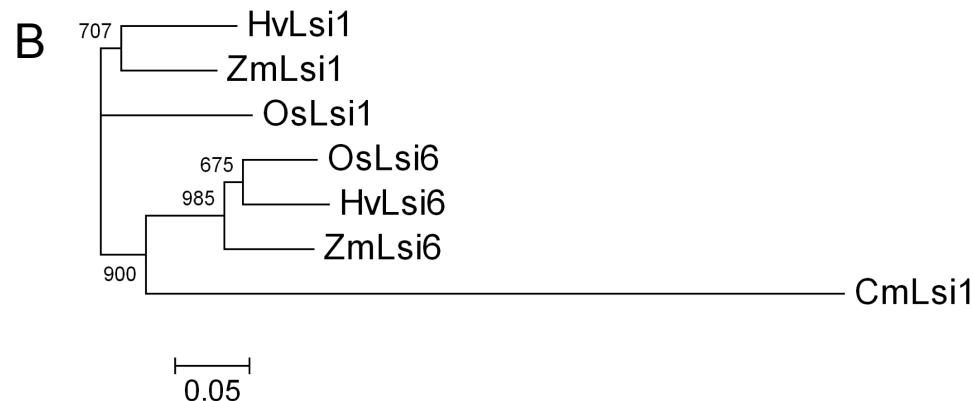


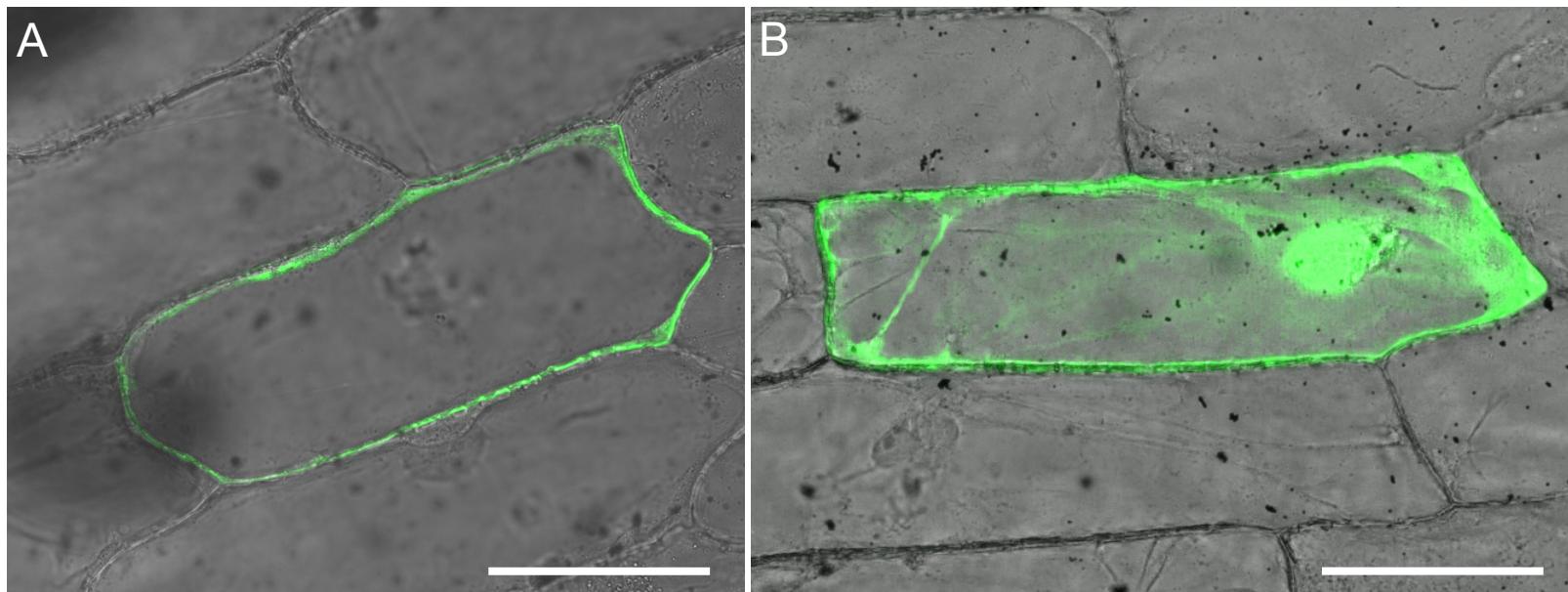
**A**

HvLsi6	1	MSVT <sub>S</sub> NTP <sub>T</sub> RANSRVNYSNEIHDLS <sub>T</sub> VQDGAPSLAPS <sub>MYY</sub> Q-EKSFADFFPPHLLKKVISELVATFLLVFVTCGAASIYG
OsLsi6	1	MASTT-APSRTNSRVNYSNEIHDLS <sub>T</sub> VQS--VS <sub>A</sub> VPS <sub>VYY</sub> P-EKSFADIFPPNLLKKVISEVVATFLLVFVTCGAASIYG
ZmLsi6	1	MAAAS-TTSRTNSRVNYSNEIHDLS <sub>T</sub> VQS--GS <sub>V</sub> VPTLFYP-DKSIADIFPPHLGKKVISEVVATFLLVFVTCGAASIYG
HvLsi1	1	MASN---SRSNSRATFSS <sub>E</sub> IHDIGTVQN---STTPSMVY <sub>T</sub> ERSIADYFPPHLLKKVSEVVSTFLLVFVTCGAAAISA
OsLsi1	1	MASN <sub>N</sub> --SRTNSRANYSNEIHDLS <sub>T</sub> VQN---GTMP <sub>T</sub> MYYG-EKAIA <sub>D</sub> FPPHLLKKVSEVVATFLLVFMTCGAAGISG
ZmLsi1	1	MSTN---SRSNSRANFNNEIHDIGTAQN---SSM <sub>P</sub> PTY--DRSLADIFPPHLLKKVSEVVSTFLLVFVTCGAAGIYG
HvLsi6	80	ADVTRVSQLGQSVV <sub>G</sub> GLIVTVMIYATGHISGAHMNP <sub>A</sub> VTLSFACFRHFPWIQVPFYWAAQFTGAMCAA <sub>F</sub> VLRAVLHPI <sub>T</sub> V
OsLsi6	77	EDMKRISQLGQSVV <sub>G</sub> GLIVTVMIYATGHISGAHMNP <sub>A</sub> VTLSFAFFRHFPWIQVPFYWAAQFTGAMCAA <sub>F</sub> VLRAVL <sub>Y</sub> PIEV
ZmLsi6	77	EDNRRISQLGQSVAGGLIVTVMIYATGHISGAHMNP <sub>A</sub> VTLSFACFRHFPWIQVPFYWAAQFTGAMCAA <sub>F</sub> VLKAVLHPI <sub>A</sub> V
HvLsi1	74	HDVTRISQLGQSVAGGLIVV <sub>V</sub> MIYAVGHISGAHMNP <sub>A</sub> VT <sub>L</sub> AFA <sub>I</sub> FRHFPWIQVPFYWAAQFTGAICASFVLKAVLHPI <sub>T</sub> V
OsLsi1	74	SDLSRISQLGQSIAGGLIVTVMIYAVGHISGAHMNP <sub>A</sub> VT <sub>L</sub> AFAVFRHFPWIQVPFYWAAQFTGAICASFVLKAVIHPVDV
ZmLsi1	72	SDKDRISQLGQSVAGGLIVTVMIYAVGHISGAHMNP <sub>A</sub> VT <sub>L</sub> AFAVFRHFPWIQVPFYWAAQFTGSICASFVLKAVLHPI <sub>A</sub> V
HvLsi6	160	LGTTTPTGPHWHALVIEIIIVTFNMMFITCAVATDSRAVGELAGLAVGSAVCITSIFAGPVSGGSMNPARTLAPAVASGVY
