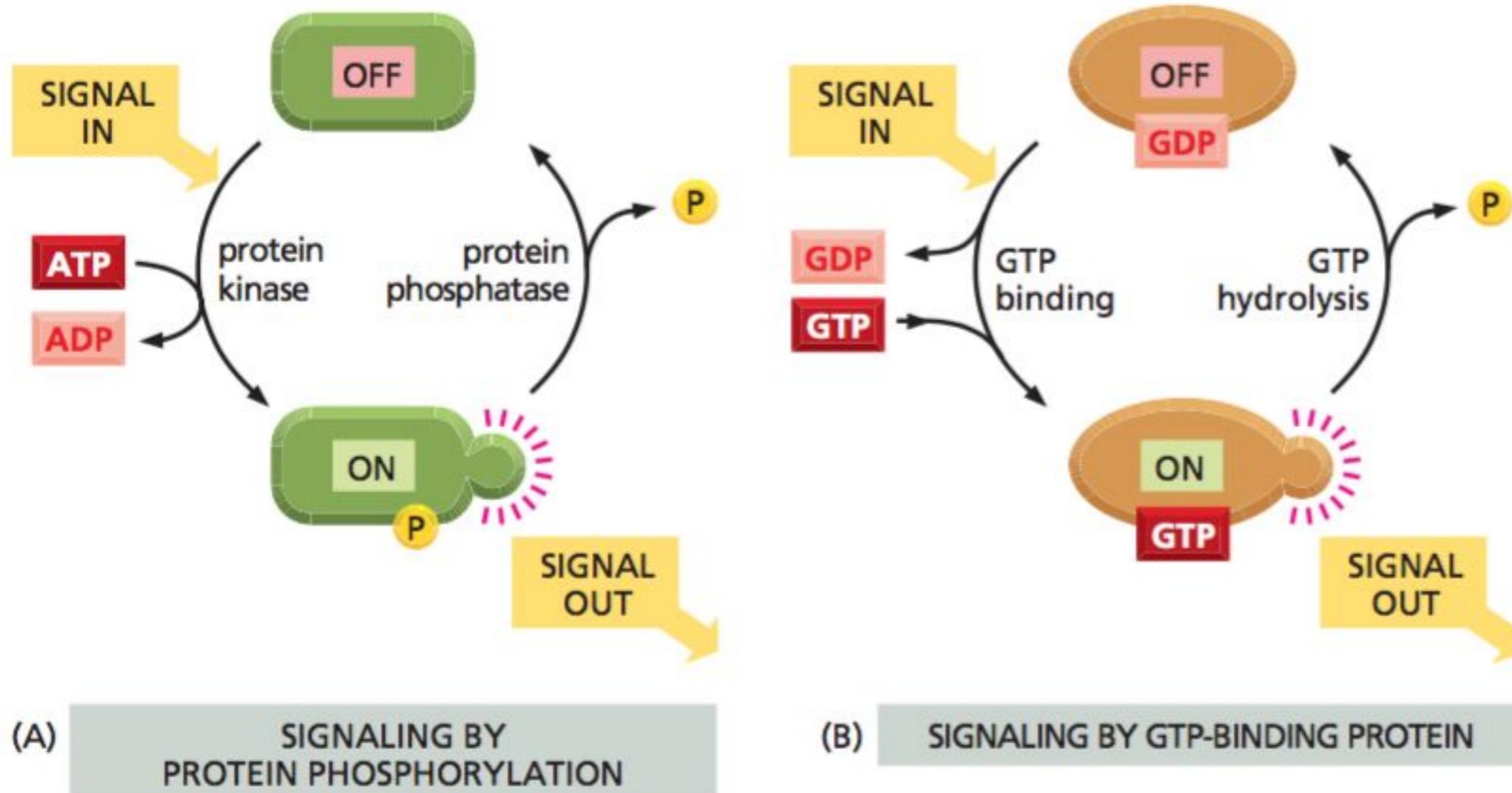


# Receptor signalling

## GPCR

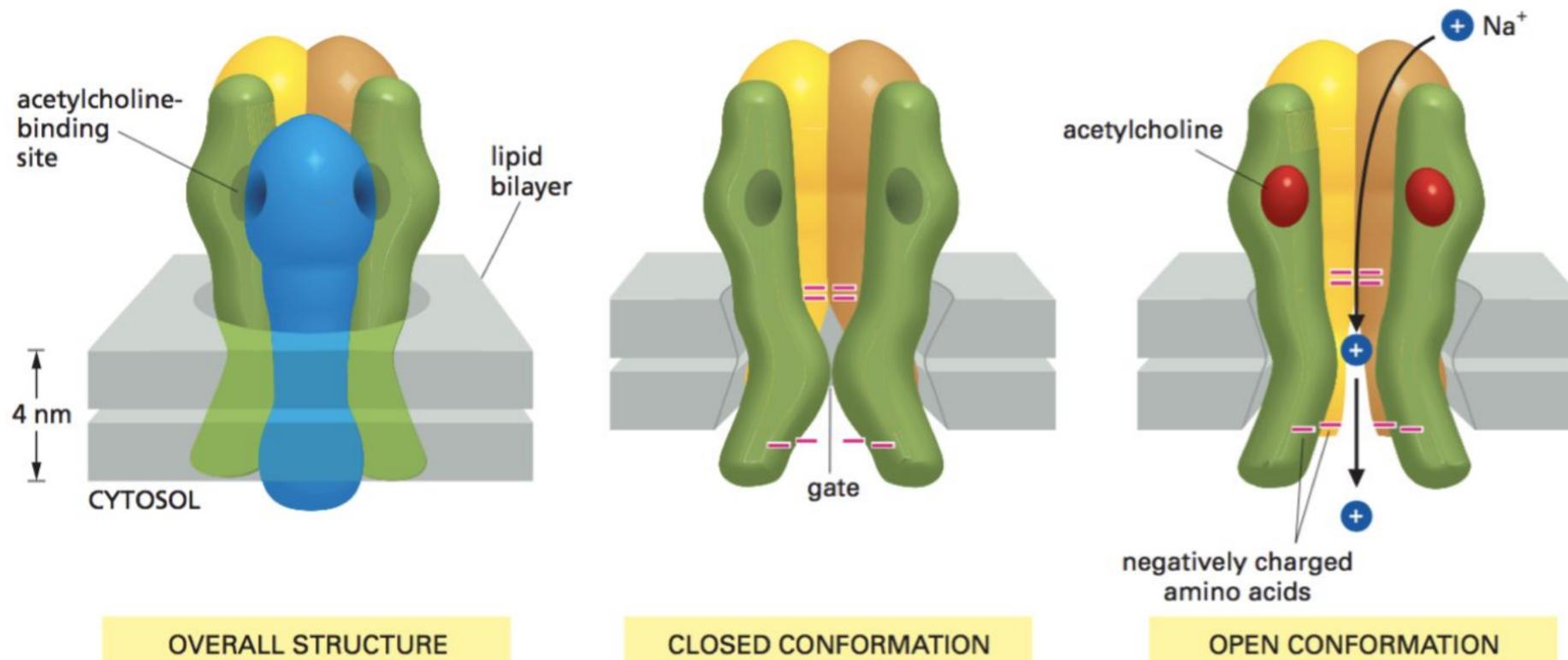
