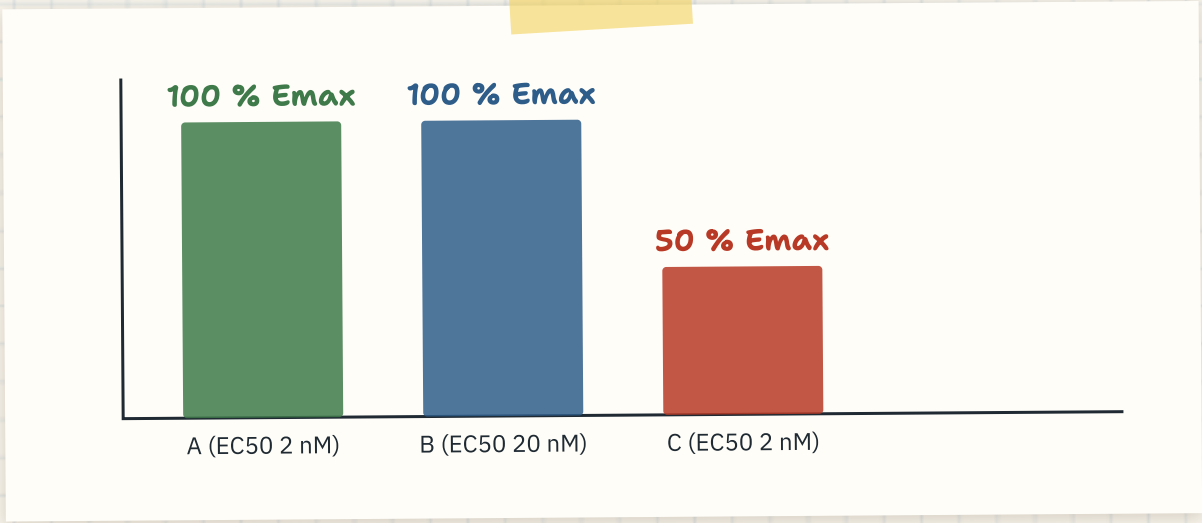
Potency vs efficacy

EC50, Emax and agonist types



Step by step

1. Plot log dose against effect (% of maximum)
2. Read EC50: potency, curve position
3. Read Emax: efficacy, curve height
4. Compare drugs on both, separately

Type	Response
Full agonist	Reaches the tissue maximum
Partial agonist	Plateaus below the maximum
Inverse agonist	Falls below baseline (constitutive activity)
Plain antagonist	Baseline left alone

Agonist types

Rule of thumb

Potency is where the curve sits, left to right

Efficacy is how high it reaches

Lower EC50 means higher potency

Exam traps

- ! Maximal response is efficacy, not potency.
- ! A higher EC50 means lower potency, not higher efficacy.
- ! Potency and efficacy are independent.

For exam study only, not medical advice. Follow local guidelines and your lab's ranges.
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