

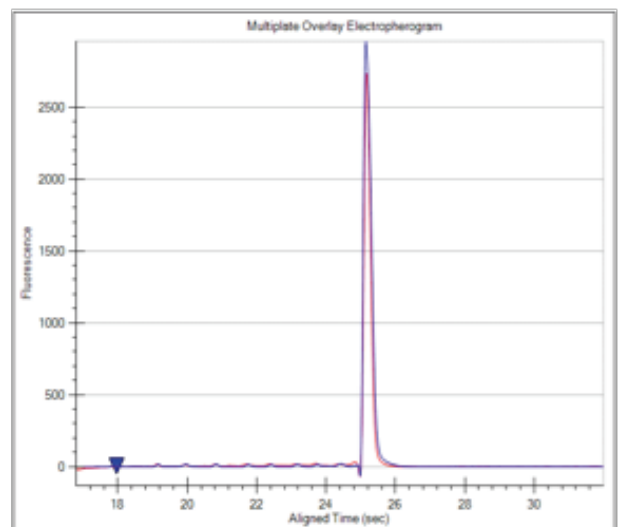
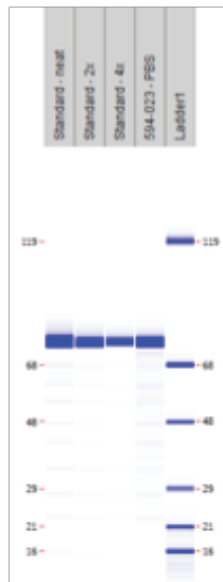
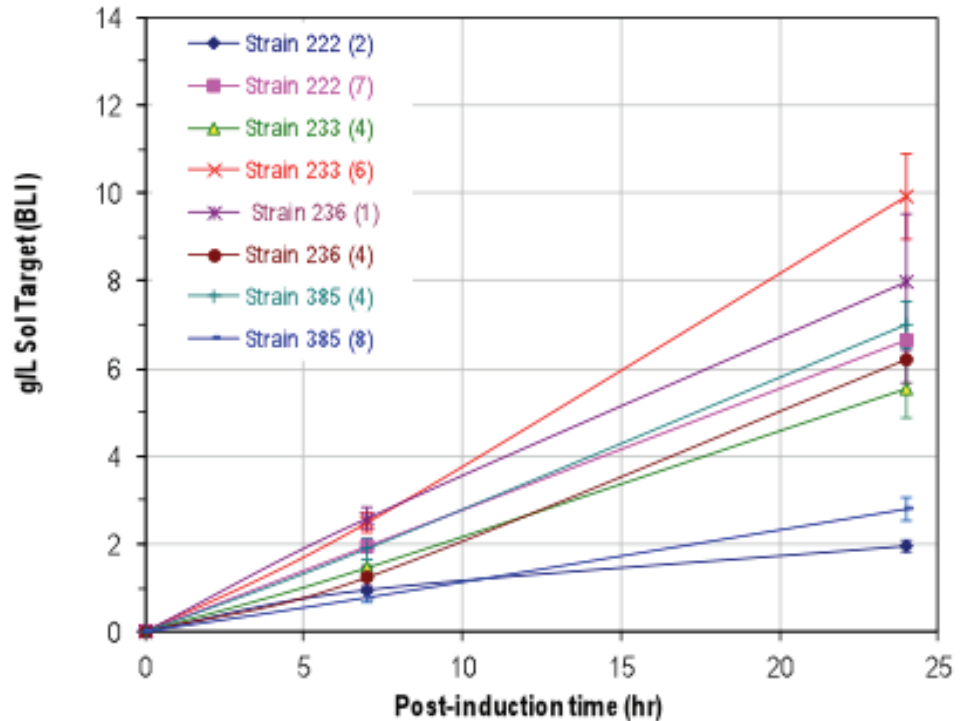
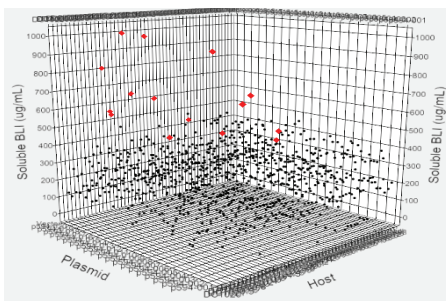
EXPRESSION OF UNIQUE SCAFFOLDS IN P. FLUORESCENS: TANDEM REPEAT PROTEIN EXPRESSION

A complex, repetitive protein with 6 disulfide bonds was screened in 1,000 unique expression strains at the 0.5mL scale. Soluble target protein expression was assessed by active binding to partner protein using biolayer interferometry. Up to 1 g/L of soluble target protein was produced in a subset of strains.

Five strains were advance for screening in high cell density fermentation under several conditions. Results from the top production strain + fermentation condition combinations show a range of 2-10 g/L of soluble and active protein.

A single production strain was then selected and scaled for further process development along with production of 30 grams of GLP product for formulation development and toxicology testing.

Strain Screening:Titer up to 1g/L achieved



Blue: Standard(97%purity); Red: 594-023: (95%purity)