

Figure S1. Comparative metabolomic analyses of *R. toruloides* samples prepared under Pi-limited (P0) and Pi-replete (F3) conditions. **a** Total ion chromatogram of quality control (QC) sample (positive). **b** Total ion chromatogram of QC sample (negative). **c** Changes of some cellular nucleoside derivatives and bases.

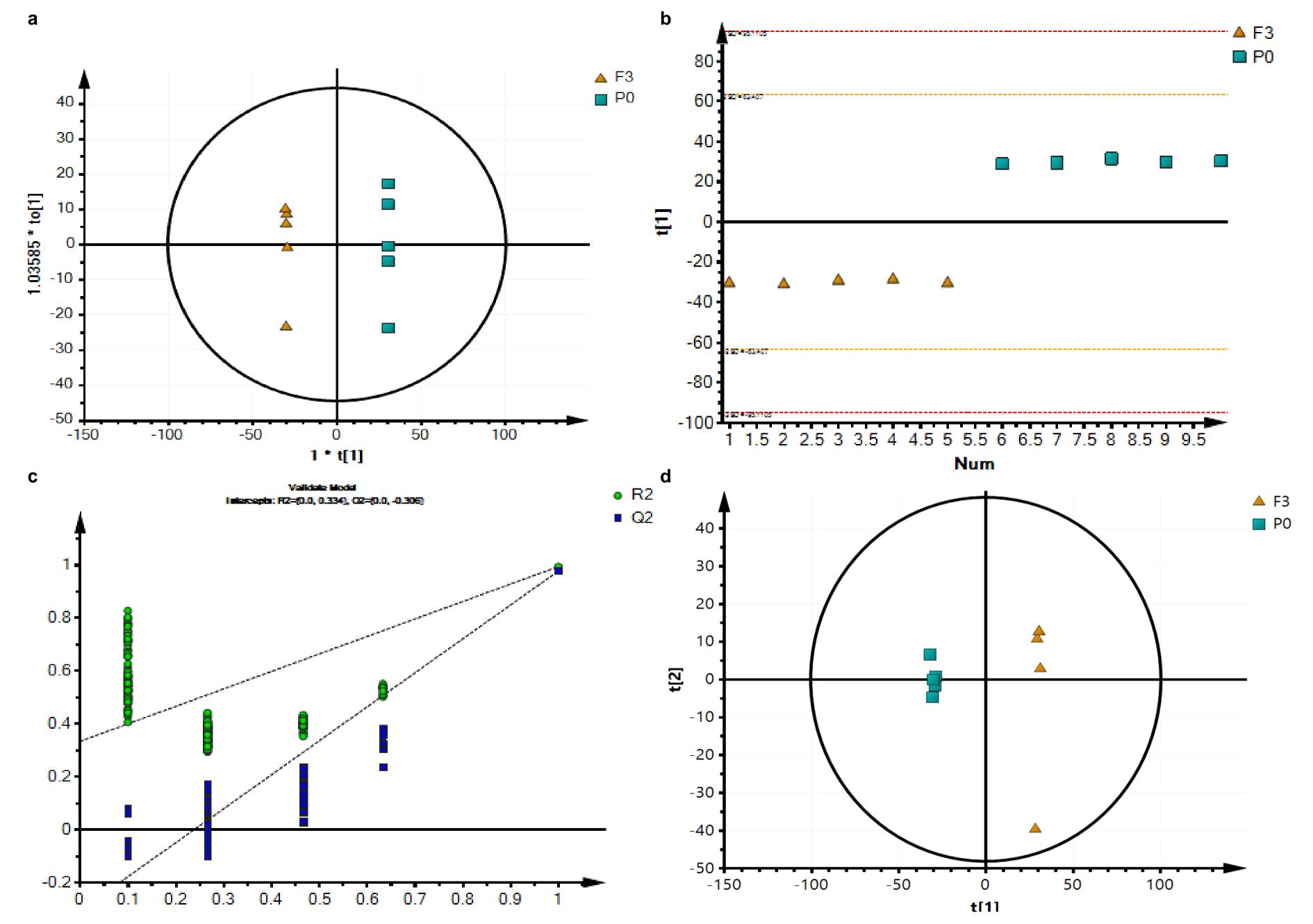


Figure S2. Metabolomic analysis of *R. toruloides* during phosphate limitation. **a** The score plot of PCA in P0 vs F3 (positive). **b** The score plot of PLS-DA in P0 vs F3 (positive). **c** The sorting plot of PLS-DA in P0 vs F3 (positive). **d** The score plot of OPLS-DA in P0 vs F3 (positive).

