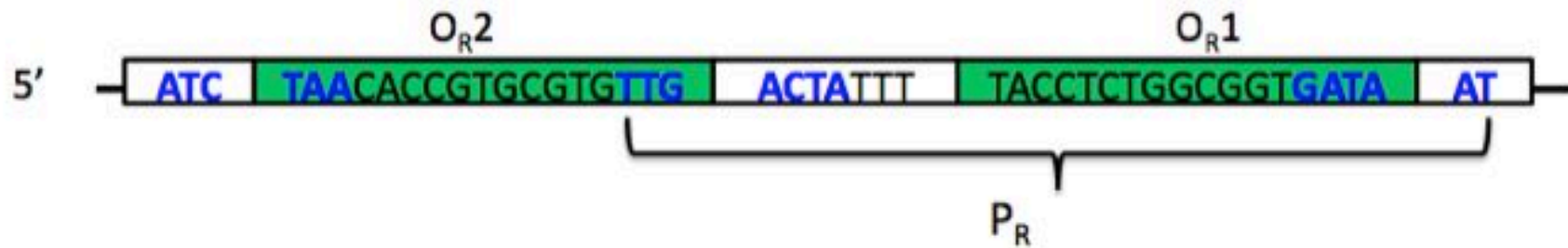


- Announcements → an “in-time” module
- Lab Quiz
- Pre-lab Lecture
 - ❖ Lambda promoter(s)
 - ❖ Miller assay
 - ❖ Today in Lab: M2D2

Lambda promoter(s)

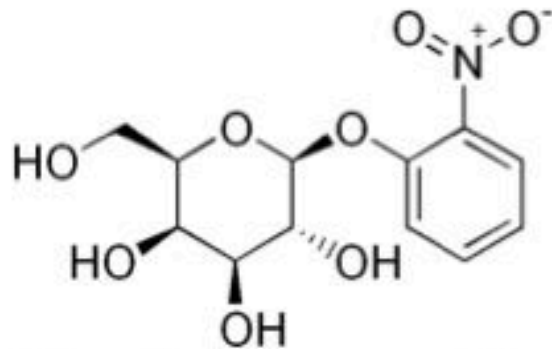


Consider: What happens to promoter strength when we combine with *lux* promoter? What elements impact strength?

Bonus reading: Mutations exist that affect operator strength.

β -gal assay: background

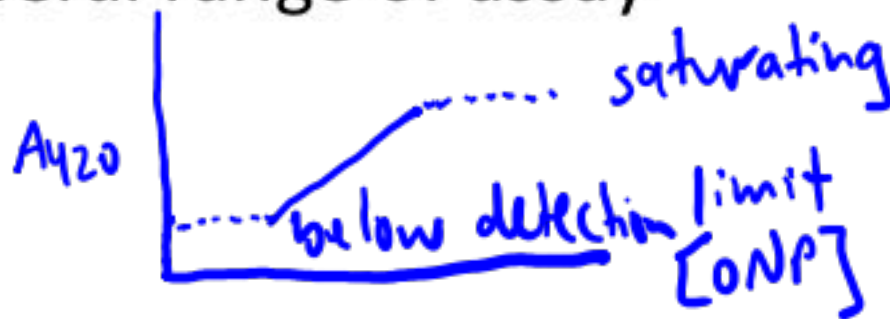
- β -gal is protein encoded by *lacZ*
- ONPG is used to detect β -gal. How?



galactose
ONP \rightarrow yellow (A₄₂₀)