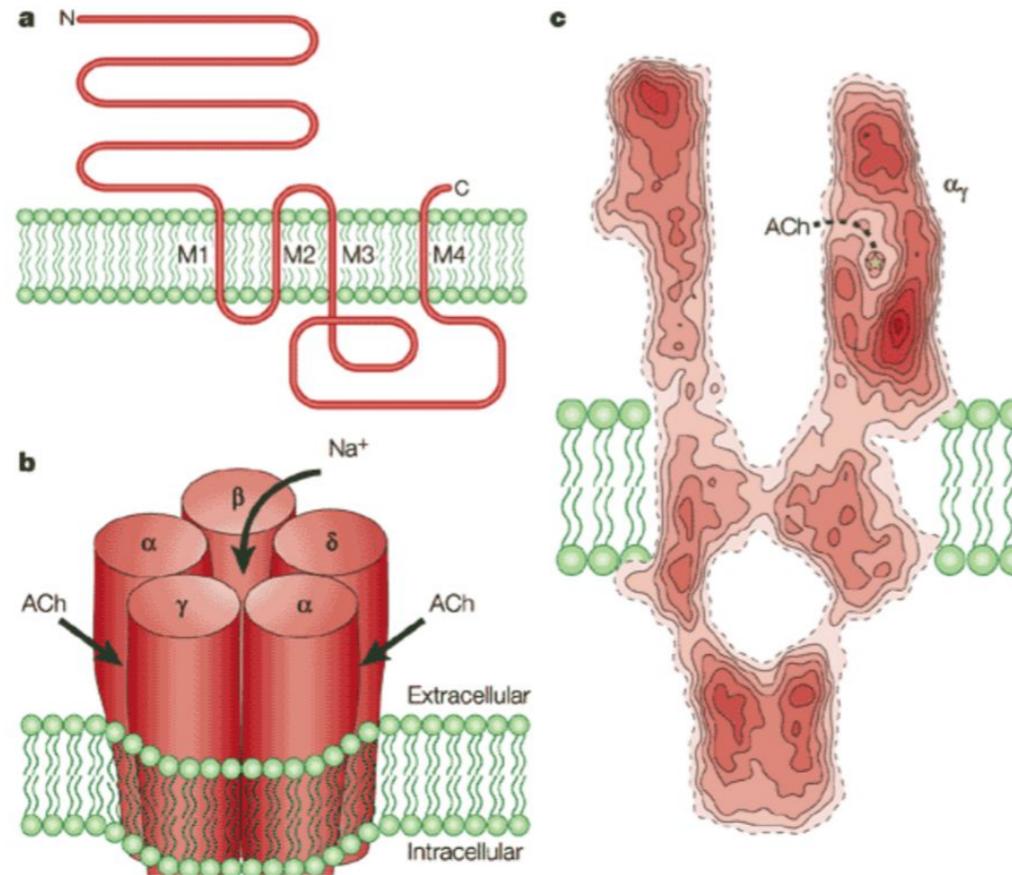
Fall into three classes:

