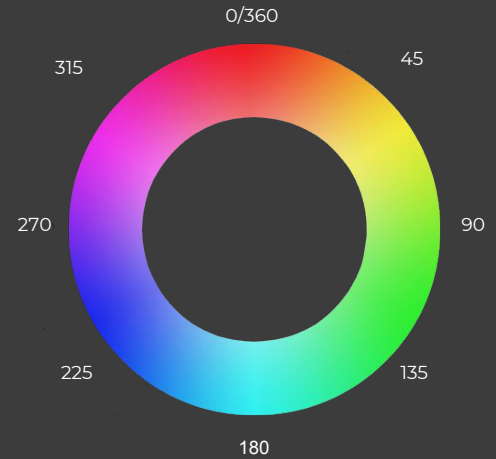
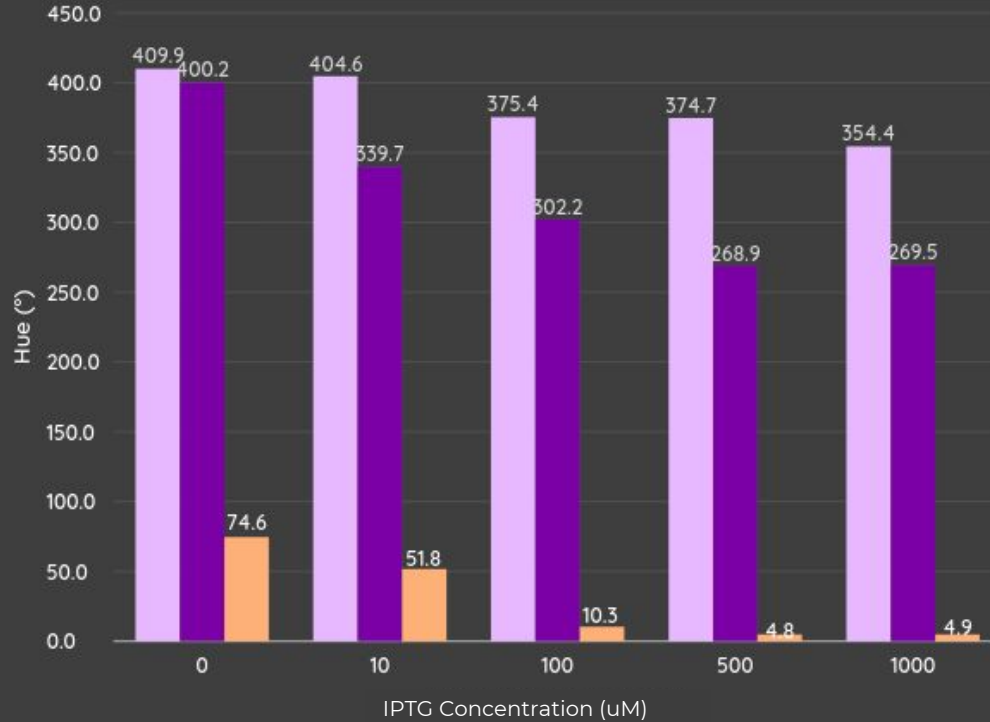


# PROOF OF CONCEPT DATA

## Effects of IPTG Concentration on Hue



### Hue Values

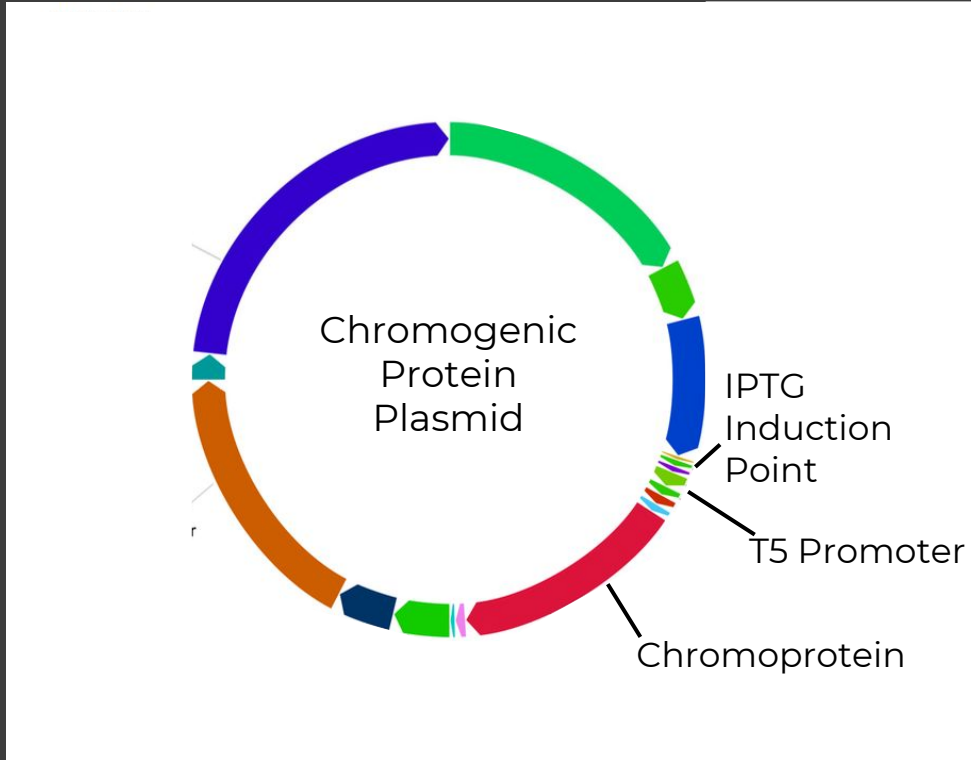
Key:

- Virginia Violet
- tsPurple
- Scrooge Orange

There is an inverse correlation between hue and IPTG Concentration



# ATUM PROTEIN PAINTBOX CONSTRUCT

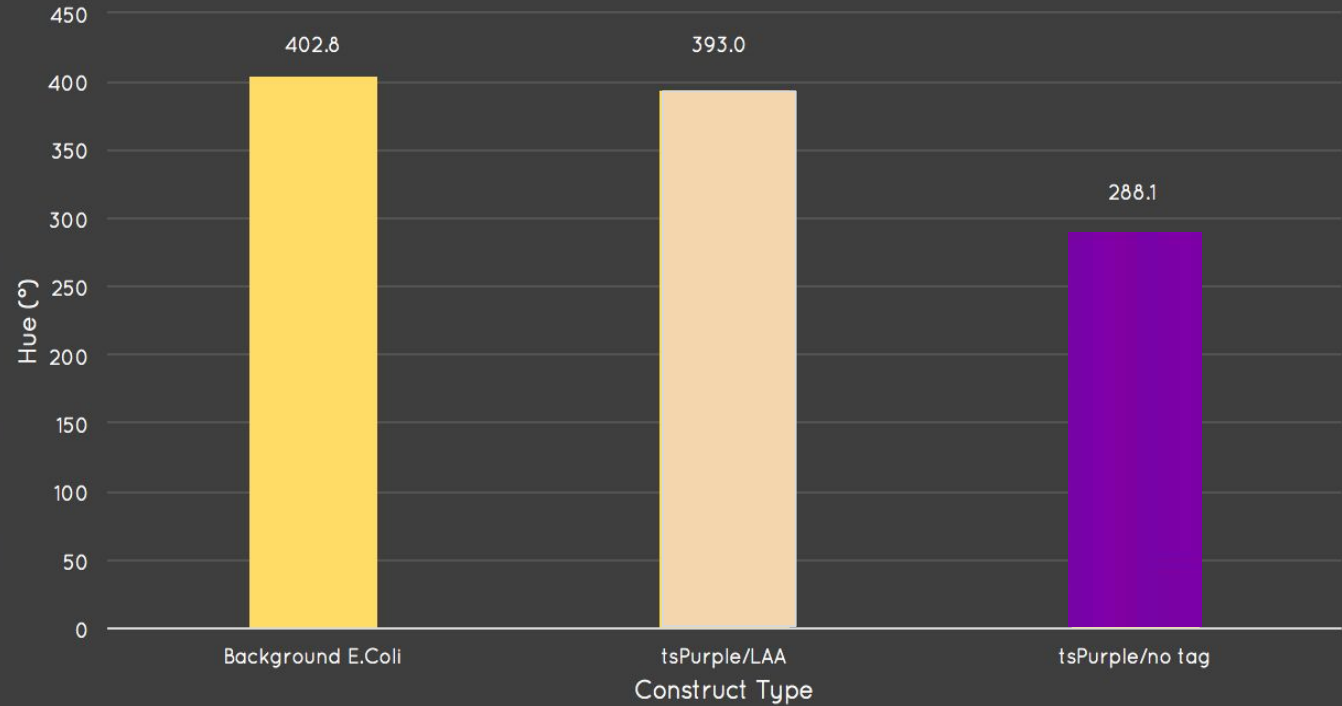


- Chromoprotein gene regulated by T5-lac promoter which is inducible by IPTG
- Expression of chromoprotein regulated by Lac Operator
- Increasing IPTG correlates with increasing expression of chromogenic protein.



# CLiP'd DATA

Effect of Levels of Protein Degradation on Hue



- Successful degradation of tsPurple LAA by ClpXP
- Increase in color correlates with decrease in hue, confirmed in proof of concept

