

## SUPPLEMENTAL INFORMATION 1.

### Amino acid and DNA sequences of constructs used in this study.

#### A. CMV IE94::TM-CIBN-NES-TEV-N-AsLOV2-tTA-SV40pA (6756 bp)



#### Amino acid sequence

METDTHLLWVLLLWVPGSTGDEQKLISEEDLNAVGGDTQEVIVVPHSLPFKVVVISAILALVVLTIISLILIM  
LWQKKPRGGSGGLEGMNGAIGDLLLLNFPDMSVLERQRAHLKYLNPFDSPLAGFFADSSMITGGEMDSY  
LSTAGLNLPMMYGETTVEGDSRLSISPETTLGTGNFKAAKFDTETKDCNEAAKKMTMNRDDLVEEGEEBK  
SKITEQNNGSTKSIKKMKHKAKKEENNFSNDSSKVTKELEKTDYIHACGGGGSGGGGSGGGGRSGGSMQLQ  
LPPLERLTLLEMGESLFKGPDRDYNPISSTICHLTNEVDGHTTSLYIGIFGPFITNKHLFRRNNGTLLVQSLHGV  
FKVKNTTTLQQLIDGRDMIIRMPKDFPPFPQKLKFRPQREERICLVTTNFQELGSGSGEFLATTLERIEKN  
FVITDPRLPDNPFIASDSFLQLTEYSREEILGRNCRFLQGPETDRATVRKIRD AIDNQTEVTVQLINYTKSGK  
KFWNVFHLQPMRDYKGDVQYFIGVQLDGERLHGAAREAVCLIKKTAFAQIAENLYFQGSRLDKSKVINS  
ALELLNEVGIEGLTTRKLAQKLGVEQPTLYWHVKNKRALLDALAIEMDRHHTHFCPLEGESWQDFLRNN  
AKSFRCALLSHRDGAKVHLGTRPTEKQYETLENQLAFLCQQGFSLENALYALS AVGHFTLGCVLEDQEHQ  
VAKEERETPTTDSMPLLRQAIELFDHQGAEPFLFGLLELICGLEKQLKCESGSAYSRARTKNNYGSTIEGL  
LDLPDDDAPEEAGLAAPRLSFLPAGHTRRLSTAPPTDVS LGDELHLDGEDVAMAHADALDDFDLMDLGDG  
DSPGPGFTPHDSAPYGALDMADFEFEQMFTDALGIDEYGG\*

#### DNA sequence

ATGGAGACAGACACACTCCTGCTATGGGTACTGCTGCTCTGGGTTCCAGGTTCCACTGGTGACGAACA  
AAAACATCTCAGAAGAGGATCTGAATGCTGTGGGCCAGGACACGCAGGAGGTCATCGTGGTGCCA  
CACTCCTTGCCCTTAAGGTGGTGGTATCTCAGCCATCCTGGCCCTGGTGGTGCTCACCATCATCTCC  
CTTATCATCCTCATCATGCTTTGGCAGAAGAAGCCACGTGGTGGCTCTGGAGGTCTCGAGGGAATGAA  
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CGGCGGCGAGATGGACAGCTATCTTTCGACTGCCGTTTGAATCTTCCGATGATGTACGGTGAGACGA  
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GCGAAGTTTGATACAGAGACTAAGGATTGTAATGAGGCGGCGAAGAAGATGACGATGAACAGAGATG  
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GCATCAAGAAGATGAAACACAAAGCCAAGAAAGAAGAGAACAATTTCTCTAATGATTCATCTAAAGT  
GACGAAGGAATTGGAGAAAACGGATTATATTCATGCATGCGGTGGCGGTGGCTCTGGAGGTGGTGGG  
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AGCACCTGTTTCAGGCGGAATAATGGCACTCTGCTGGTGCAGAGCCTGCACGGGGTGTCAAAGTGAAG  
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CCACAAACTTTTCAGGAGCTCGGTAGTGGTAGTGGGGAGTTTCTGGCAACCACACTGGAACGGATCGAG  
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ACGTGGCGATGGCGCATGCCGACGCGTACGACGATTTCGATCTGGACATGTTGGGGGACGGGGATTCC  
CCGGTCCGGGATTTACCCCCACGACTCCGCCCCCTACGGCGCTCTGGATATGGCCGACTTCGAGTTT  
GAGCAGATGTTACCGATGCCCTTGGAAATTGACGAGTACGGTGGGTAG