- Ion-channel-coupled receptors (e.g. ACh receptors)
- G-protein-coupled receptors
- Enzyme-coupled receptors (e.g. Tyrosine kinases)



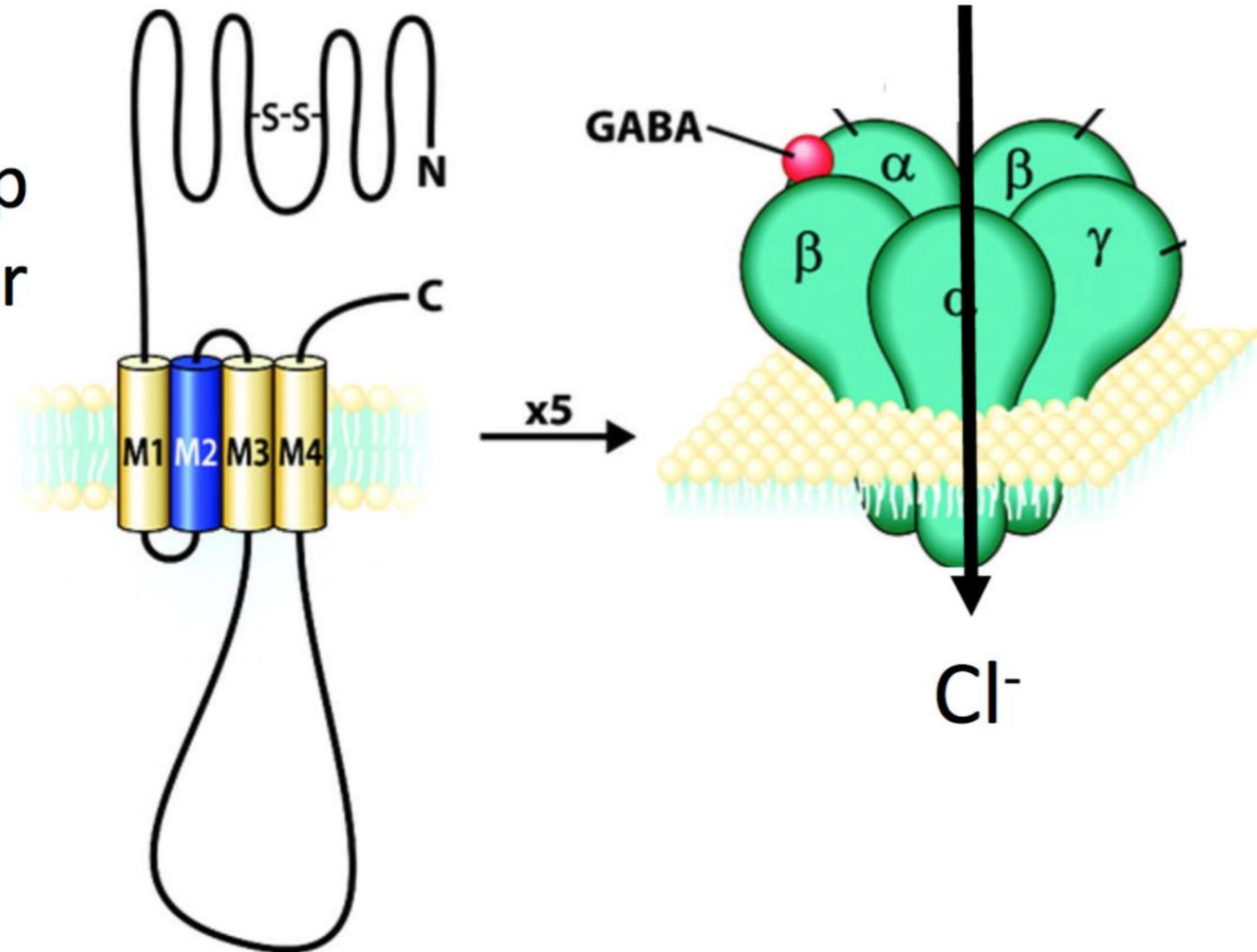
# Nicotinic *acetyl