Supplementary material

The phosphatidylcholine-hydrolyzing phospholipase C NPC4 plays a role in response of Arabidopsis roots to salt stress

Daniela Kocourková, Zuzana Krčková, Přemysl Pejchar, Štěpánka Veselková, Olga Valentová, Rinukshi Wimalasekera, Günther F.E. Scherer, Jan Martinec

Table S1. List of UPL (Universal Probe Library) probe numbers and corresponding qRT-PCR primers

Locus	UPL	Name	Oligo Sequence
At1g07230	UPL39	*NPC1 L*	ctcgccaagattgtccaga
		NPC1 R	gagttgagaggccagttgga
At2g26870	UPL76	*NPC2 L*	tctccgagttcgctgttttc
		NPC2 R	tgacgtccctgagtgtacaaa
At3g03520	UPL93	*NPC3 L*	atcgaacctggaacggtgt
		NPC3 R	agtgttgccggaattgatg
At3g03530	UPL46	*NPC4 L*	tgcacaattaagcgaatttcaa
		NPC4 R	ttcttcgtttttgtagtctcctttt
At3g03540	UPL122	*NPC5 L*	attacgagaaactcaccaagacaa
		NPC5 R	cattttgaccggatttgaca
At3g48610	UPL92	*NPC6 L*	aatcccgatgggaatactgg
		NPC6 R	ggtccttttgcttcacttacga
At3g18780	UPL30	*Actin2 L*	ccgctctttctttccaagc
		Actin2 R	ccggtaccattgtcacacac
At4g05320	UPL10	*UBQ10 L*	tcaccggaaagaccatcact
		UBQ10 R	cggtgggataccctctttg

Table S2. List of qRT-PCR primers

Locus	Name	Oligo Sequence
At4g26080	*ABI1 L*	ccatccatcattcctgatcc
	ABI1 R	ccatctcacacgcttcttca
At5g57050	*ABI2 L*	gagatcgatgaatcagagtgag
	ABI2 R	cattagtgactcgaccatcaag
AT5g27150	*NHX1 L*	tcttgtattcggagagggtg
	NHX1 R	gcaccaagcaaggtacttag
At5g07920	*DGK1 L*	agccagtttatgaacaaagtcc
	DGK1 R	aaccagtattccttccgca
At5g52310	*RD29A/LTI78/COR78 L*	tcaccggaactttctcatcc
	RD29A/LTI78/COR78 R	gtgctctgttttggctcctc
At1g14660	*NHX8 L*	atcttacaaaggaaactcgtgg
	NHX8 R	caatccaacccatagccag
At3g11410	*PP2CA L*	tctgaggccgagatacgg
	PP2CA R	aagacggatgtaacgcaacc
At5g66400	*RAB18 L*	tcaaggagaagttgccaggt
	RAB18 R	tgtccatcatccccttcttc
At2g47770	*TSPO L*	tttgctctgtttggtttggg
	TSPO R	cattaacagcggctacaaagg
At2g01980	*SOS1 L*	agcgaccgattcgtcttct
	SOS1 R	ttagctccatattcgagagatcc
At5g35410	*CIPK24/SOS2 L*	gtgcagtttttgatggaattga
	CIPK24/SOS2 R	gccttttaacaaaatcctgtcg
At5g24270	*CBL4/SOS3 L*	tatttgatgtgaagcgaaatgg
	CBL4/SOS3 R	cgatgaatccagtttgtcgt
At2g03760	*SOT12 L*	cccagatttcgatttctcca
	SOT12 R	tcccaaaatgccataaggac
At1g50030	*TOR L*	tcgaagggcaaagtacgac
	TOR R	acgcacgctcatagctctc