## B. CMV IE94::NES-CRY2PHR-TEV-C-SV40Pa



### Amino acid sequence

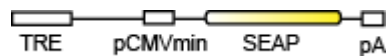
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KQSLAHL~~SQSL~~KALGSDLTLIKTHNTISAILDCIRVTGATKVVFNHLYDPVSLVRDHTVKEKLV~~ERGIS~~VQS  
YNGDLLYEPWEIYCEKGPFTSFNSYWKCLDMSIESVMLPPWRLMPITAAAEAIWACSIEELGLENEAE  
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WARDKNSEGEESADLFLRGIGLREYSRYICFNFPF~~THEQ~~SLLSHLRFFPWDADVDKFKAWRQRTGYPLVD  
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RLDNPALQGAKYDPEGEYIRQWLP~~ELARLPTEWI~~HHPWDAPLTVLKASGVELGTNYAKPIVDIDTARELLA  
KAISRTREAQIMIGAA~~LQELGGGRSGGGG~~STKS~~MSSMVS~~DTSCFPSSDGIFWKHWIQTKD~~GQC~~GSPLVS  
TRDGFIVGIHSASNFTNTNNYFTSVPKNFMELLTNQEAQ~~QWVSGWRLNADSVLWGGHKV~~FMV

### DNA sequence

ATG~~CTTCAACTTCCTCCTCTTGAACGTCTTACTCTC~~GAGGCCACCATGAAGATGGACAAAAAGACTATA  
GTTTGGTTT~~AGAA~~GAGACCTAAGGATTGAGGATAATCCTGCATTAGCAGCAGCTGCTCACGAAGGATC  
TGTTTTCTGTCTTCATTTGGTGTCTTGAAGAAGAAGGACAGTTTTATCCTGGAAGAGCTTCAAGATG  
GTGGATGAAACAATCACTTGCTCACTTATCTCAATCTTGAAGGCTCTTGGATCTGACCTCACTTTAAT  
CAAAACCCCAACACGATTTACGCGATCTTGGATTGTATCCGCGTTACCGGTGCTACAAAAGTCTCTT  
TAACCACCTCTATGATCCTGTTTCGTTAGTTTCGGGACCATACCGTAAAGGAGAAGCTGGTGGAAAGCTG  
GGATCTCTGTGCAAAGCTACAATGGAGATCTATTGTATGAACCGTGGGAGATATACTGCGAAAAGGGC  
AAACCTTTTACGAGTTTCAATTCTTACTGGAAGAAATGCTTAGATATGTCGATTGAATCCGTTATGCTT  
CCTCCTCCTTGGCGGTTGATGCCAATAACTGCAGCGGCTGAAGCGATTTGGGCGTGTTCGATTGAAGA  
ACTAGGGCTGGAGAATGAGGCCGAGAAACCGAGCAATGCGTTGTAACTAGAGCTTGGTCTCCAGGA  
TGGAGCAATGCTGATAAGTTACTAAATGAGTTCATCGAGAAGCAGTTGATAGATTATGCAAAGAACAG  
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CCGTTTACTCACGAGCAATCGTTGTTGAGTCATCTTCGGTTTTTCCCTTGGGATGCTGATGTTGATAAGT  
TCAAGGCCTGGAGACAAGGCAGGACCGGTTATCCGTTGGTGGATGCCGGAATGAGAGAGCTTTGGGC  
TACCGGATGGATGCATAACAGAATAAGAGTGATTGTTTCAAGCTTTGCTGTGAAGTTTCTTCTCCTTCC  
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CAAGGCGCCAAATATGACCCAGAAGGTGAGTACATAAGGCAATGGCTTCCCGAGCTTGCGAGATTGC  
CAACTGAATGGATCCATCATCCATGGGACGCTCCTTTAACCGTACTCAAAGCTTCTGGTGTGGAACCTCG  
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AGAACCCGTGAAGCACAGATCATGATCGGAGCAGCACTGCAGGAGCTCGGTGGAGGCGGCCGCTCCG  
GTGGCGGTGGCTCTACTAAGAGCATGTCCAGCATGGTGAGCGATACTAGCTGTACCTTCCCATCATCT  
GACGGAATCTTCTGGAAGCACTGGATTTCAGACTAAGGACGGCCAGTGTGGCAGCCCACTGGTGAGCA  
CACGAGACGGATTTCATCGTGGGATTTCACAGCGCCTCCAACCTTACAAACACCAATAACTATTTACC  
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GCCTGAACGCCGATTCCGTGCTGTGGGGCGGGCACAAAGTGTTTATGGTGTGA

