Figure S1

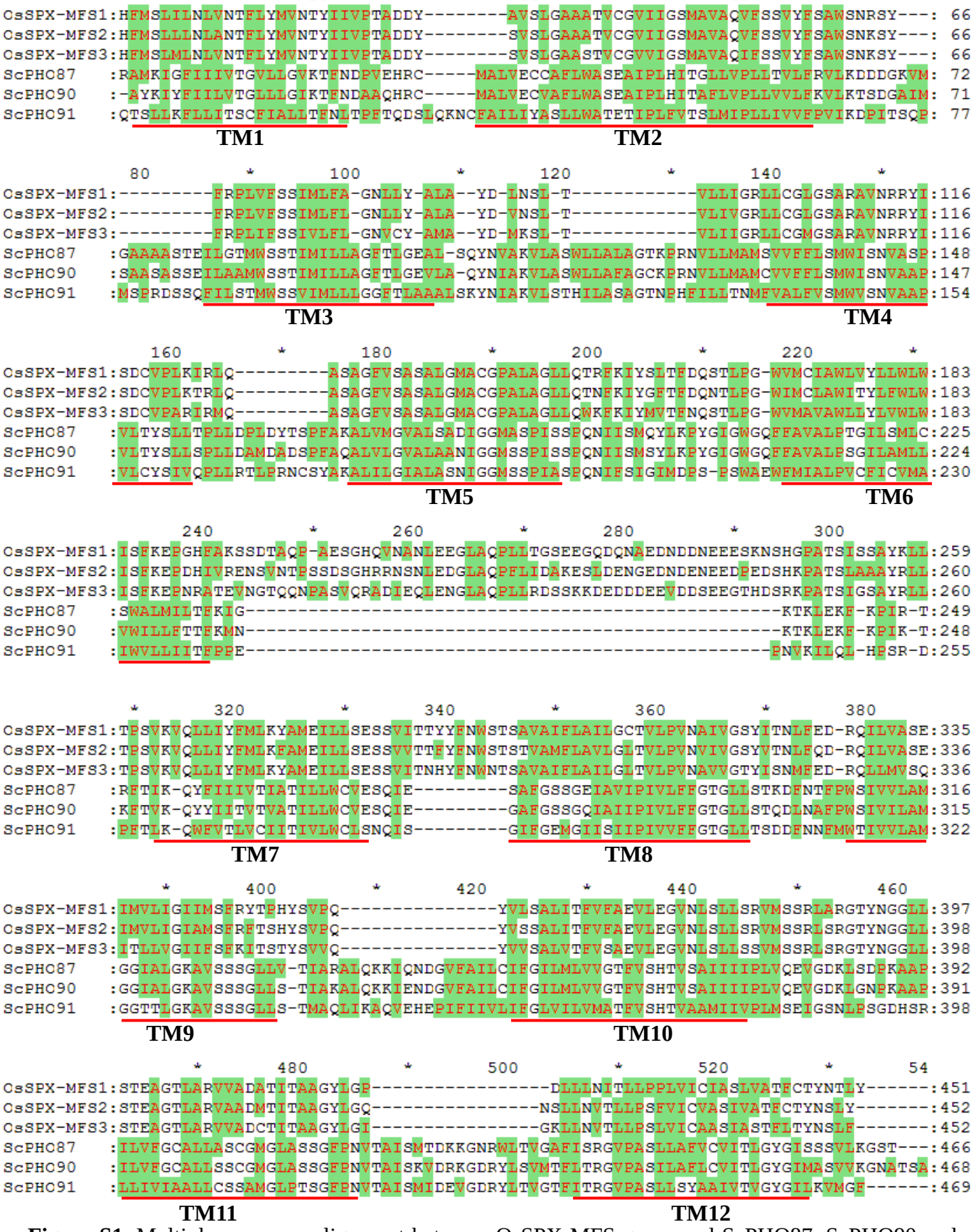

Figure S1. Multiple sequence alignment between OsSPX-MFS genes and ScPHO87, ScPHO90 and ScPHO91. The hydrophobic amino acids were marked red. The conserve transmembrane domain were indicated by red lines.