choline* receptors

Cys-loop  
receptor



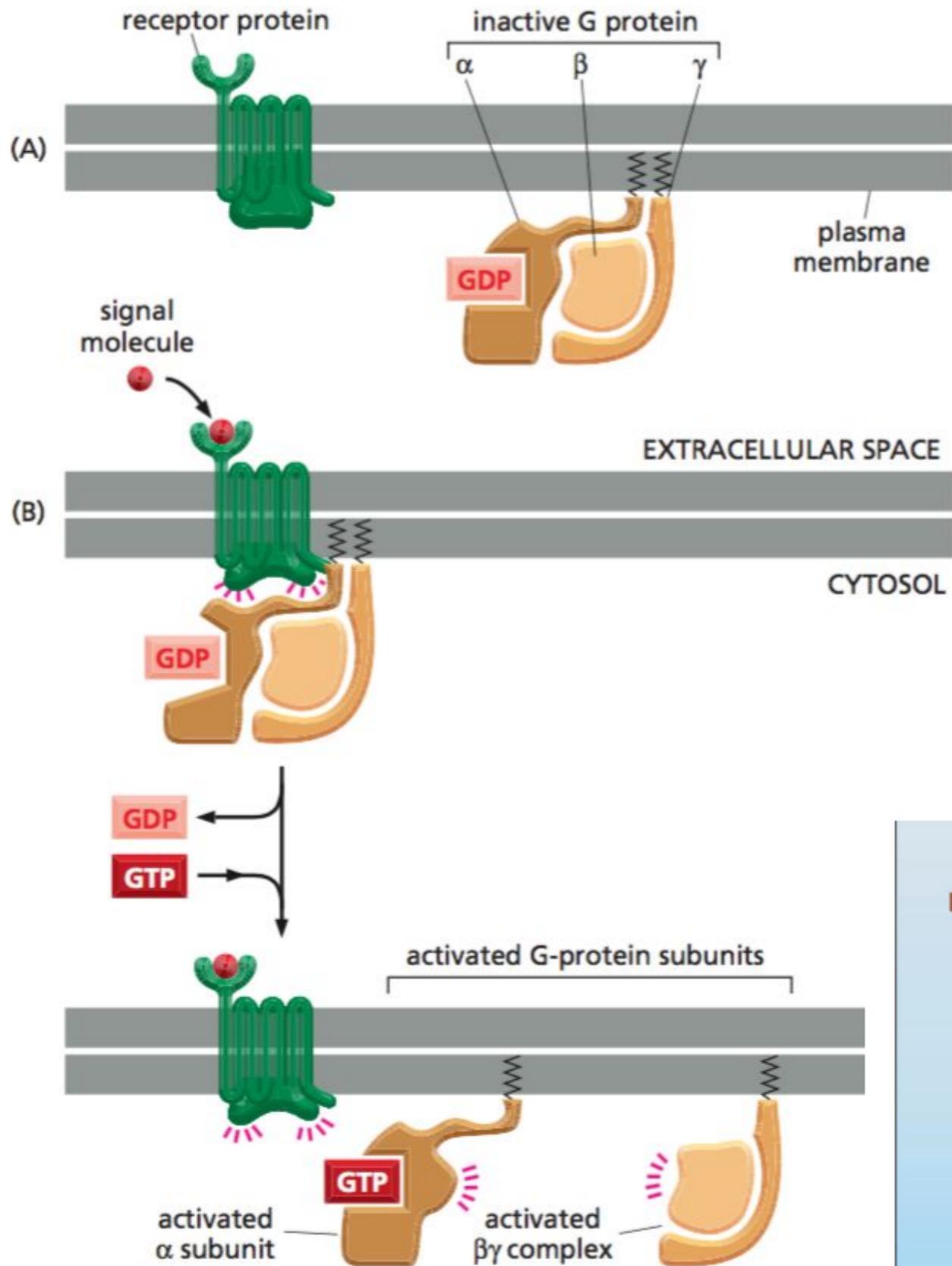
# $GABA_A$ receptors