### C. TRE::SEAP-SV40pA (5694 bp)



### Amino acid sequence

MLLLLLLGLRLQLSLGIIPVEEENPDFWNREAAEALGAAKKLQPAQTAAKNLIIFLDGMGVSTVTAARIL  
KGQKKDKLGPEIPLAMDRFPYVALSKTYNVDKHPVDSGATATAYLCGVKGNFQTIGLSAAARFNQCNTTR  
GNEVISVMNRKAKGKSVGVVTTTRVQHASPAGTYAHTVNRNWYSDADVPASARQEGCQDIATQLISNM  
DIDVILGGGRKYMFRMGTPDPEYPDDYSQGGTRLDGKNLVQEWLAKRQGARYVWNRTELMQASLDPSV  
THLMGLFEPGDMKYEIHRDSTLDPPLMEMTEAALRLLSRNPRGFFLFVEGGRIDHGHESRAYRALTETIM  
FDDAIERAGQLTSEEDTLSLVTADHSHVFSFGGYPLRGSSIFGLAPGKARDRKAYTVLLYGNPGYVLKDG  
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DLAPPAGTTD

### DNA sequence

TCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGA  
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 GCACGTATGGCCTTCGCCGCTGCCTGGAGCCCTACACCGCCTGCGACCTGGCGCCCCCGCCGGCA  
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**D. TRE::EGFP-SV40pA (4855 bp)**



**N. pAAV TRE::EGFP-WPRE-bGHpA (5093 bp)**



**Amino acid sequence**

MVSKGEELFTGVVPIVELDGDVNGHKFSVSGEGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLTLYGVQC  
 FSRYPDHMKQHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKL  
 EYNYNSHNVIYIMADKQKNGIKVNFKIRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDPN  
 EKRDHMVLLFVTAAGITLGMDELYK\*

**DNA sequence**

TCGAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACTCCCTATCAGTGA  
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**E. CMV IE94::DRD2-V2tail-CIBN-BLITz-1-tTA-SV40Pa (7404 bp)**



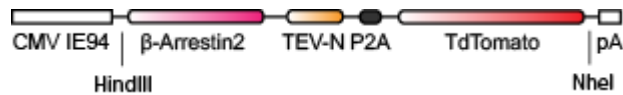
**Amino acid sequence**

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 MMCTASILNLCAISIDRYTAVAMPMLYNTRYSSKRRVTVMIAIVWVLSFTISCP LLFGLNNTDQNECIANP  
 AFVVYSSIVSFYVPFIVTLLVYIKIYIVLRKRRKR VNTKRSSRAFRANLKTPLKGNCTHPEDMKLCTVIMKSN  
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 LERIEKNFVITDPRLPDNP IIFASDSFLQLTEYSREEILGRNCRFLQGPETDRATVRKIRDAIDNQT ETVVQLIN  
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 EDQEHQVAKEERETPTTDSMPPLLRQAIELFDHQGAEP AFLFGLELIICGLEKQLKCESGSEFDALDDFDL D  
 MLGSDALDDFDL DMLGSDALDDFDL DMLGSDALDDFDL DML\*