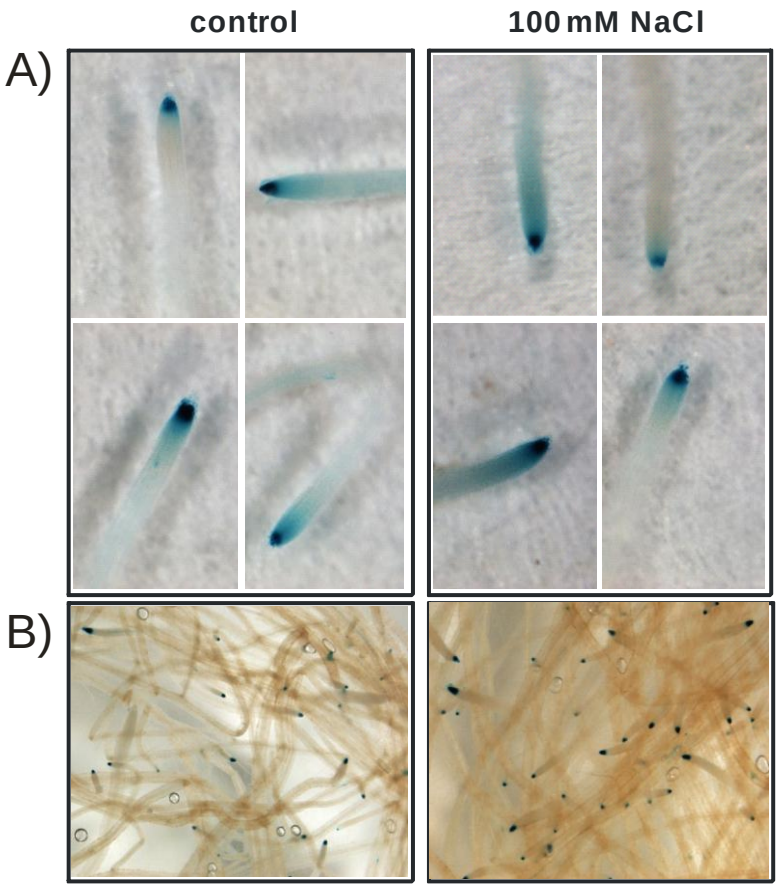

Figure S1. Histochemical analysis of P_{NPC3}*:GUS* expression under salt stress in Arabidopsis plants. A) Effect of salt on P_{NPC3}*:GUS* expression pattern in the main root of ten-day-old seedlings. The plants were grown on agar and transferred in liquid nutrient solution with or without 100 mM NaCl for 24 h. B) Effect of salt on P_{NPC3}*:GUS* expression pattern in roots of five-week-old Arabidopsis plants. The plants were grown hydroponically in modified half strength Hoagland´s solution and exposed to 100 mM NaCl for 4 h.

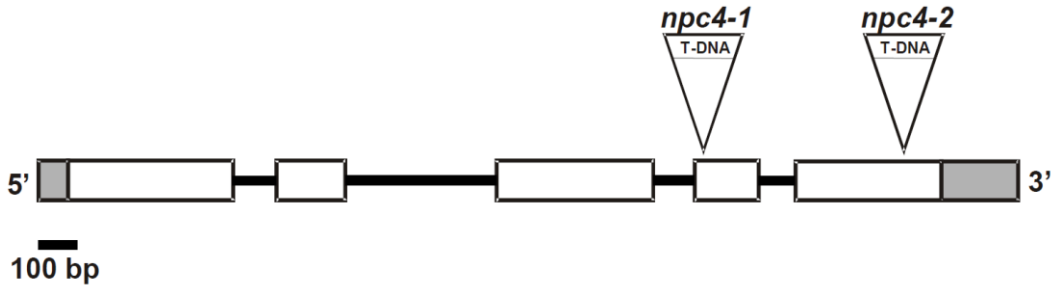

Figure S2. The position of T-DNA insertions in two Arabidopsis *npc4* mutant lines. The SALK line 046713 was marked as *npc4-1* and the GABI-KAT line 571E10 was marked as *npc4-2*.

