1. Plasmids and their source:

- pAR3283 (Dr. Studier F.W., Brookheaven National laboratory, NY, USA)
- pFF19G (Dr. Messing J Waksman Institute, Rutgers University, USA)
- pBin-HygTX and pBin-tetR (Prof. Christiana Gatz, Institute for Genetic, Germany)
- pGEMT-Easy (Promega)
- pET14b and pET3a (Novagen)
- pVSR326 (Dr. V.S. Reddy, ICGEB)
- pCAMBIA1300
- pCAMBIA1301
- pCAMBIA2300

(Dr. Jefferson – CAMBIA)

2. Primers:

Name	Sequences*	Length (mer)
NHT-1	attcgctgcctgcagggatccctaTTGATCAAAGTGCCAAACACCG TG	48
GUSNCONEW	gattccATGGTCCGTCCTGTAGAAACCCCA	30
GUS3-BAM	cgcggatccTCATTGTTTGCCTCCCTGCTG	30
FERRI5-1	cgcggatcctaccATGGCTCTTGCTCCATCCAAAGTT	37
FERRI5-2	cgcggatcctaccatggctTCAACGGTGCCTCTCACTGGG	40
FERRI3-1	attcgagctcctaTTGATCAAAGTGCCAAACACCGTG	37
TETR-5	catgccATGGTATCTAGATTAGATAAAAGTAAAGTG	36
TETR-3	ATTCGAGCTCTTAAGACCCACTTTCACATTTAA	33
T7-1	GATCTGGATCCAACACGATTAACATCGCTAAGAACG	36
T7-2	AATTCGTTCTTAGCGATGTTAATCGTGTTGGATCCA	36
T7-3	TGCTGGATGCCAGAGCAAGACCC	23
T7-5	TTC AAC ACT CTG GCT GAC CAT TAC	24
T7-6	GAG TCG GAC TTC GCG TTC GCG TAA	24
SSUTP-1	GCTCTAGAGGTACCTTTTATTTTTAATTTTCTTTCAAA TACTTCCACCATGGGCCCATTCGGCGGCCTCAAA	72
SSUTP-2	GCTCTAGAGGTACCATGGGCCCATTCGGCGGCCTCAA AT	39
GUSINTN	ATGCCCACAGGCCGTCGAGT	20
35SINT	CCCACTATCCTTCGCAAGAC	20

SV40NLS5	AATTCCTCGAGCCTCCAAAAAAGAAGAGAAAG	32
SV40NLS3	AATTCGTCCTTTCTCTTCTTTTTTGGAGG	29
PDS-5K-SacI	ggtaCCATTGTATCTGAATGCTGGG	25
PDS-5P-SalI	ctgcagTCGACTCAGAAAGCATTCAGG	27
PDS-3B-XhoI	ggatccTCGAGCCACATAAGACATGGA	27
PDS500	GTTGATTACGTGAACTCCGT	20
PDS1286	TGAGCACATTATGTAGTAG	19
PDSNewPro5	ggaattcagatctggatccTTTGCCAGTATTACAACAGCTTATA	44
PDSNewPro3	gggtaccgtcgacccgggTCCAATTTGAGGTATTTTACTGAAA	43
PDSNEW5Bcl	ggggatcctctagatgatcaTTTGCCAGTATTACAACAGCTTATA	45
PDSNEW3Xba	gggtcgacccgggtctagaTCCAATTTGAGGTATTTTACTGAAA	44
pET14b5	ggaattcaagcttgagctCGTCCGGCGTAGAGGATCGAGAT	41
pET14b3	ggaattcaagcttgagctcATCCGGATATAGTTCCTCCTTTC	42
pET14b5New	ggggtaccaagcttggatcCGTCCGGCGTAGAGGATCGAGAT	42
pET14b3New	ggggtaccaagcttggatccATCCGGATATAGTTCCTCCTTTC	43
pET14b5Bg	TAG AGG ATC GAG ATC TCG ATC CC	23
pET14b3Bg	gaa gat ctA TCC GGA TAT AGT TCC TCC TTT C	31
LCY5NX-A	cccatggctcgaGGTTAGAAATCGTGTCCGGTG	33
LCY3SBg-A	gggtcgacagatctTTAGTCTCTATCTTGTACC	33
LCY5NX-T	cccatggctcgagAGATGGATACTTTGTTGAAAACC	37
LCY3SBg-T	gggtcgacggatccGACAAGATTCCGAATTACTC	34
PALproAt5-1	cccaagcttagatctTGTACTGATAAACGAAACTAAACG	39
PALproAt5-2	cccaagcttagatcTACGTATCAACTTTCAGTTA	34
PALproAt5-3	cccaagcttagatcTCGAAATGATATCCCAAATGAC	36
PALproAt5-4	cccaagcttagatctGTTGACGAAAACCAAAGAAATTC	38
PALproAt3-1	tatcccgggCTAAAAGAAAGAAAGAAGATAGG	32
PAL pro3-2	tatcccgggAGCTTATTTGTAATATTGTTGG	31
IRT2-5'XBBg	ggtctagaggatccagatCTTTCTCTGACTTTTAACATCC	40
IRT2-3'XS	ggtctagacccgggTATTgAgATTgTTTTATAATATAT	38
ChsA-5XBBg	ggtctagaggatccagatctTTCCTGTTCAAAGCTGATGCT	41
ChSA-3XS	ggtctagacccgggATTTTTGCTTGAAAAAAGTTTGG	37
rbcS3A-5XBBg	ggtctagaggatccagatctGATCCAAAAGCTTGGACAGG	40
rbcS3A-3XS	ggtctagacccgggaTTTTTCTCACTTCTGTATGAAT	37
Glu B1-5H	cgcaagcttGATCTCGATTTTTGAGGAATTTTAG	34
GluB1- 3BSK	ggatcccgggtaccAGCTATTTGTACTTGCTTATGG	36
Kin5-HBg	gga agc tta gat ctG ACG AGC CAA ACT TAT AYT CAA AT	38
Kin3-BSm	gga tcc cgg gTT TTT TCA GAT ATT TWT TTC TTG T	34
IRT1-BB	cgg gat cca gat ctT TAA GCC CAT TTG GCG ATA A	34
IRT1-5XBA2	gct cta gaa ata att ttg ttt aac ttt aag aag gag ata tac cAT GAA AAC AAT CTT CCT CGT AC	65
IRT1-5 Xba	gct ctA GAA TGA AAA CAA TCT TCC TCG TAC	30
IRT1-3 Bam	GCG GAT CCT TAA GCC CAT TTG GCG ATA A	28
GFP Rev	cgg gat ccg agc tcT TAG AGT TCG TCG TGT TTG	33
GFPFwdnew	gct cta gac cat ggc aAG TAA AGG AGA AGA ACT T	34
T7 sen	TGT CGA TAA GGT TCC GTT CCC TGA	24
T7 antisen	CAC GGT AAC TAC TTC GTT ATC GG	23
ACTINSEN	CAG AGC GAG GCT ACT CGT TCA CC	23