## DNA sequence

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CTCAATCCCACCTTTGATTCTCCTCTCGCCGGCTTCTTTGCCGATTCTTCAATGATTACCGGCGGCGAGA  
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GATTCAAGACTCTCAATTTCCCGCGAAACGACGCTTGGGACTGGAAATTTCAAGAAACGGAAGTTTGA  
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AGAAGGAGAAGAAGAGAAGTCGAAAATAACAGAGCAAAACAATGGGAGCACAAAAGCATCAAGAA  
GATGAAACACAAAGCCAAGAAAGAAGAGAACAATTTCTCTAATGATTTCATCTAAAGTGACGAAGGAA  
TTGGAGAAAACGGATTATATTCATGGTGGCGGTGGCTCTGGAGGTGGTGGGTCCGGAGGAGGCGCGC  
CATGCGGTAGTGGTAGTGGGGAGTTTCTGGCAACCACACTGGAACGGATCGAGAAAAATTCGTGATT  
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## F. CMV IE94::β-Arrestin2-TEV-N P2A TdTomato-SV40pA (7184 bp)



### Amino acid sequence

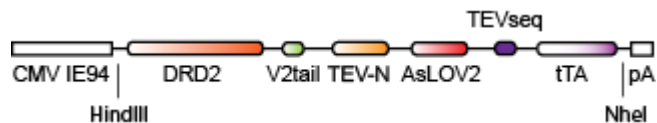
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### DNA sequence

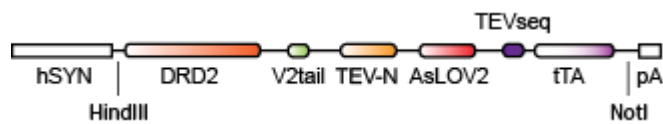
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**G. CMV IE94::DRD2-V2tail-TEV-N-BLITz-1-tTA-SV40pA (7428 bp)**



**L. pAAV hSYN::DRD2-V2tail-TEV-N-BLITz-1-tTA-bGHpA (7108 bp)**



**Amino acid sequence**

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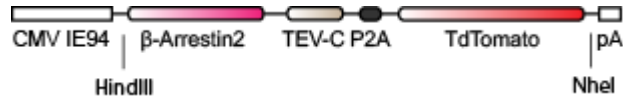
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### DNA sequence

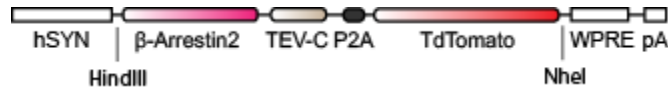
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#### H. CMV IE94::β-Arrestin2-TEV-C P2A TdTomato-SV40pA (7121 bp)



#### M. pAAV hSYN::β-Arrestin2-TEV-C P2A TdTomato-WPRE-bGHpA



#### Amino acid sequence

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**I. CMV IE94::NPY1R-V2tail-TEV-N-BLITz-1-tTA-SV40pA**



**Amino acid sequence**

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KSFRCALLSHRDGAKVHLGTRPTEKQYETLENQLAFLCQQGFSLENALYALS AVGHFTLGCVLEDQEHQV  
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DLPDDDAPEEAGLAAPRLSFLPAGHTRRLSTAPPTD VSLGDELHLDGEDVAMAHADALDDFDLMDLGDG  
DSPGPGFTPHDSAPYGALDMADFEFEQMFTDALGIDEYGG\*

## DNA sequence

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## J. CMV IE94::CB1R-V2tail-TEV-N-BLITz-1-tTA-SV40pA



### Amino acid sequence

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### DNA sequence

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**K. CMV IE94::HTR1A-V2tail-TEV-N-BLITz-1-tTA-SV40pA**



