

7 ANHANG

7.1 Hergestellte pJK- und andere Plasmide

Kurzform	Vektor	Tag	Insert	pLitmus 28	pBadMycHis C
pJK 1	pBluescript II KS		pVC 8		
pJK 2	pRBIPDI		PE 255		
pJK 3	pRBIPDI		PE 385		
pJK 4	pThioHis B	TRX	pKD 52		
pJK 5	pBluescript II KS		MTS		
pJK 6	pBluescript II KS		DTA-MTS		
pJK 7	pThioHis B	TRX	DTA-MTS		
pJK 8	pBluescript II KS		DTA-MTS ESP	pJK 8L^{a)}	
pIH	pET 11d	HIS	Tox-CSP-MTS		
pJK 9	pET 11d	HIS	Tox-CSP-MTS-ESP		
pJK 10	pET 11d		DTA-Ad(MTS) ^{b)}	pJK 10L	pJK 10B^{a)}
pJK 11	pET 11d	HIS	DTA-Ad(MTS)	pJK 11L	
pJK 12	pET 11d		DTA-Ad(PEN)	pJK 12L	
pJK 13	pET 11d	HIS	DTA-Ad(PEN)	pJK 13L	
pJK 14	pET 11d		DTA-Ad(TLM)	pJK 14L	
pJK 15	pET 11d	HIS	DTA-Ad(TLM)	pJK 15L	
pJK 16	pET 11d		DTA	pJK 16L	
pJK 17	pET 11d	HIS	DTA	pJK 17L	
pJK 18	pET 11d		DTA-Ad(MTS)-eGFP	pJK 18L	
pJK 19	pET 11d		DTA-MTS-ESP-eGFP	pJK 19L	
pMS	pET 11d		DTA-MTS-eGFP		
pJK 20	pET 11d		DTA-Ad(MTS)-TRBP	pJK 20L	
pJK 21	pET 11d		DTA-TRBP	pJK 21L	
pJK 22	pET 11d	HIS	DTA-Ad(MTS)-TRBP		
pJK 23	pET 11d	HIS	DTA-Ad(TLM)-TRBP	pJK 23L	
pJK 24	pLitmus 28	HIS	eGFP-Ad(MTS)		
pJK 25	pET 11d		eGFP-Ad(MTS)		
pJK 26	pET 11d		eGFP-Ad(MTS)-TRBP		
pJK 27	pET 11d		eGFP		
pJK 28	pET 11d		eGFP-TRBP		

^{a)} das entsprechende Insert wurde jeweils über *Nco* I / *Eco*R I in pLitmus 28 bzw. in pBadMycHis C kloniert

^{b)} Ad(Transfersequenz) steht stellvertretend für CSP-Transfersequenz-ESP

7.2 Adaptersequenzen

7.2.1.1 Membrantransfersequenzen

MTS

CAT ATG GCA GCC GTT CTT CTC CCT GTT CTT GCC GCA CCC GCG GGC CC
NdeI Ala Ala Val Leu Leu Pro Val Leu Ala Ala Pro *Apal*
 A A V L L P V L L A A P 12 AS

TLM

CAT ATG CCC TTA TCG TCA ATC TTC TCG CGC ATT GGG GAC CCT GCG GGC CC
NdeI Pro Leu Ser Ser Ile Phe Ser Arg Ile Gly Asp Pro *Apal*
 P L S S I F S R I G D P 12 AS

PEN

CAT ATG CGC CAG ATT AAG ATT TGG TTC CAG AAT CGG CGC ATG AAG TGG AAG AAG GCG GGC CC
NdeI Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys *Apal*
 R Q I K I W F Q N R R M K W K K 16 AS

7.2.1.2 Spaltbare Sequenzen

CSP

GCT AGC TAT GTT CAC GAT GAA GTC GAT CGT GGT CCT CAT ATG
NheI Tyr Val His Asp Glu Val Asp Arg Gly Pro *NdeI*
 Y V H D E V D R G P 10 AS

ESP

G GGC CCG CGT CAT CGC CAG CCG CGC GGC AAT CGT GTC CGA CGC TCA CCC GGC
Apal Arg His Arg Gln Pro Arg Gly Asn Arg Val Arg Arg Ser *XmaI / SmaI*
 R H R Q P R G N R V R R S 13 AS

7.3 Allgemeines

7.3.1 Genetischer Code

		2. Position im Codon								
		T	C	A	G	T	C	A	G	
1. Position (5'-Terminus)	T	TTT	Phe	TCT	Ser	TAT	Tyr	TGT	Cys	T
		TTC	Phe	TCC	Ser	TAC	Tyr	TGC	Cys	C
		TTA	Leu	TCA	Ser	TAA	<i>Stop</i>	TGA	<i>Stop</i>	A
		TTG	Leu	TCG	Ser	TAG	<i>Stop</i>	TGG	Trp	G
	C	CTT	Leu	CCT	Pro	CAT	His	CGT	Arg	T
		CTC	Leu	CCC	Pro	CAC	His	CGC	Arg	C
		CTA	Leu	CCA	Pro	CAA	Gln	CGA	Arg	A
		CTG	Leu	CCG	Pro	CAG	Gln	CGG	Arg	G
	A	ATT	Ile	ACT	Thr	AAT	Asn	AGT	Ser	T
		ATC	Ile	ACC	Thr	AAC	Asn	AGC	Ser	C
		ATA	Ile	ACA	Thr	AAA	Lys	AGA	Arg	A
		ATG	Met ^{a)}	ACG	Thr	AAG	Lys	AGG	Arg	G
	G	GTT	Val	GCT	Ala	GAT	Asp	GGT	Gly	T
		GTC	Val	GCC	Ala	GAC	Asp	GGC	Gly	C
		GTA	Val	GCA	Ala	GAA	Glu	GGA	Gly	A
		GTG	Val	GCG	Ala	GAG	Glu	GGG	Gly	G

^a ATG: Startcodon

7.3.2 Kurzbezeichnungen für Aminosäuren

Kurzformen ^{a)}	Bezeichnung	Kurzformen	Bezeichnung		
A	Ala	Alanin	M	Met	Methionin
C	Cys	Cystein	N	Asn	Asparagin
D	Asp	Asparaginsäure	P	Pro	Prolin
E	Glu	Glutaminsäure	Q	Gln	Glutamin
F	Phe	Phenylalanin	R	Arg	Arginin
G	Gly	Glycin	S	Ser	Serin
H	His	Histidin	T	Thr	Threonin
J	Ile	Isoleucin	V	Val	Valin
K	Lys	Lysin	W	Trp	Tryptophan
L	Leu	Leucin	Y	Tyr	Tyrosin

^a Kurzformen: entweder 1- oder 3-Buchstabencode