

A

		Exon II																			
Gene fragment	Nucleotide No. on cDNA	382	383	384	385	386	387	390	391	392	393	396	399	402	405	408	411	414	420	424	426
<i>Solanum tuberosum</i>	-	-	-	C	I	G	C	A	I	G	G	A	G	C	I	A	C	A	C	G	
<i>Oryza sativa</i>	A	G	A	A	C	A	T	G	T	G	G	A	G	T	C	G	C	G	T	A	
<i>Zea mays</i>	-	-	-	A	T	G	T	G	T	A	A	A	A	T	C	G	C	G	T	A	
<i>Ipomoea batatas</i>	-	-	-	-	-	-	-	-	-	G	G	A	C	T	C	T	G	C	A		
<i>Hordeum vulgare</i>	-	-	-	G	T	G	T	G	C	A	G	A	T	T	C	G	C	G	T	G	

		Exon III																				480	483	489	490	492	493	495	496	498	504	507	509	510	513	516	517	522	526	527	528	529
Gene fragment	Nucleotide No. on cDNA	432	435	438	439	441	442	443	450	451	456	459	462	465	466	468	471	474	475	477	479	480	483	489	490	492	493	495	496	498	504	507	509	510	513	516	517	522	526	527	528	529
<i>Solanum tuberosum</i>	T	A	A	T	G	T	T	A	A	T	T	G	G	C	T	T	T	G	C	T	T	G	T	T	G	A	A	C	C	A	T	A	A	G	T	C	T	C				
<i>Oryza sativa</i>	A	A	I	C	C	A	C	C	G	T	C	I	G	C	A	T	A	C	A	A	C	A	A	C	A	C	A	C	G	C	A	G	G	T	A	C	C					
<i>Zea mays</i>	A	G	T	C	C	A	C	T	A	C	T	A	G	A	T	C	T	G	A	A	T	A	A	A	A	C	A	A	A	C	G	G	C	A	G	C	C					
<i>Ipomoea batatas</i>	T	A	A	T	G	T	T	A	A	T	T	G	G	C	T	T	T	G	A	A	T	T	A	C	G	A	C	G	C	A	T	A	A	T	T	C	T	A				
<i>Hordeum vulgare</i>	A	A	I	C	T	A	C	T	A	C	C	A	A	C	A	A	A	C	A	A	T	A	A	A	C	A	A	T	A	C	A	G	G	T	A	G	T	C				

		Exon IV																				604	606	609	612	624	633	634	636
Gene fragment	Nucleotide No. on cDNA	534	541	546	549	552	558	562	567	570	571	573	576	579	585	586	588	591	595	597	603	604	606	609	612	624	633	634	636
<i>Solanum tuberosum</i>	A	G	T	T	A	G	T	A	G	C	T	T	C	C	T	G	C	T	G	A	C	A	C	C	C	T	A	G	
<i>Oryza sativa</i>	G	G	C	T	G	T	C	C	G	T	A	T	C	C	T	G	T	C	G	C	C	A	T	T	A	T	C	A	
<i>Zea mays</i>	A	G	C	G	C	T	T	C	C	C	G	T	T	T	T	G	T	T	A	A	T	T	A	T	C	C			
<i>Ipomoea batatas</i>	G	G	T	T	A	A	T	G	G	C	T	T	C	T	C	T	G	A	T	G	T	T	G	C	A	G			
<i>Hordeum vulgare</i>	A	C	C	T	C	T	C	C	T	C	A	G	C	C	C	G	T	T	G	C	C	A	T	T	A	T	C	G	

a.a.r. No. in the analyzed fragment	1	2	3	20	23	31	37	38	41	42	45	48	49	53	84													
a.a.r. No. in the protein	129	130	131	148	151	159	165	166	169	170	173	176	177	181	212													
<i>Solanum tuberosum</i>	-	L	N	M	L	I	D	K	N	H	N	N	S	Q	A	R												
<i>Oryza sativa</i>	R	T	N	V	I	V	Q	Q	H	S	D	T	Q	A	-													
<i>Zea mays</i>	-	M	N	V	T	I	E	K	Q	Q	N	D	S	Q	A	R												
<i>Ipomoea batatas</i>	-	-	-	-	L	I	E	N	K	H	N	N	S	K	A	R												
<i>Hordeum vulgare</i>	-	V	N	A	I	Q	K	Q	H	N	D	S	Q	P	R													

B

SNPs in exon sequences of the *Pho1a* gene fragment (exons II-IV) in the species *Solanum tuberosum* L. (NM 001288286.1), *Oryza sativa* L. (AK063766.1), *Zea mays* L. (NM 001309854.1), *Ipomoea batatas* (L.) Lam. (M64362.1), *Hordeum vulgare* L. (JQ277327.1) (A) and substitutions of amino acids in the analyzed area of the protein (B).