

8 Anhang

8.1 Synthetische Oligonukleotide

Tab.1: Auflistung aller eingesetzter synthetischer Oligonukleotide

Primerbezeichnung	Oligonukleotidsequenz
Act 2A	5'-gAA gAT TAA ggT CgT TgC ACC ACC Tg-3'
Act 2B	5'-ATT AAC ATT gCA AAg AgT TTC AAg gT-3'
atpA-1	5'-gAA CgA ggg gCA ATg gAA TA-3'
atpA-2	5'-gAC Tgg gTC TCg ACg ATT gg-3'
atpF-1	5'-CCg ATT CTT TCg TTT ACT Tg-3'
atpF-2	5'-gAC TTg ATT AAT TgT TCT TT-3'
Binv1	5'-ACA gAA CCg CAA CgT TgA A-3'
Binv2	5'-TCg TTT CCC gCC TTC AgT TTA-3'
Binv4	5'-TAA AAA CgT CCg CAA TgT gT-3'
Binv5	5'-AgT gAg ACg ggC AAC AgC T-3'
cob hinten	5'-gTT ATg gCA AAg AAC AAg-3'
cob vorn	5'-CAC CTT AAA TCg TTT TTT-3'
cox3hinten	5'-CgT TCC TTC ATA TAC CTC-3'
cox3vorn	5'-CAC gTT ggA Agg ACA TCA-3'
E-rich 1	5'-gTT Tgg gAg AAg AAg TTg gg-3'
E-rich 2	5'-ACA gTT TTC TCT TTC ACA Ag-3'
E-rich 3	5'-ggA TCC ATC gCg AAg AAg AAA gTg TCT CgT-3'
E-rich 4	5'-gCg gCC gCT CgA ggT gAT CAC TTg AgA gAA-3'
E-rich 5	5'-Tag AAA TAA CAA CAC TgT gg-3'
HPT 6	5'-gCg AAg AAT CTC gTg CTT-3'
HPT 7	5'-ggC gAg TAC TTC TAC ACA-3'
HygA	5'-gTA CCC ggg CgC gCC TCg AgA CTA gTT AAT TAA T-3'
HygB	5'-CTA gAT TAA TTA ACT AgT CTC gAg gCg CgC CCg g-3'
nd1_B/C	5'-ggT CTT ATT CTT ATT ACT gTA C-3'
nd1_D/E	5'-CTC ATT AAg ATC ATA TTg gC-3'
ndhB_1	5'-gCT AAC gAT TTA ATA ACT ATC-3'

ndhB_2	5'-ggA ATA TCg AAA ATT CgA gTg-3'
ndhB-8	5'-gTg Tgg ATg gCA ggC Agg CC-3'
ndhB-9	5'-CTA gAA gCT AAA AAg ggT AT-3'
ndhF-1	5'-gTT AAg TAT AgT TAT gAT CT-3'
ndhF-2	5'-gAA CAC ATT CCA ACT AAT TC-3'
Nico Pol1-A	5'-gCA AgT AAA AgC ATT AgT gA-3'
Nico Pol1-B	5'-AgC ATT ggC AAg TAg ggA AT-3'
Nico Pol2-D	5'-TCg CAg ATg TTA ggg CTA Ag-3'
Nico Pol2-E	5'-ggC ATC ACT gCA TAT CTC CC-3'
Nico Pol3-C	5'-gCA ggg gAC TCA CAA gAg gA-3'
Nico Pol3-D	5'-AAC ATC ggA ACA TAA ggA AT-3'
Pol1-tag	5'-AAT TCg gTg CAA gCT TCT gC-3'
<i>Pol1-T7</i>	5'-TAA TAC gAC TCA CTA Tag ggA gA-3'
<i>Pol1-C-Ex</i>	5'-TCA TgA AAA TAg CAT CAA AA-3'
<i>Pol2-T7</i>	5'-TAA TAC gAC TCA CTA TAg ggA gA-3'
<i>Pol2-C-Ex</i>	5'-TCA AgA TgA AgC TAC CCA AC-3'
<i>Pol3-T7</i>	5'-TAA TAC gAC TCA CTA TAg ggA gA-3'
<i>Pol3-C-Ex</i>	5'-TCA ACA CAT CAT TTC TTT AT-3'
Primer Anti 1-5'	5'-gTC gAC AAg ATC CAT gAA AT-3'
Primer Anti 2-3'	5'-ggC gCg CCT Tgg ggT TgA TAC-3'
Primer Anti 2-5'	5'-TTA ATT AAg TTC gAT TgA TgT C-3'
Primer Anti 3-3'	5'-ggC gCg CCA CCA Agg AAg ATC C-3'
Primer Anti 3-5'	5'-TAT TTA ATg TTC ATA TTC CC-3'
Primer Nico Pol 2A	5'-TCT TAA Cgg TTg TAg ATA gg-3'
Primer Nico Pol 2B	5'-TCC CAC TTC CAT TTC TTA Ag-3'
Primer Nico Pol 3A	5'-AAT ggA gTg CTC gAA Agg CC-3'
Primer Nico Pol 3B	5'-AgC TTT TCA ACA CCA CCT gC-3'
Primer Pol.13	5'-TAg Cgg ATg ggT gAA TAA gA-3'
psbE-1	5'-gTC Tgg AAg CAC Agg AgA AC-3'
psbE-2	5'-CTA AAA AgA TCT ACT AAA TT-3'
RNA_Pol1	5'-ATg gCA Tgg CTT ggT gAT Tg-3'
RNA_Pol2	5'-CAA AAC gAg TCA TgC ACC CC-3'
RNA_Pol3	5'-ggT CTT CCg gTT gTT CAg CC-3'
RNA_Pol4	5'-ATA gCA gTC ATC ATC ATg Tg-3'