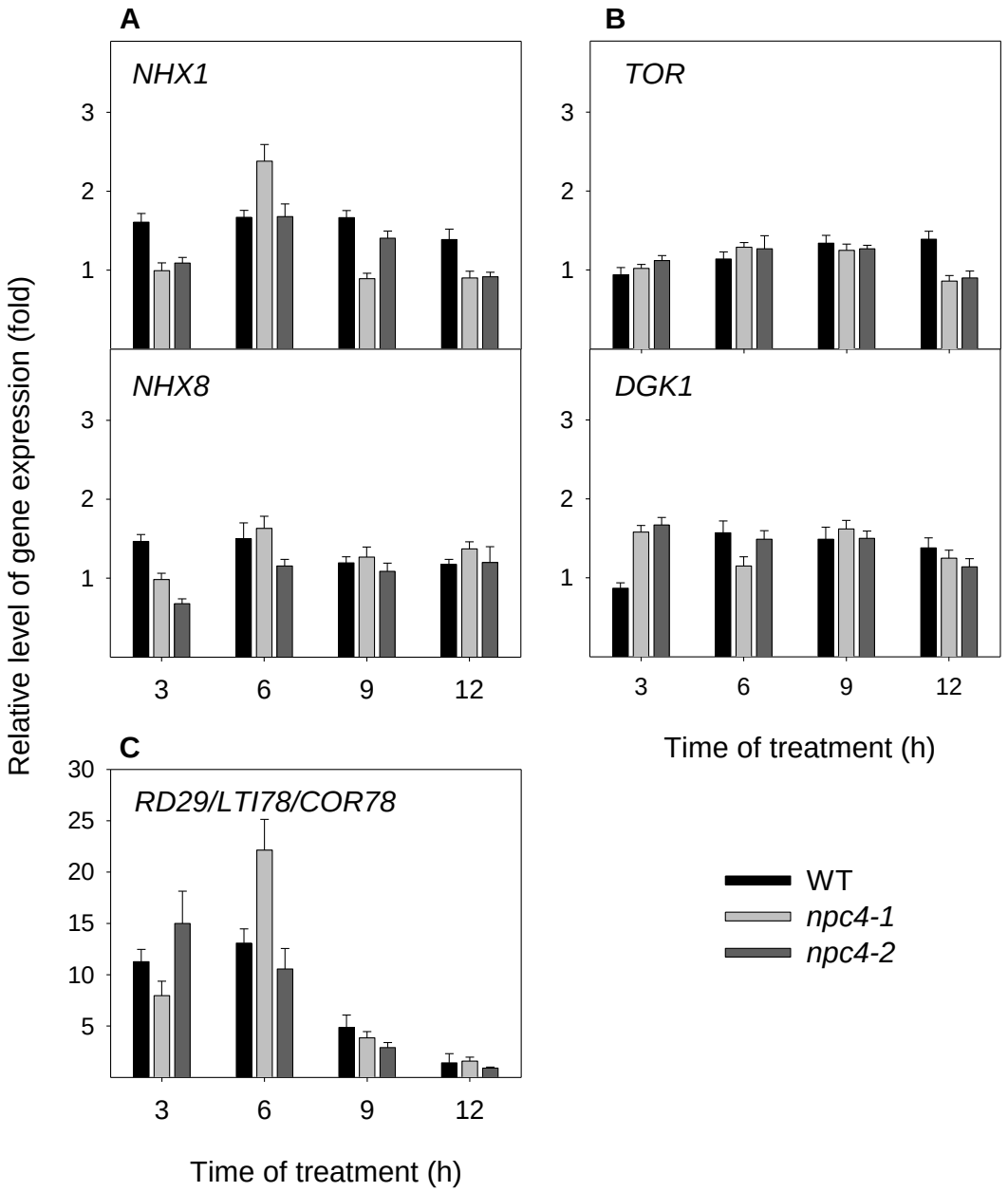

Figure S3. Relative level of gene expression of ion transporter genes *NHX1*, *NHX8* (A), phospholipid signalling related genes *TOR* and *DGK1 (B)* and of *RD29/LTI78/COR78* gene (C) in WT, *npc4-1* and *npc4-2* under 100 mM NaCl treatment. The transcript levels of genes were measured by quantitative real-time PCR in roots of non-treated plants and in plants treated with 100 mM NaCl for 3, 6, 9 and 12 h. *Actin2* and *UBQ10* were used as an internal

control. The expression of the genes in non-treated controls in particular time was set to 1. Data represents means + SE, n = 2 discrete samples from one biological experiment. This experiment was repeated twice with similar results.