Cys-loop receptor



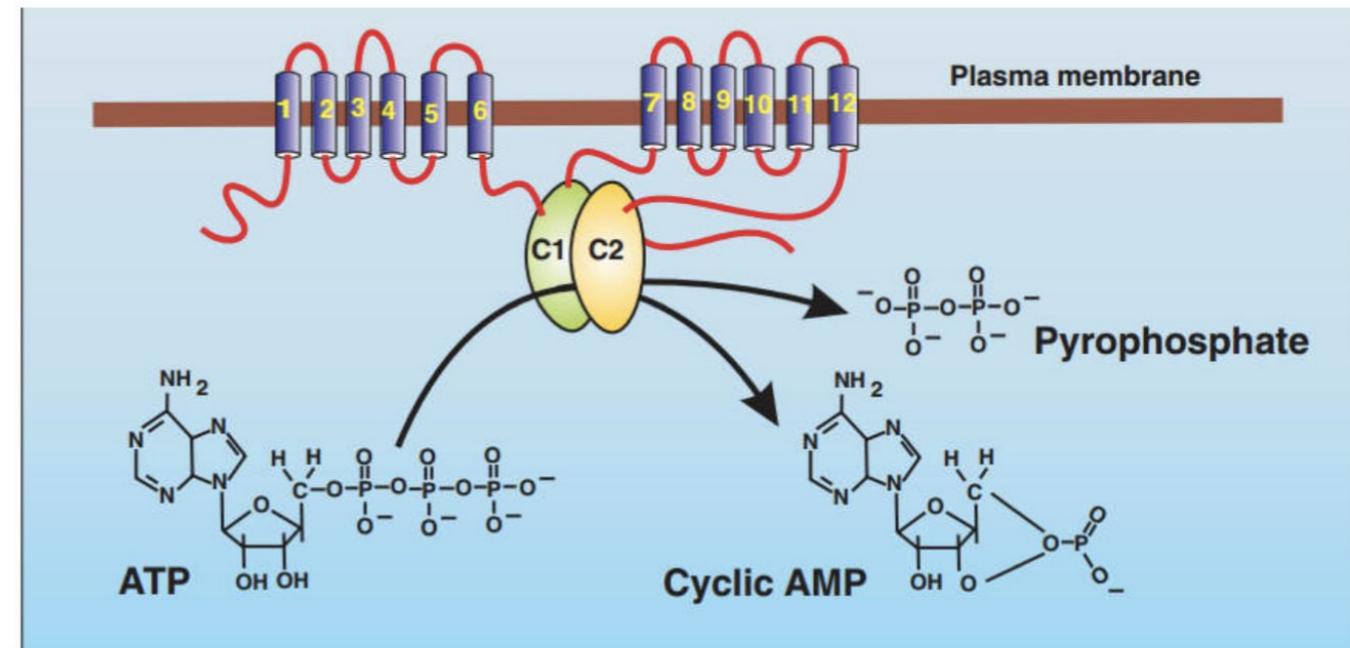
Found at *inhibitory* synapses

