ONPG test
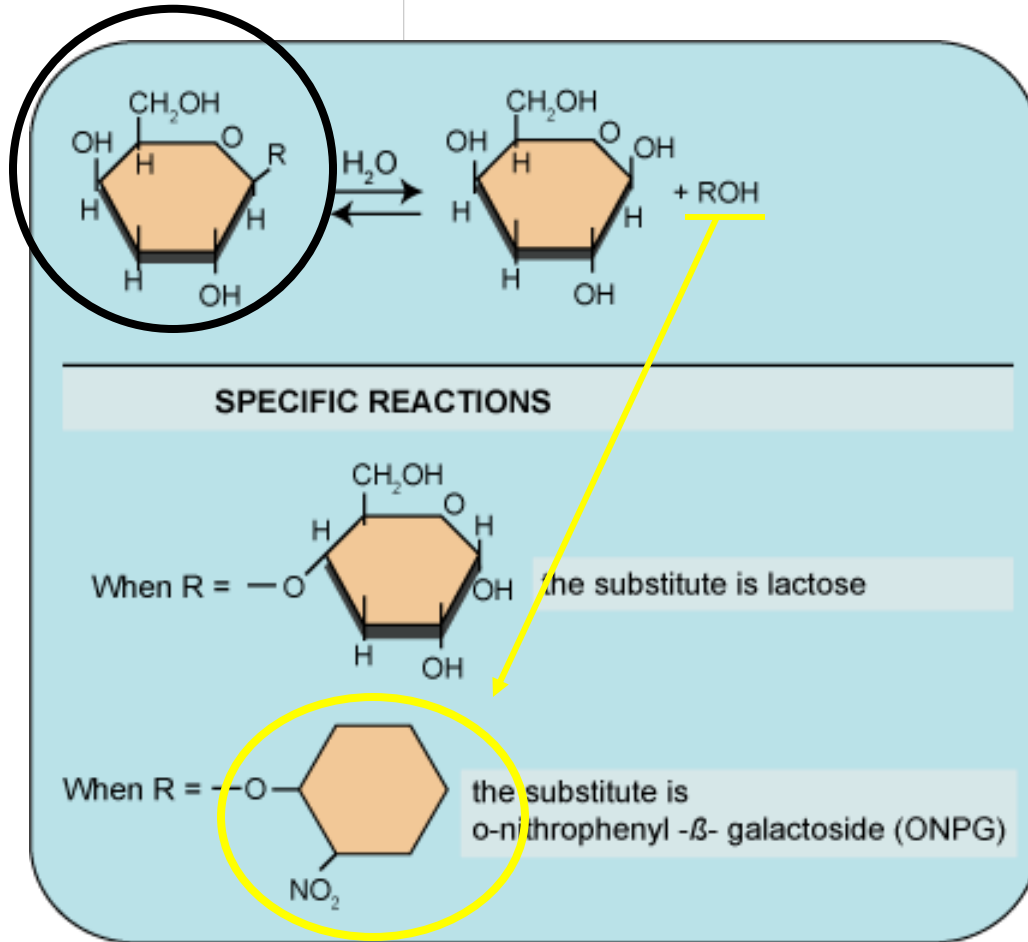

ONPG at 40 mg/mL
In buffered solution

ONPG test

- **Z buffer**, (Optimal for activity but it works with other ones) per 50 mL:
  - O.80g $Na_2HPO_4.7H_2O$ (0.06M)
  - 0.28g $NaH_2PO_4.H_2O$ (0.04M)
  - 0.5 mL 1M KCl (0.01M)
  - 0.05 mL 1M $MgSO_4$ (0.001M)
  - 0.135 mL β -mercaptoethanol (BME) (0.05M)
  - bring to approximately 40 mL with H_2O, dissolve all the salts
  - adjust the pH to 7.0
  - use a graduated cylinder to bring the buffer to 50 mL
  - store at 4°C.

ONPG test

- Show the activity of β-galactosidase
  - Lactose inducible… after Kligler!
  - Optimal at 37°C : incubation not for bacterial growth
  - Depend on the quantity of enzyme : quantity of bacteria!
  - Do not depend on the presence of the lactose permease
    - A strain could be β-Gal (ONPG) positive and Lactose négative :-o