Figure S2

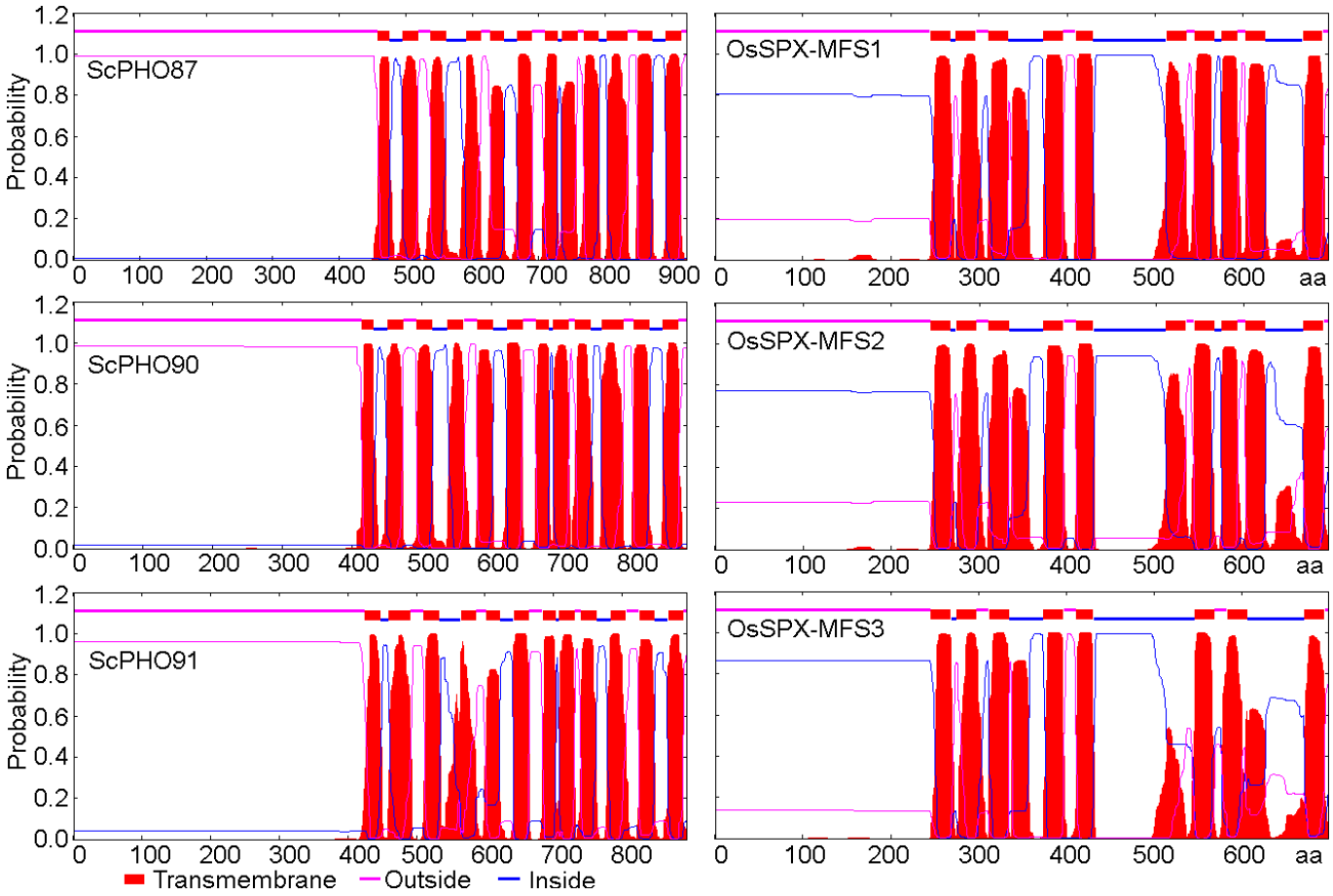

Figure S2. Prediction of transmembrane helices of OsSPX-MFS, ScPHO87, ScPHO90 and ScPHO91 proteins by TMHMM (http://www.cbs.dtu.dk/services/TMHMM/).

Figure S3

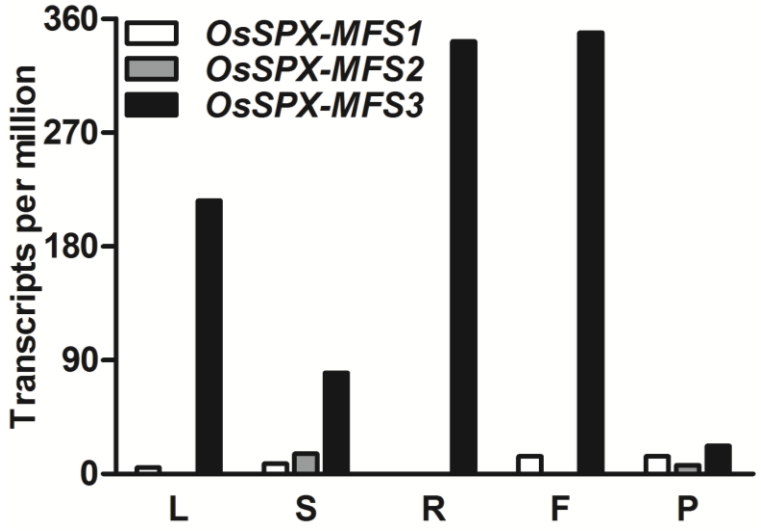

Figure S3. Digital expression analysis of *OsSPX-MFS1*, *OsSPX-MFS2* and *OsSPX-MFS3* in different tissues in rice. L, leaf; S, shoot; R, root; F, flower; P, panicle. Digital expression was performed using the rice dbEST database. Frequencies of the ESTs in the corresponding library were calculated to represent the gene expression level.