rpoB-1	5'-Cgg gAT TAA TTT ggA AAA CC-3'
rpoB-2	5'-gAT AAg AAA ATT TCA ggg TA-3'
Rps14-1	5'-ggC AAA gAA AAg TTT gAT TT-3'
Rps14-2	5'-CCA gCT TgA TCT TgT TgC CC-3'
35S-Primer	5'-CTT CgC AAg ACC CTT CCT C-3'

8.2 RNA-Polymerase-Sequenzen

RNA-Polymerase 1 (Pol.1, Mt 1, RpoT;1) ACCESSION Y09432

bases 1 to 9764

Reference

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JOURNAL Unpublished

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Aminosäure-Sequenz

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Nucleotid-Sequenz

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RNA-Polymerase 2 (Pol.2, Mt2, RpoT;2) ACCESSION AJ001037

bases 1 to 7440

Reference 1

AUTHORS Schuster, W.

Direct Submission

Submitted (06-AUG-1997) Schuster W., Institute for Applied Genetics, Free University of Berlin, Albrecht-Thaer-Weg 6, D-14195 Berlin, FRG

Reference 2

AUTHORS Sanchez,H. und Schuster,W.
 TITLE Cloning of three single-subunit RNA polymerases from *Arabidopsis thaliana*
 JOURNAL Unpublished

Aminosäure-Sequenz

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RNA-Polymerase 3 (Pol.3, Cp, RpoT;3) ACCESSION Y08722

bases 1 to 9080

Reference 1

AUTHORS

Hedtke,B., Börner,T. und Weihe,A.

TITLE

Mitochondrial and chloroplast phage-type RNA polymerases in
Arabidopsis

JOURNAL

Science 277 (5327), 809-811 (1997)

Reference 2

AUTHOR Hedtke,B.

TITLE Direct Submission

Submitted (08-OCT-1996) B. Hedtke, Humboldt University, Institut of Biology (Genetics),
Chausseestr. 117, D-10115 Berlin, FRGAminosäure-Sequenz

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3781 gagctgthtag thgatcttht atthgtthtt thgtctcatg aggthaaag thtatgthatt
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9001 tctaagtgaa taaggaaagt ctaaggatgt tgccaaaatg tgtttgaaga aaaacaagtt
9061 ttggcaaaaa ttcataaaaa

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8.3 Aminosäuresequenz-Vergleich der Gene At5g27330 und At3g05130

At5g27330	1	MAKKKVS	SRNSNGAS	NE	-	QQQIQN	Q	SPV	VTSQK	STKLS	RESSMEDHDS	SEEK	FQNLKSLNA
At3g05130	1	MAKKKAS	SRNSNDTAN	DN	NR	QQQHDQ	K	APETD	KKATVLS	RQSSMEEHDS	SEEQ	FQNLKSLNA	
At5g27330	61	ILLKQ	TMEKROQIE	S	L	FQAKD	S	L	E	TEL	VRSGKEK	TLLREEL	CGSSDENF
At3g05130	61	MLLKQ	AMEKRNQID	S	L	VQAKD	E	L	E	TEL	ARYCQEK	TGLRDEL	DQVSDENF
At5g27330	121	FVEGR	VKEMGV	VDW	L	FKEKS	DRE	T	E	IRD	LKREAN	LIRKLES	ERE
At3g05130	121	FVESQ	FREMCV	GVDM	L	VKEKS	DRE	S	E	IRV	LKGEA	I	ELTGK
At5g27330	181	GFDLQ	SEEMN	LLKES	V	VRLEM	RE	V	S	L	GEEV	GR	LKCEN
At3g05130	181	GFDLQ	HEEVN	RLKE	C	VRLE	E	K	S	N	L	E	I
At5g27330	241	L	V	S	L	E	E	K	V	R	E	I	D
At3g05130	241	L	E	K	I	M	E	E	K	N	E	I	D
At5g27330	301	REG	L	R	G	V	V	G	L	E	K	S	L
At3g05130	301	E	K	V	L	R	D	L	V	I	G	L	E
At5g27330	361	M	V	Q	F	S	D	K	E	K	L	V	E
At3g05130	361	N	V	Q	S	S	D	K	G	K	L	I	D
At5g27330	421	E	K	L	N	C	N	V	S	O	L	K	D
At3g05130	421	G	K	L	S	C	K	V	D	O	L	S	N
At5g27330	481	A	E	R	G	L	I	K	E	K	E	L	N
At3g05130	481	I	E	R	K	S	L	F	S	A	K	N	D
At5g27330	541	S	V	S	L	V	C	G	I	E	N	K	D
At3g05130	541	S	A	A	S	M	L	S	O	L	E	N	R
At5g27330	601	S	V	E	D	A	H	K	K	S	F	W	T
At3g05130	601	S	T	E	E	A	H	K	K	Q	T	F	W

100%ige Sequenzhomologie ist schwarz unterlegt.