OsLsi6	157	LGTTTPTGPHWHALVIEIIVVTFNMMFVTCAVATDSRAVGELAGLAVGSAVCITSIFAGPVSGGSMNPARTLAPAVASN <sub>V</sub> Y
ZmLsi6	157	IGTTTPSGPHWHALLIEIVVTFNMMFVTCAVATDSRAVGELAGLAVGSAVCITSIFAGPVSGGSMNPARTLAPAVASN <sub>V</sub> F
HvLsi1	154	IGTTEPVGP <sub>H</sub> WHALVIEVVVTFNMMFVT <sub>L</sub> AVATDTRAVGELAGLAVGS <sub>S</sub> VCITSIFAGAVSGGSMNPARTLGPALASN <sub>R</sub> Y
OsLsi1	154	IGTTTPVGP <sub>H</sub> WHSLV <sub>E</sub> VIIVTFNMMFVT <sub>L</sub> AVATDTRAVGELAGLAVGSAVCITSIFAGAISGGSMNPARTLGPALASNKF
ZmLsi1	152	LGTTTPTGPHWH <sub>S</sub> LVIEIIIVTFNMMFVT <sub>L</sub> AVATDTRAVGELAGLAVGSAVCITSIFAGAVSGGSMNPARTLGPALASNLY
HvLsi6	240	TGLWIYFLGPVIGTL <sub>S</sub> GAWVYTYIRFEEEPSVKDG--PQKLSSFKLRLQSQRSMAVDEFDHV-----
OsLsi6	237	TGLWIYFLGPVVGTL <sub>S</sub> GAWVYTYIRFEEAAPAAGGAA <sub>P</sub> QKLSSFKLRLQSQS-MAADEFDNV-----
ZmLsi6	237	TGLWIYFLGPVIGTL <sub>S</sub> GAWVYTYIRFEEAAPAKD---TQR <sub>L</sub> SSFKLRRMQSQ--LAADFDTV-----
HvLsi1	234	PGLWLYFLGPVLGTL <sub>S</sub> GAWTYT <sub>T</sub> YIRFEDPP--KDA--PQKLSSFKLRLQSQ-SVAADD-DELDHI <sub>P</sub> V
OsLsi1	234	DGLWIYFLGPVMGTL <sub>S</sub> GAWTYT <sub>T</sub> YIRFEDTP-KEGS--SQKLSSFKLRLRSQSQSIAADDVDEMENIQV
ZmLsi1	232	TGLWIYFLGPVLGTL <sub>S</sub> GAWTYT <sub>T</sub> YIRFEEAPS <sub>H</sub> KDM--SQKLSSFKLRLQSQ-SVAVDD-DELDHI <sub>Q</sub> V



### Supplemental Figure S1. Alignment and phylogenetic tree of HvLsi6.

(A) Alignment of HvLsi6 with other Si influx transporter. Two NPA motifs and four amino acid residues of ar/R selectivity filter are indicated by blue and green dotted boxes, respectively. (B) Phylogenetic tree of HvLsi6.



**Supplemental Figure S2. Subcellular localization of HvLsi6.**

(A) GFP-HvLsi6 fusion or (B) GFP alone was transiently expressed in onion epidermal cells. Scale bar = 100  $\mu$ m.