**Amino acid sequence**

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## DNA sequence

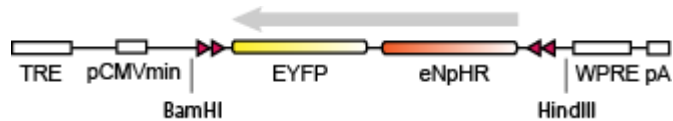
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GGATACTTTATACGAAGTTATCATTGGGATTCTTCTATTTTGTATCCAAGCATCACCATCGACCTCTA  
GTCCAGATCTCACCATCGACCCATAAAGTCTGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGGCCCTCC  
CCCGTGCCTTCCCTGACCCTGGAAGGTGCCACTCCCACTGTCCTTTCTAATAAAAATGAGGAAATTGCA  
TCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGG  
ATTGGAAGACAATAGCAGGCATGCTGGGGA

**P. pAAV TRE::Flox-eNpHR-EYFP-WPRE-bGHpA (6327 bp)**



### Amino acid sequence

MRGTPLLLVVSFLSLLQDTETLPPVTESAVALQAEVTQRELFEFVLNDPLLASSLYINIALAGLSILLFVFMTRGLDDPRAKLIIVSTILVPVVSIASTGLASGLTISVLEMPAGHFAEGSSVMLGGEEVDGVVTMWGRYLTWALSTPMILLALGLLAGSNATKLFATAITFDIAMCVTGLAAAALTTSSHLMRWFWYAISCACFLVVLVYILLVEWAQDAKAAGTADMFNLTLLKLLTVVMWLGYPVWALGVEGIAVLPVGVTSWGYSFLDIVAKYIFAFLLLNYLTSNESVVSIGSILDVPSASGTPADDAAA VSKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLCFICTTGKLPVPWPTLVTTFGYGLQCFARYPDHMKQHDFKFSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNSHNVYIMADKQKNGIKVNFKIRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHLYSYQSALS KDPNEKRDHMLLEFVTAAGITLGMDELYKFCYENEV\*

### DNA sequence

- tetracycline response element (TRE)
- minimal CMV promoter (pCMVmin)
- LoxP sequence
- woodchuck hepatitis virus posttranscriptional regulatory element (WPRE)
- bGH polyA signal

TCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGA  
 AAGTCGAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACTCCCTATCAG  
 TGATAGAGAAAAGTGAAAGTCGAGTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGT  
 TTACCACTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACTCCCTATCAGTGATAGAGA  
 AAAGTGAAAGTCGAGCTCGGTACCCGGGTCGAGTAGGCGTGTACGGTGGGAGGCCTATATAAGCAGA  
 GCTCGTTTGTGAAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACA  
 CCGGACCGGATCCAGCCTCCGCGGCCCGAATTCGAGCTCGGTACCCGGGGATCCTCTAGAGTCGACT  
 CCGGAATAACTTCGTATAGGATACTTTATACGAAGTTATGCAGAAATGGTAGCTGGATTGTAGCTGCTA  
 TTAGCAATATGAAACCTCTTAATAACTTCGTATAGCATAACATTATACGAAGTTATGGCGCGCCTCATT  
 CACTCGTTCTCGTAGCAGAACTTGTACAGCTCGTCCATGCCGAGAGTGATCCCGGGCGGCGGTCACGA  
 ACTCCAGCAGGACCATGTGATCGCGCTTCTCGTTGGGGTCTTTGCTCAGGGCGGACTGGTAGCTCAGG  
 TAGTGGTTGTGCGGCAGCAGCACGGGGCCGTCGCCGATGGGGGTGTTCTGCTGGTAGTGGTCGGCGAG  
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 CTTGAAGAAGTCGTGCTTTCATGTGGTGGGAGTACGGGGCAAGCACTGCAGGCCGATGCCGAAG  
 GTGGTCACGAGGGTGGGCCAGGGCACGGGCAGCTTGCCGGTGGTGCAGATGAACTTCAGGGTCACTG  
 TGCCGTAGGTGGCATCGCCCTCGCCCTCGCCGGACACGCTGAACTTGTGGCCGTTTACGTCGCCGTTCA  
 GCTCGACCAGGATGGGCACACCCCGGTGAACAGCTCCTCGCCCTTGCTCACGGCGGCCGCATCATCA  
 GCCGGGGTCCCAGAAGCAGATGGAACATCCAAAATGCTGCCGGACACGACAGATTGTTTTGACGTCA  
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 GTCACCCCAACGGGCAACACCGCGATACCTCGACTCCAAGAGCCACACAATTGGATACCCAGCCA  
 CATCACTACTGTCAACAGCTTCAGGGTATTGAACATGTCAGCGGTTCCCGCGGCTTTGGCGTCTGTGC  
 CCACTCCACCAGCAGGATATAAAGACCACCAGAAAGCATGCACAATGATAGCGTACCAGAACCAT  
 CTCATGAGGTGGGAGGAGGTAGTCAGGGCCGCGGCAAGGCCAGTCACGCACATAGCGATATCGAAAG