Figure S4

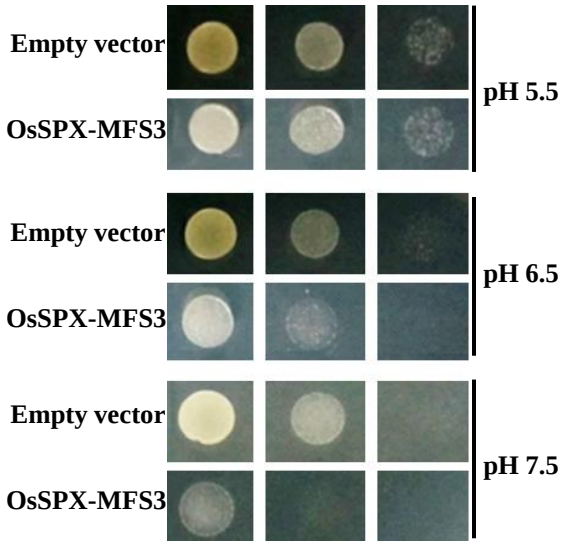

Figure S4. Complementation of yeast high affinity inorganic phosphate transporter mutant PAM2 (Δ*pho84*Δ*pho89*) by OsSPX-MFS3 genes at different pH conditions. Yeast PAM2 cells harboring either an empty expression vector (control) or OsSPX-MFS3 cDNA construct were grown in SD medium containing 0.22 mM Pi at pH 4.5 to an OD600 = 1. Equal volumes of 10-fold serial dilutions were applied to medium containing 1 mM Pi and then incubated at 30℃ for 4 days.

Figure S5

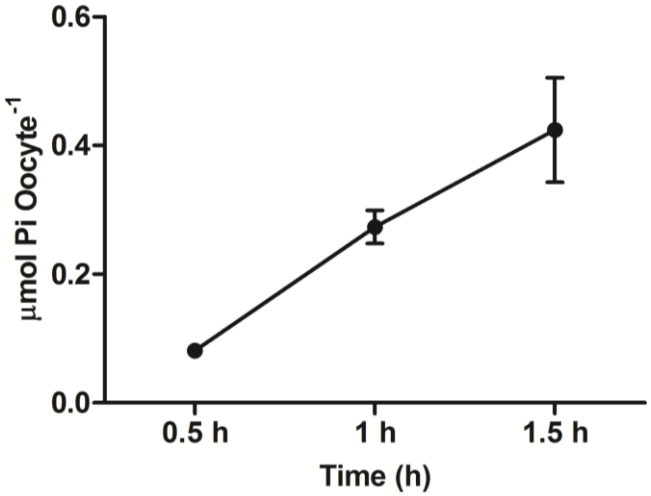

Figure S5. Time course of phosphate influx activity of OsSPX-MFS3. Oocytes were incubated for 48 h in BS (without phosphate) and then transferred into BS solution containing 5 mM Pi for 1 hour containing ^{33}P (5 mCi/ml). The radioactivity response to increasing concentrations of externally applied Pi was recorded at pH 5.5. Mean ± SEM (n = 8 oocytes) are shown.

Figure S6

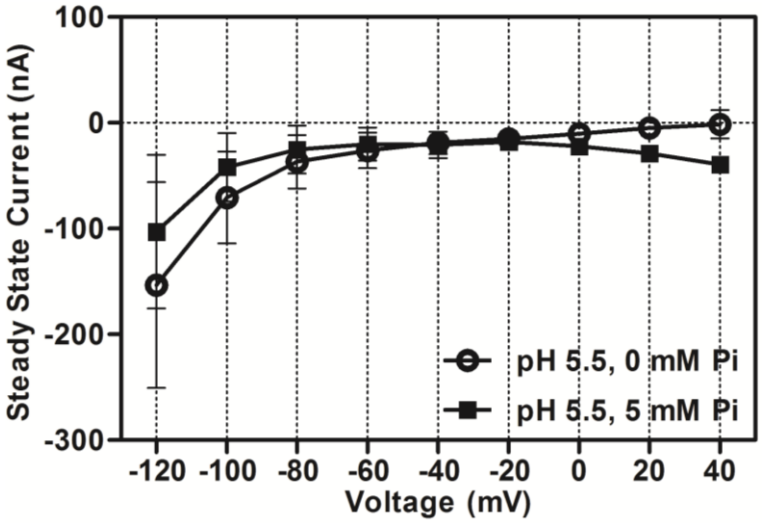

Figure S6 Voltage clamp of OsSPX-MFS3 injected oocyte under 0 Pi and 5 mM Pi solution.