

Oligonucleotides used in this study (Sequence 5'→3')*

Expressions of LrpA1 into the Pet26b vector

ExpLrpA1 fwd TTTTTCATATGAGCACTGAATCGACAGAAGA
 rev TTTTTCCTCGAGCTTGAGGCGTTCCTGGAGGA

Northern blot: Probe against aspartate transaminase (OE2619F)

NbOE2619F fwd ATGAGGGATGGCCGCGATCC
 rev TAATACGACTCACTATAGGGAGAGTCGGTGCGGTCGGCGAGG
NbOE2621R fwd TCACTTGAGGCGTTCCTGGAG
 rev TAATACGACTCACTATAGGGAGAGTGAGCACTGAATCGACAGAAG

Construction of the deletion mutants

ΔOE2621R fwd upstream TTTTTT**GGATCC**CAGACATCGCCGACGAGCC
 rev upstream TTTTTT**CTGCAG**TTCGCTCTTCTGTCGATTTCAGT
 fwd downstream TTTTTT**CTGCAG**CCAGGAACGCCTCAAGTGAG PstI
 rev downstream TTTTTT**TCTAGAG**ATCGGCGATGACACCGCC
ΔOE3923F fwd upstream TTTTTT**GGATCC**CTTCGGTGCGAGATCGAAG
 rev upstream TTTTTT**CTGCAG**AAGTTTACGAACGTCCAATTCTG
 fwd downstream TTTTTT**CTGCAG**CCGGGAACGCGACCGGACAC
 rev downstream TTTTTT**TCTAGAC**CGACCGTCGTCGACG

probes for Southern blotting

AlrpA1 fwd CGTTTTGATTGTGCGGTACGTG
 rev CGGTGCGAACGCAACCGAGT
lrpA1 fwd TTTTTCATATGAGCACTGAATCGACAGAAGA
 rev TTTTTCCTCGAGCTTGAGGCGTTCCTGGAGGA
Alrp fwd CTGCATGGATAAATGAGTATCGC
 rev ACGTTCTTTGCGCGCGATCTC
lrp fwd ATGACCTACGAGAACCTCGACG
 rev CGCGTCGCCGTCGAGGTCGA

Construction of the overexpression mutants

↑*lrp* Lrp_Pst_for GTAGCC**CTGCAG**ATGACCTACGAGAACCTC
 Lrp_Bam_rev TCGAAC**GGATCC**TTTTCGGCGGCCGCGTTG
↑*lrpA1* LrpA1_Pst_for AATAT**CTGCAG**GTGAGCACTGAATCGACAG
 LrpA1_Bam_rev GCGTT**GGATCC**GGAACGAGGTCACCGAGCG
Pbop_for: AGTGGAAGCTTGCGTGACGCATCGACTT
Pbop_rev: AACTCCTGCAGGCAACAGTACCTAACGAGGA
Lrp_rev: ATCTCCACTGCACCAGCGGTGCCGC
LrpA1_rev: ATTCGGTGCGAACGCAACCGAGTA

DNA-binding-assay

Pro_lrpA1 fwd ACGACACCGGGTCGTTTTGAT
Pro_lrpA1bio rev TGGAGACGTCCGCACGCTC
Promut_lrpA1 fwd AAGATACCCTTTCACACGAACC
Promut_lrpA1 rev GGATAGGGGGTTCGTGTGAAA
Pro_aspB3 fwd ATCGCGCTTGAACGTCTGCAT
Pro_aspB3bio rev GTCGGCGGCGCGTTCGAG
flaA fwd TCGGCACGCTCATCGTGTTCATCG

flaA2bio rev GCGCTCGTCTTCGTCAGTGATGAACTCG

Reverse transcription-quantitative PCR

OE6130F	fwd GACGTGAGCGAAAATGGAGAC
	rev ACATTCCCGTCAACACCCTC
aspB3	fwd CTGTTGGCCACTGTCGACC
	rev AAGTTCGGGTAGCAGGCGTA
lrpA1	fwd CGACCGTCCGCAAATACAT
	rev TTTGCCCGGACAGCTTCTT
lrp	fwd CCTGAAATCACTGGGACGCT
	rev TCGGTGTCGGTGAACTTCC

5'-3'-RACE

a.) cDNA-Synthese

P1cDNALrpA1-(I)	GACGATGACGCCGTCCGATTCTG
P2cDNALrpA1-(II)	CTTTGCCCGGACAGCTTCTTGG
P1cDNAasp-(I)	GGCTGGGGGTGCGAAGTCGG
P2cDNAasp-(II)	CGCGTCGACTGCTGCCTCGG

b.) 1. PCR und 2. „nested“-PCR

PCRLrpA1:	fwd CACATGCTGATGGCGGAGGT
	rev TCGATGTATTTGCGGACGGTC
NESPCRLrpA1:	fwd CTCGGTGACGTGATCAGCGAC
	rev ACGTCCGCGATGGCCGCAT
PCRasp:	fwd CGGATTTTCGGTGCGAACGCA
	rev CCACTTCCATGTGGATCACGT
NESPCRasp	fwdCGGGCGTCGTTTGCGGTGAG
	rev GTTCGAGGACATCCATCGCGG

* Bold sequences indicate restriction sites.