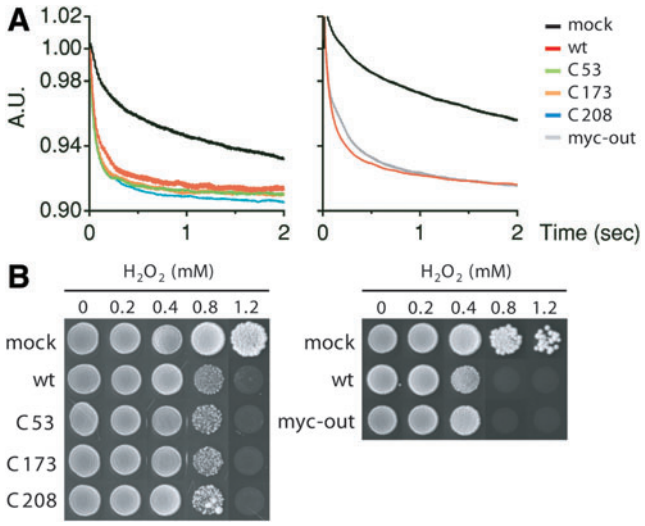

SUPPLEMENTARY FIG. S3. Transport and survival of yeast expressing different human AQP8 mutants. (A) Water transport assays in yeasts by stopped-flow spectroscopy after a hypotonic shock. Spheroplasts from BY4741wt yeast cells, transformed with the mock vector pYeDP60u or pYeDP60u containing the indicated hAQP8 versions, were suspended in a 1.8 *M* sorbitol buffer at an A600 of 1.5 and mixed in a fast kinetics instrument (SFM3000; Bio-Logic) with a hypotonic 1.2 *M* sorbitol buffer of equal volume. Scattered 450 nm light intensity was measured at 90° and with a photomultiplier connected to the PMS 250 control unit. Each line represents the average of 8–19 (*left panel*) or 42 (*right panel*) sample recordings, respectively. The averaging was automatically calculated by the Stopped-Flow Bio-Logic Software Bio-Kine32. Data points are shown every 500 μs for 2 s. A representative experiment of three (*left panel*) or two (*right panel*) independent biological replications is displayed. **(B)**. Yeast growth and survival assay on synthetic medium supplied with different concentrations of H_2O_2. BY4741wt yeast cells, transformed with the mock vector pYeDP60u or pYeDP60u containing the indicated hAQP8 versions, were spotted at an A600 of 2 on medium containing indicated concentrations of H_2O_2. Growth was recorded after 5–8 days at 30°C. All growth assays were replicated with consistent results in three independent experiments.