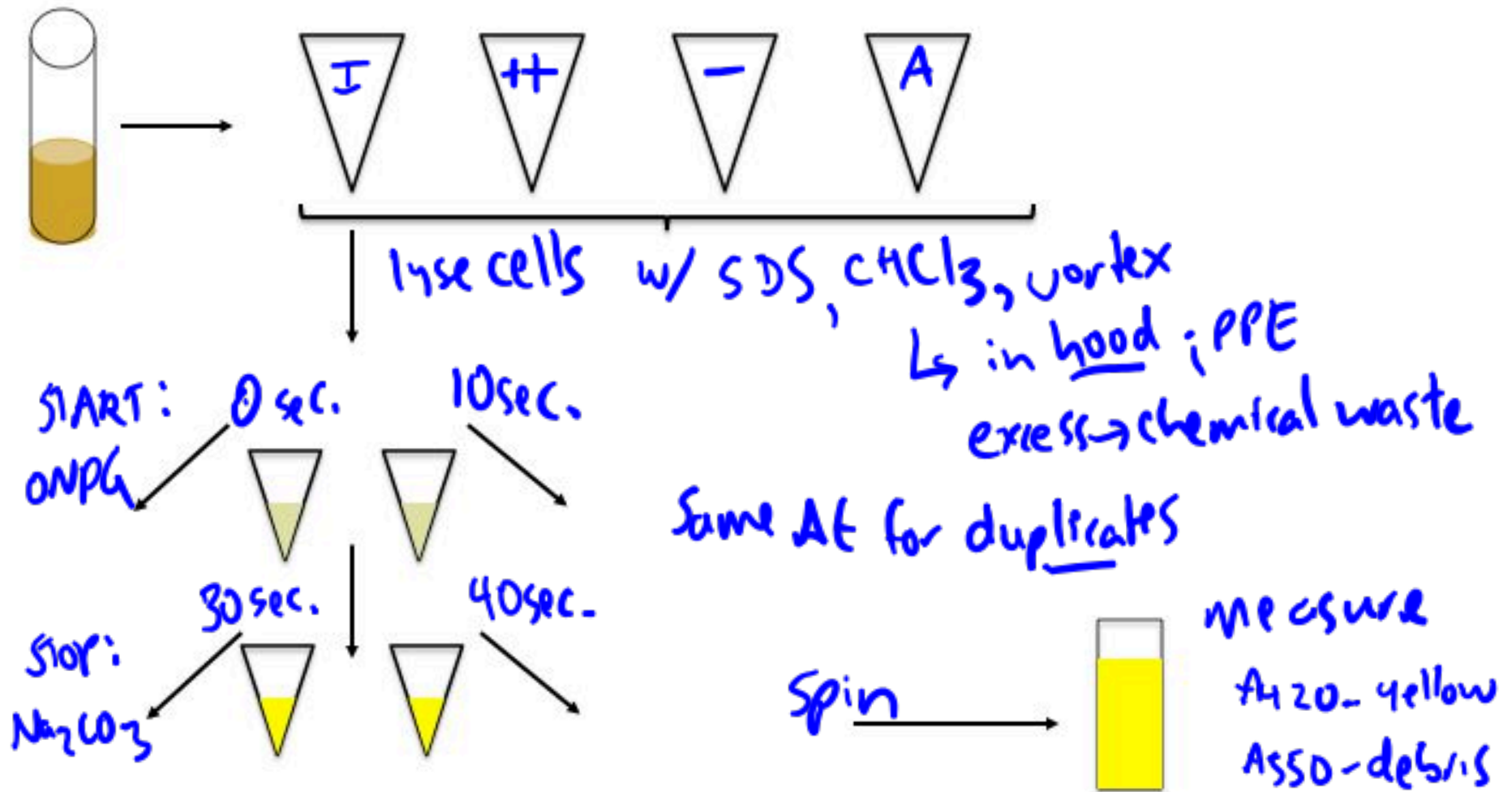
Wikimedia Commons, public domain image

- Useful range of assay



β -gal practice assay: workflow

dilute 1:10 in ϵ



Today in Lab (M2D2)

- *First*, design a modification to $P_{\text{lux-lambda}}$
 - Must finish oligos primer design by 2:45 (ideally 2:30)!
 - Continue with wet lab work only after that is done
- β -gal assay for IPTG-based system truth table
 - calculations and figure FNT
- Briefly look at edge detection plates