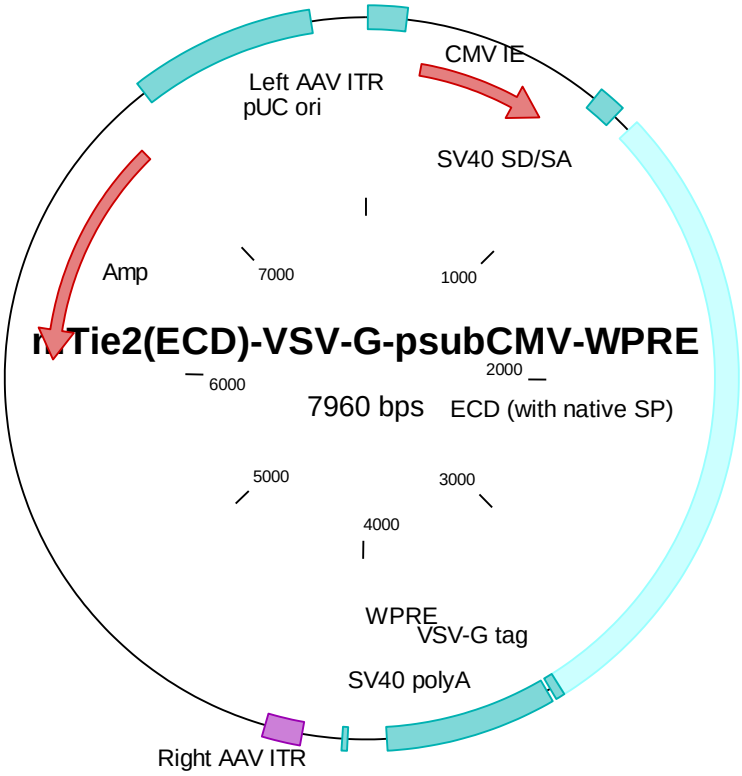
5401 cgagtcagtg agcgaggaag cggaag

* TRE = tetracycline response element; p = plasmid; TET_OS_Ang2 = mouse tetracycline inducible angiopoietin-2; cds = coding sequence; Amp = ampicillin; bps = base pairs; pBR322 ori = replication origin from pBR322; pCR2.1-TOPO = name of the plasmid from Invitrogen; NeoR/KanR = neomycin resistance cassette / kanamycin resistance cassette; T7 promoter = promoter sequence derived from T7 bacteriophage; mAng2 = mouse angiopoietin-2; lac-promoter = promoter from β-galactosidase gene; f1 ori = replication origin, derived from f1 filamentous bacteriophage.

Supplementary Table 3. Sequences of mTie2(ECD)-VSV-G and mTie2(ECD)-FLAG Plasmids*



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/SECDrawAs="Region"

misc_feature 1031..3268

/gene="ECD (with native SP)"

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misc_feature 3269..3301

/gene="VSV-G tag"

/SECDrawAs="Region"

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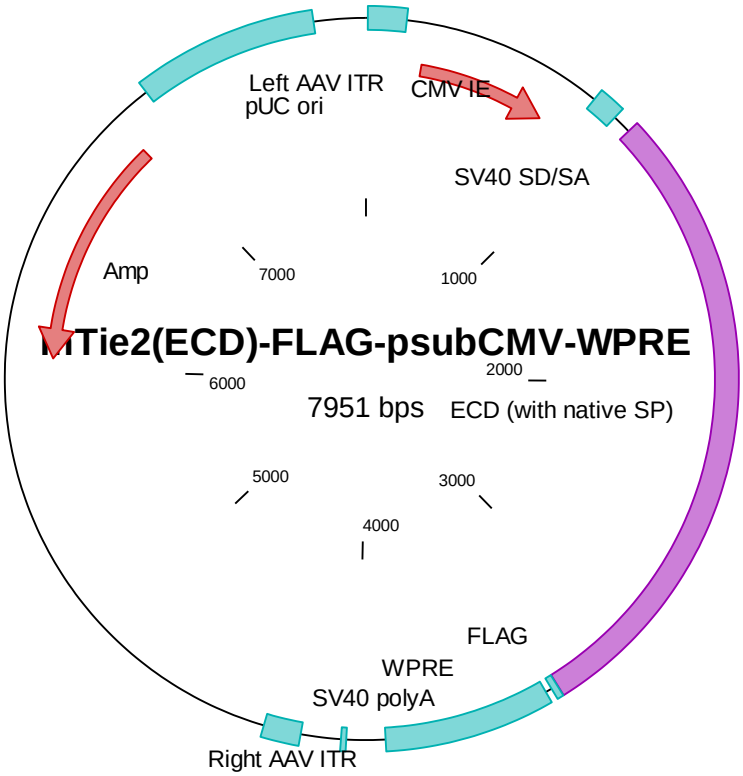

mTie2(ECD)-FLAG 7951 bp DNA circular

FEATURES Location/Qualifiers

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CDS complement (6046..6976)

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7861 cagccgaacg accgagcgca gcgagtcagt gagcgaggaa gcggaagagc gcccaatacg

7921 caaaccgcct ctccccgcgc gttggccgat t

*mTie2-ECD-VSV-G-psubCMV-WPRE = mouse Tie2 - extracellular domain – vesicular stomatitis virus with glycoprotein G – cytomegalovirus plasmid - Woodchuck Hepatitis Virus Posttranscriptional Regulatory Element; AAV = adeno-associated virus; SV40 SD/SA = splice donor / splice enhancer from simian virus 40; pUC ori = replication origin from pUC plasmid; Amp = ampicillin; bps = base pairs; SP = signal peptide; poly A = poly A tail; FLAG = FLAG-tag; cds = coding sequence; ITR = inverted terminal repeat; IE = intronic enhancer.