# GPCR

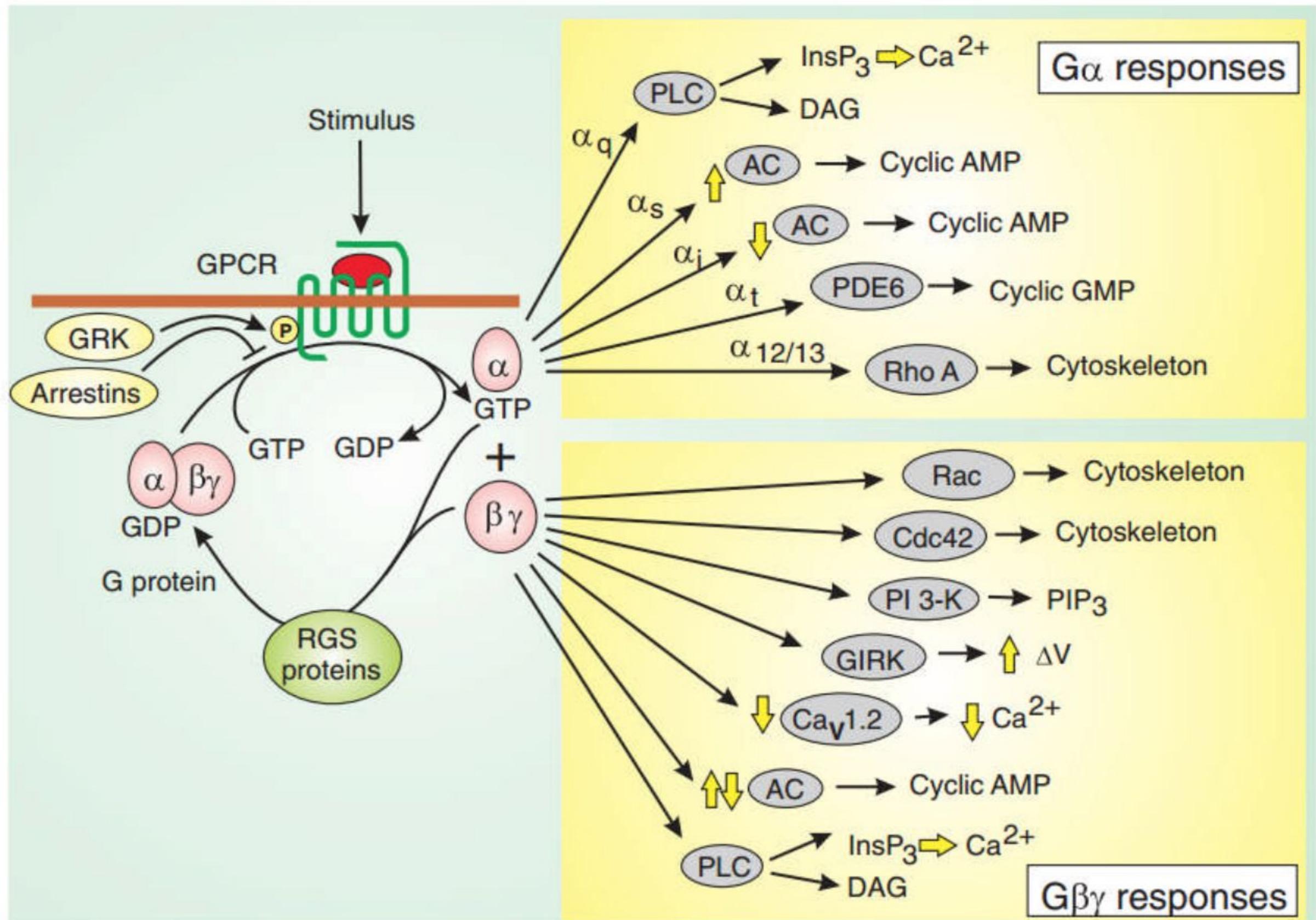


Can be activated by:

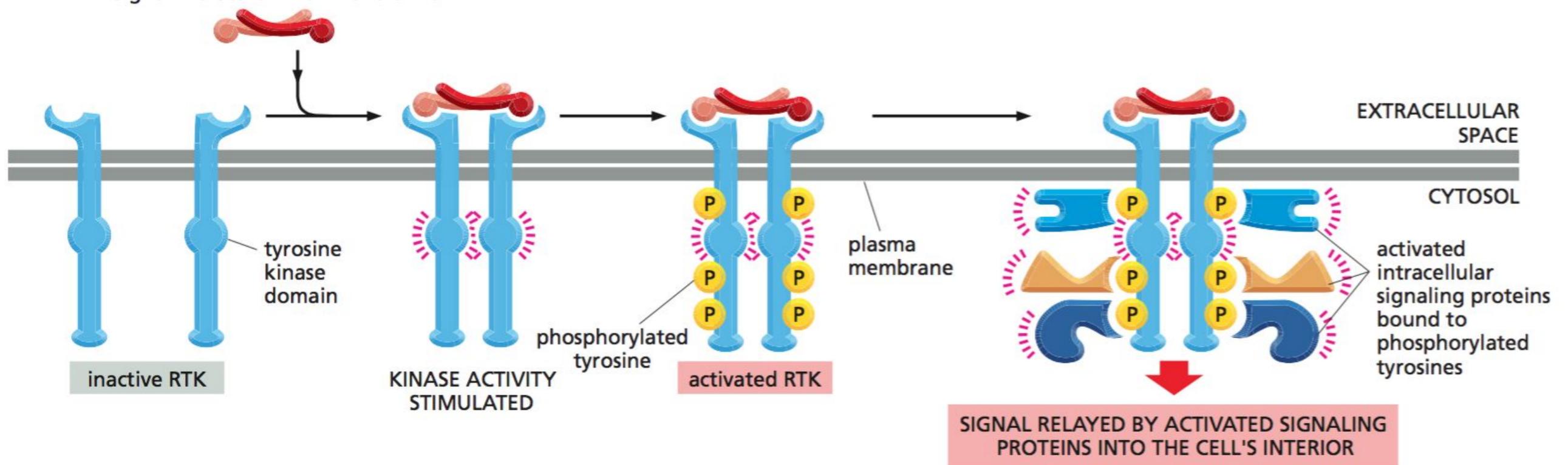
