



Figure S6. Colony size variation in epistasis-profile data. Cumulative distribution of the coefficients of variation (CV) of colony sizes in three technical replicates from raw (left) or filtered data (right). The distribution of CV between the double mutants from knockouts (*ilv1Δ xxxΔ* and *ilv1Δ(bis) xxxΔ*) and catalytic-mutant (*ilv1^{K109A} xxxΔ*) strain collections were similar between each other before and after filtering the data; no bias in S-scores is expected from the variance in different epistasis profiles.