ACTIN antisen	AAC CTC CAA TCC AAA CAC TAT AC	23
Gus sen	CTA CAC CAC GCC GAA CAC	18
Gus antisen	CAA CGC TGA CAT CAC CAT TG	20
HBsAg sen	CTA CAC TCG TGG TGG ACT TCT C	22
HBsAg antisen	AAC GCC GCA GAC ACA TCC	18
ACTIN sen	CGT TTC CGA TGC CCT GAA GTC	21
ACTIN antisen	CGA ACC GCC ACT GAG TAC AAT C	22
ACTIN Be	(AMC6+T X RED)** CGC GAT CCA TGA AGT GCG ACG TGG ATA TCA GAA GAT CGC G (MB-TX RED)	40
HBsAg Be	(5HEX) CGC GAT CAA CCT CCA ATC ACT CAC CAA CCT CTT GAT CGC G (MB-5HEX)	40
Gus Be	(6-FAM) CGC GAT CAC CGT GGT GAC GCA TGT CGC GAT CGC G (MB-6-FAM)	34
T7 Poly Be	(CY5) GCG GAT CAC AGC ACC ACG GCC TGA GCT ATA AGA TCG CG (MB-CY5)	38

Notes **(*)** Uppercase letters show gene or promoter sequences
Lowercase letters show additional adapter
(**) In brackets are beacon fluorescent proteins

3. Plant materials:

- Tobacco (*Nicotiana tabacum* cv. xanthi)
- Tomato (*Lycopersicon estculentum* cv. Money maker, Cheery tomato)
- *Arabidopsis* (*Arabidopsis thaliana* encotype Columbia)
- Rice (*Oryza sativa* cv. Taipei 309, IR 64, IR72)
- Pea (*Peacum sativum*, local cultivar)

4. Culture media

10X Macro for 1 litre (L)

KNO_3	19 grams (g)
$MgSO_4$	3.7 g
$CaCl_2$	4.4 g
KH_2PO_4	1.7 g
NH_4NO_3	16.5 g

100X Micro for 100 milliliters (ml)

$MnSO_4.2H_2O$	169	mg
H_3BO_3	62	mg
$ZnSO_4.7H_2O$	86	mg
KI	8.3	mg
$Na_2MoO_4.2H_2O$ (1mg/ml)	2.5	ml
$CuSO_4.5H_2O$ (1mg/ml)	0.25	ml
$CoCl_2.6H_2O$ (1mg/ml)	0.25	ml

100X Vitamins	**for 100 ml**	
Glycine	20	mg
Myo-inositol	1000	mg
Nicotinic acid	5	mg
Pyridoxine HCl	5	mg
Thiamine HCl	1	mg

RM (for propagation of sterile plants)	**for 1 litre**
10X macro	100 ml
100X micro	10 ml
Fe.EDTA (734g/l)	5 ml
Sucrose	30 g
Agar	0.6%
pH	5.6-5.8

RMOP (for shoot regeneration)	**for 1 litre**	
10X macro	100	ml
100X micro	10	ml
FeNaEDTA (7.34g/l)	5	ml
Sucrose	30	g
Thiamine (1 mg/ml)	1	ml

NAA (1mg/ml)	0.1 ml
BAP (1mg/ml)	1 ml
Inositol	0.1 g
Agar	0.8%
pH	5.6-5.8

YEM medium	**for 1 litre**
Yeast Extract	0.4 g
Manitol	10 g
NaCl	0.1 g
$MgSO_4$	0.2 g
K_2HPO_4	0.5 g
pH	7

LB medium	**for 1 liter**
Tryptone	10 g
Yeast Extract	5 g
NaCl	5 g
Agar (for solid medium)	15 g