

*Supporting Information***Homology Modeling and Microarray Analysis of Silicon Transporter Protein in Rice, Barley and Maize****Mohammed M. Morshed¹, Mohammad A. Ashraf¹, Mohammad K. Manik² and Mohammad N. Morshed^{3,4*}**¹*Department of Biochemistry & Molecular Biology, University of Dhaka, Dhaka, Bangladesh*²*Department of Pharmacy, East West University, Dhaka, Bangladesh*³*Center for Advanced Research in Sciences (CARS), University of Dhaka, Dhaka, Bangladesh*⁴*Center for Neuromedicine, Korea Institute of Science & Technology (KIST), Seoul, Korea**Corresponding Author, Email: mmneaz@du.ac.bd Tel.: +8802966192073/4634; Fax: +88028615583**Table S1:** Transmembrane region prediction for *Oryza sativa* Japonica group (Accession number: 90855460)

N terminal	transmembrane region	C terminal	type	length
52	VSEVVATFLLVFMTCGAAGISGS	74	PRIMARY	23
81	QLGQSIAGGLIVTVMIVAVGHIS	103	PRIMARY	23
135	TGAICASFVLKAVIHPVDVIGTT	157	SECONDARY	23
165	HSLVVEVIVTFNMMFVTLAVATD	187	PRIMARY	23
200	GSAVCITSIFAGAISGGSMNPAR	222	SECONDARY	23
234	DGLWIYFLGPVMGTLGAWTYTF	256	SECONDARY	23

Table S2: Transmembrane region prediction for *Hordeum vulgare* (Accession number: 224548822)

N terminal	transmembrane region	C terminal	type	length
53	SEVVSTFLLVFVTCGAAAISAHD	75	PRIMARY	23
81	QLGQSVAGGLIVVVMYAVGHIS	103	PRIMARY	23
135	TGAICASFVLKAVLHPITVIGTT	157	SECONDARY	23
164	WHALVIEVVVTFNMMFVTLAVAT	186	PRIMARY	23
194	LAGLAVGSSVCITSIFAGAVSGG	216	SECONDARY	23
235	GLWLYFLGPVLTLSGAWTYTYI	257	SECONDARY	23

Table S3: Transmembrane region prediction for *Zea mays* (Accession number: 99866966)

N terminal	transmembrane region	C terminal	type	length
50	VSEVVSTFLLVFVTCGAAGIYGS	72	PRIMARY	23
90	VTVMYAVGHISGAHMNPAVTLA	112	SECONDARY	23
132	FTGSICASFVLKAVLHPIAVLGT	154	SECONDARY	23
162	WHSLVIEIIVTFNMMFVTLAVAT	184	SECONDARY	23
192	LAGLAVGSAVCITSIFAGAVSGG	214	SECONDARY	23
229	NLYTGLWIYFLGPVLTLSGAWT	251	PRIMARY	23