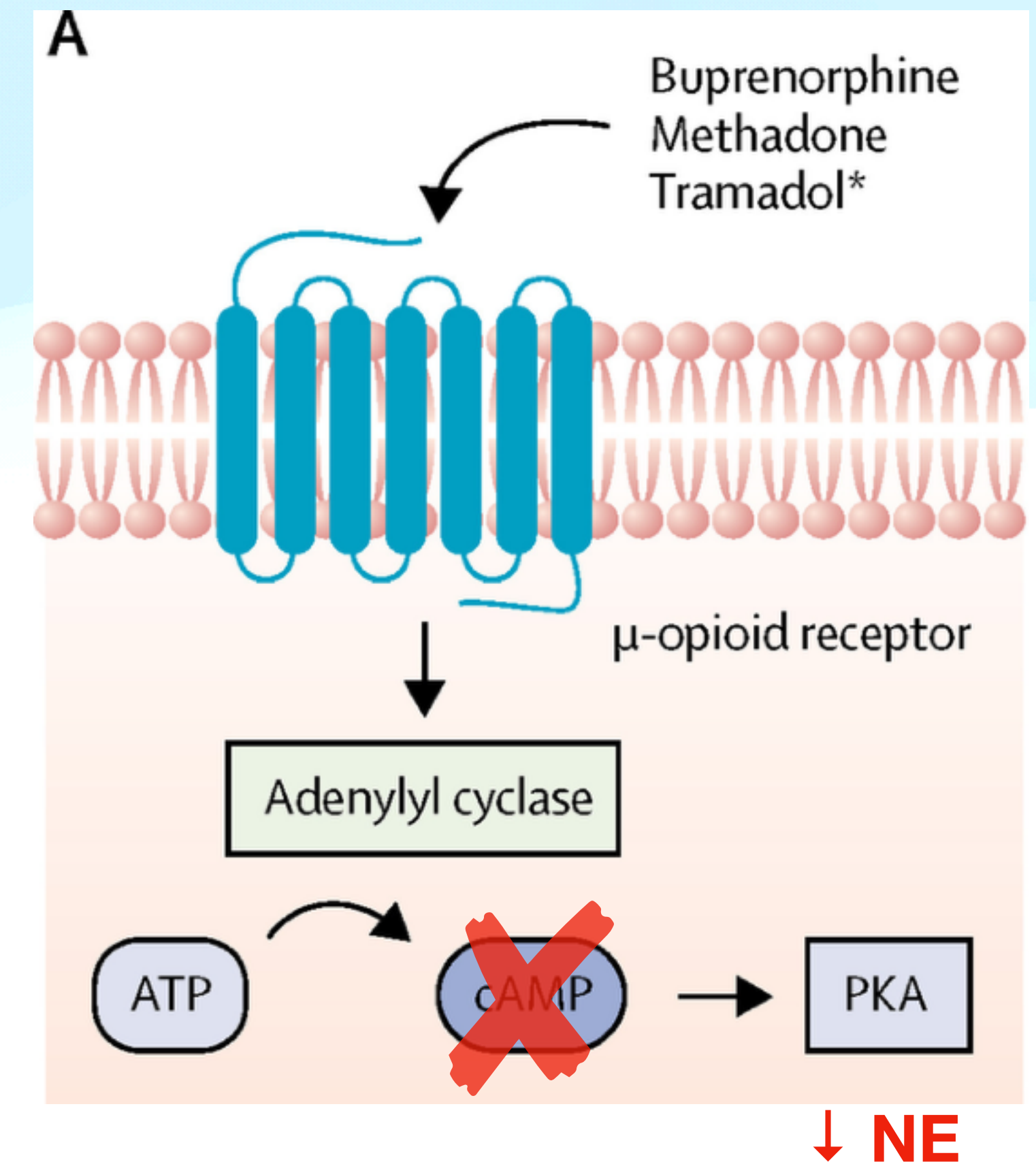


Mechanism of Opioid Withdrawal

Acute Use

Drug binds to the μ -opioid receptor in the locus coeruleus \rightarrow inhibits cAMP

- \downarrow NE
- \uparrow DA
- \downarrow vascular tone, muscle tone, respiration



Mechanism of Opioid Withdrawal

Repeated Use → Tolerance

Locus coeruleus neurons upregulate the cAMP pathway

- ↔ NE
- ↔ DA
- require baseline opioid levels to prevent withdrawal