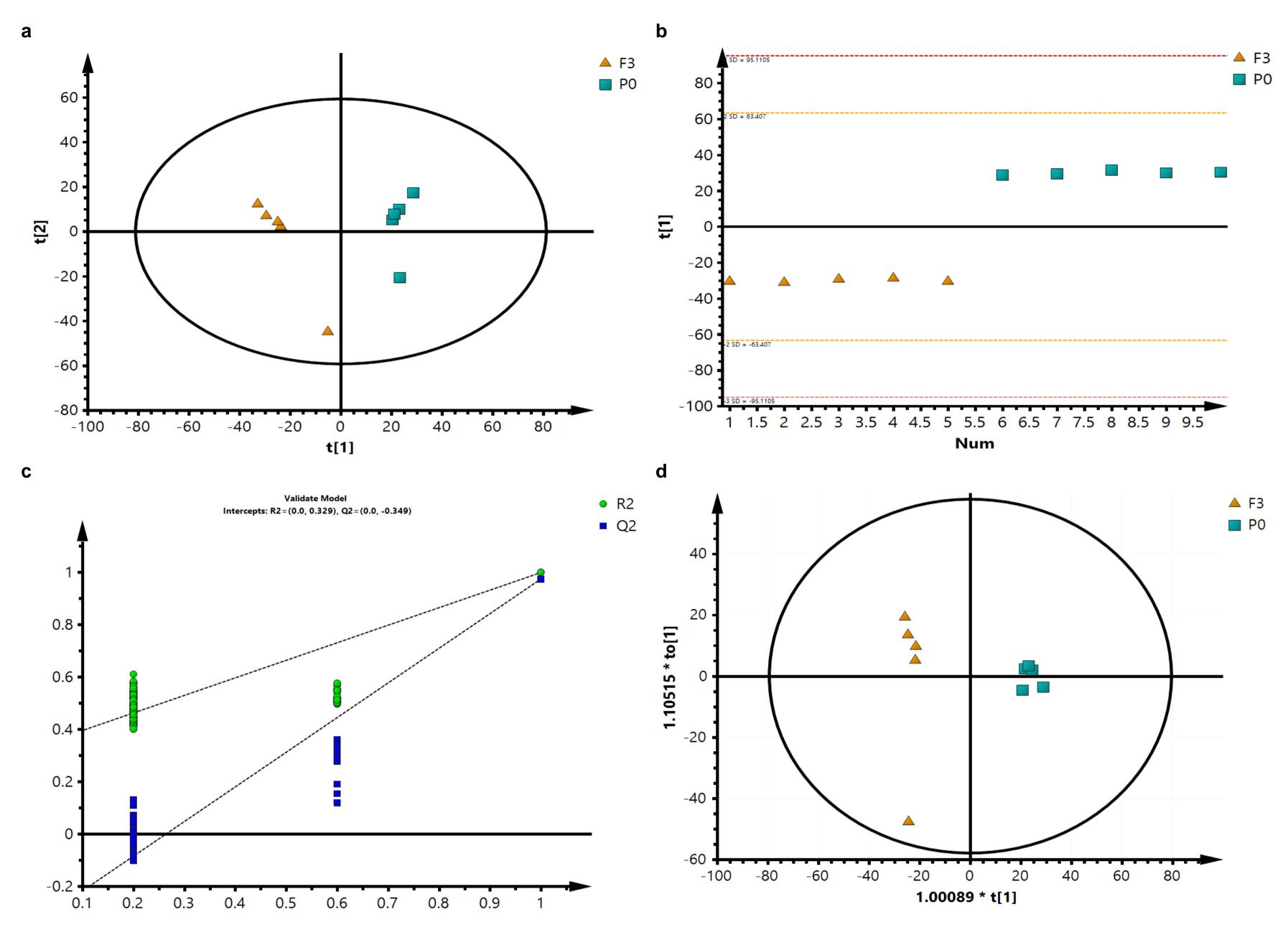


Figure S3. Metabolomic analysis of *R. toruloides* during phosphate limitation. **a** The score plot of PCA in P0 vs F3 (negative). **b** The score plot of PLS-DA in P0 vs F3 (negative). **c** The sorting plot of PLS-DA in P0 vs F3 (negative). **d** The score plot of OPLS-DA in P0 vs F3 (negative).