

*arg2* vs. *arg7* – Courtesy of Lib Harris

When they are behaving correctly, neither allele is leaky. However, *arg7* picks up second site suppressors frequently whereas *arg2* is normally stable.

The way to distinguish them is based on the fact that you can get intragenic complementation between these two alleles in diploids.

Take each product that you want to test, and set up crosses to a known *arg2* and a known *arg7*. Plate a diluted suspension of each mating mixture on minimal medium. Aim for about 200 to 500 cells per plate.

After 4 days, look at them under a dissecting scope. On the plates that complement, you'll see diploid colonies starting to grow - bright green, hemispherical mounds of healthy looking cells, on a background of the non-growing *arg*-requiring strains.