TGATAGCTGTGAAGAGCTTTGTAGCATTGCTTCCGGCCAGGAGACCCAGAGCGAGGAGAATCATGGGC  
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ATCACTGAGCTGCCTTCTGCAAAATGGCCCCGTGGCATTTCAGAACGGAAATTGTCAGGCCGCTCGC  
CAATCCAGTGTAGGAGGCAATGCTGACGACAGGCACAAGGATGGTTGACACAGCAATAAGTTTTGCC  
CGTGGATCATCGAGTCTCGGGTCATAAAAACGAACAGCAGTATACTCAGTCTGCAAGTGCGATGTT  
GATATAGAGACTGCTTGAAGCAAAGGGTCGTTACGACGAACTCGAACAACCTCCCTTTGGGTAACCT  
CGGCTTGAAGGGCCACGGCACTCTCGGTACGGGAGGCAGGGTCTCTGTGTCTGAAGCAGAGAGAA  
CAGAGAGACGACGAGGAGCAGGGGCGTACCCCTCATGGTGCGCTAGCATAACTTCGTATAAAGTAT  
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CTTCGTATAATGTATGCTATACGAAGTTATGAATTCGATATCAAGCTTATCGATAATCAACCTCTGGAT  
TACAAAATTTGTGAAAGATTGACTGGTATTCTTAACTATGTTGCTCCTTTTACGCTATGTGGATACGCT  
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GGCACTGACAATTCCGTGGTGTGTCGGGGAAATCATCGTCCTTTCCTTGGCTGCTCGCCTATGTTGC  
CACCTGGATTCTGCGCGGGACGTCTTCTGCTACGTCCCTTCGGCCCTCAATCCAGCGGACCTTCCTTC  
CCGCGCCTGCTGCCGGCTCTGCGGCCCTTCCGCGTCTTCGCCTTCGCCCTCAGACGAGTCGGATCTC  
CCTTTGGGCCGCTCCCCGCATCGATACCGAGCGCTGCTCGAGAGATCGATCTGCCTCGACTGTGCCTT  
CTAGTTGCCAGCCATCTGTTGTTTGGCCCTCCCCCGTGCCTTCCCTTGACCCTGGAAGGTGCCACTCCCA  
CTGTCCTTTCCTAATAAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTATTCTGGGGG  
GTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGA

Primer Name	Primer Sequence (5'-3')	Application
XhoI-CIBN-FW CIBN-SphI-RV	ATTCTCGAGGGTGAATGAATGGAGCTATAGGAGGTG TTTGCATGCATGAATATAATCCGTTTTCTC	to introduce CIBN domain by PCR amplification
XbaI-tTA-FW tTA-NheI-RV	ATGTCTAGATTAGATAAAAAGTAAAGTGATTAACAGC TTTGCTAGCCTACCCACCGTACTCGTCAATTCCAAG	to introduce tTA domain by PCR amplification
SacI-AsLOV2 FW BLITz-1-TEV-XbaI-RV BLITz-2-TEV-XbaI-RV BLITz-3-TEV-XbaI-RV	AAAGAGCTCGGTAGTGGTAGTGGGGAGTTTCTGGC TTTCTAGAGCCCTGGAAGTACAGGTTCTCAGCAATCTGAAAGGCTG TCTTTTTGATCAGGC TTTTCTAGAGCCCTGGAAGTACAGGTTCTCAAAGGCTGTCTTTTTG ATCAGGCAGACCGC ATCTAGAGCCCTGGAAGTACAAATTTTCGTCTCGTTCGCTGC	to generate BLITz- 1 ~ domain by PCR amplification
BLITz-4-FW BLITz-4-RV	CCTTTTCAGATTGCTGAGGCTGAGAACCTGTACTTCCAG CAGGTTCTCAGCCTCAGCAATCTGAAAGGCTGTCTTTTTG	to generate BLITz-4 by site-directed mutagenesis
BLITz-5-FW BLITz-5-RV	CAGATTGCTGAGGCCCTGTACTTCCAGGGCTCTAGATTAG GAAGTACAGGGCCTCAGCAATCTGAAAGGCTGTCTTTTTG	to generate BLITz-5 by site-directed mutagenesis
BLITz-6-FW BLITz-6-RV	GCCTTTTCAGATTGAGAACCTGTACTTCCAGGGCTCTAG CAGGTTCTCAATCTGAAAGGCTGTCTTTTTGATCAGGC	to generate BLITz-6 by site-directed mutagenesis
XhoI-CRY2PHR-FW CRY2PHR-PstI-RV	AAACTCGAGGCCACCATGAAGATGGACAAAAAGAC TTTGCTAGCTGCTGCTCCGATCATGATCTG	to introduce CRY2 domain by PCR amplification
BamHI-DRD2-FW DRD2-EcoRI-RV	TTTAAGCTTATGGATCCACTGAACCTGTCCTGG TTTGAATTCGCAGTGCAAGATCTTCATGAAGGCC	to introduce DRD2 by PCR amplification
EcoRI-TdTomato-FW TdTomato-XbaI-RV	CCTGAATTCATGGTGAGCAAGGGCGAG CTATCTAGACTACTTGTACAGCTCGTCC	to introduce TdTomato sequence by PCR amplification
SacI-LK-TEV-N-FW TEV-N-SphI RV	AAAGAGCTCACTCGAAGGTGGCGGTGGCTCTGGAGGTGG TTTGCATGCCTGAAAGTTTGTGGTCACCAGAC	to introduce TEV-N by PCR amplification
Hind3-β-Arr2-FW β-Arr2-SacI-RV	TTTAAGCTTATGGGTGAAAACCCGGGACCAGGG AAAGAGCTCAGGCAGAAGTGGTCATCACAGTCGTC	to introduce β-Arrestin2 by PCR amplification
XhoI-TEV-N FW BLITz-1-TEV-XbaI-RV	AAACTCGAGGGTATGGGCGAGAGCCTGTTCAAGGG TTTCTAGAGCCCTGGAAGTACAGGTTCTCAGCAATCTGAAAGGCTG TCTTTTTGATCAGGC	to amplify TEV-N-AsLOV2 by PCR amplification
SacI-TEV-C-FW TEV-C-SphI-RV	AAAGAGCTCAGGTGGCGGTGGCTCTGGAGGTGGTGGG TTTGCATGCACCCCGGCCTCCTGCGATTTCATC	to introduce TEV-C by PCR amplification
EcoRI-EGFP-FW EGFP-NheI-RV	CCTGAATTCATGGTGAGCAAGGGCGAGG TAAGCTAGCCTACTTGTACAGCTCGTCCATGCCG	to introduce EGFP sequence by PCR amplification
Tango-FW Tango-RV	AAAATGAAGACGATCATCGCCCTGAGC TTTCGATGAAGTGTCTTGGCCAGGGA	to introduce NPY1R and 5-HT1A sequence by PCR amplification from presto-Tango vector
BamHI-CB1R-FW CB1R-EcoRI-RV	ATGGATCCAATGAAGAGCATTTTGGATGGGC TTTGAATTCAGAGCTTCGGCAGATGTGTCAG	to introduce CB1R sequence by PCR amplification