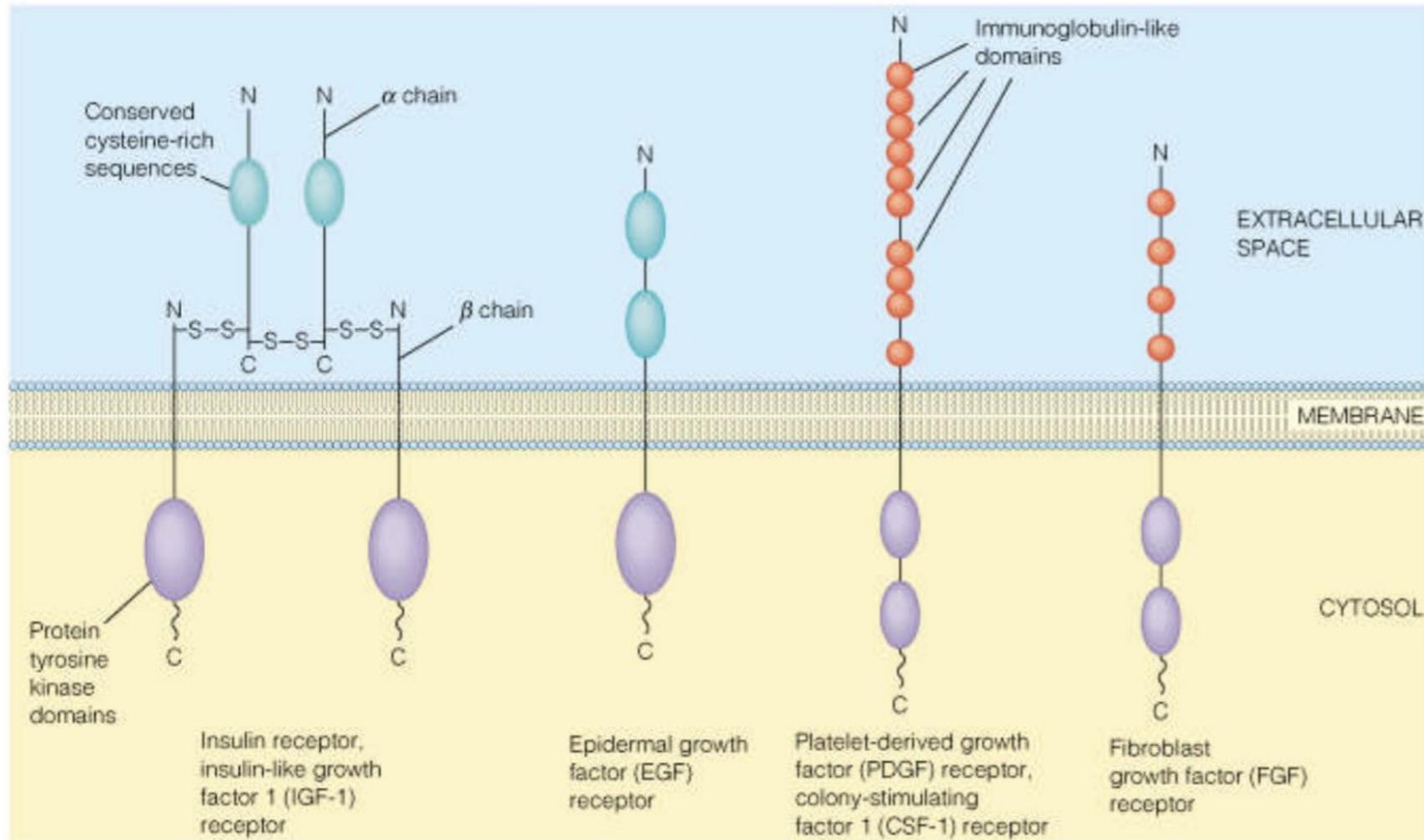
- Neurotransmitters
- Hormons
- Odorants



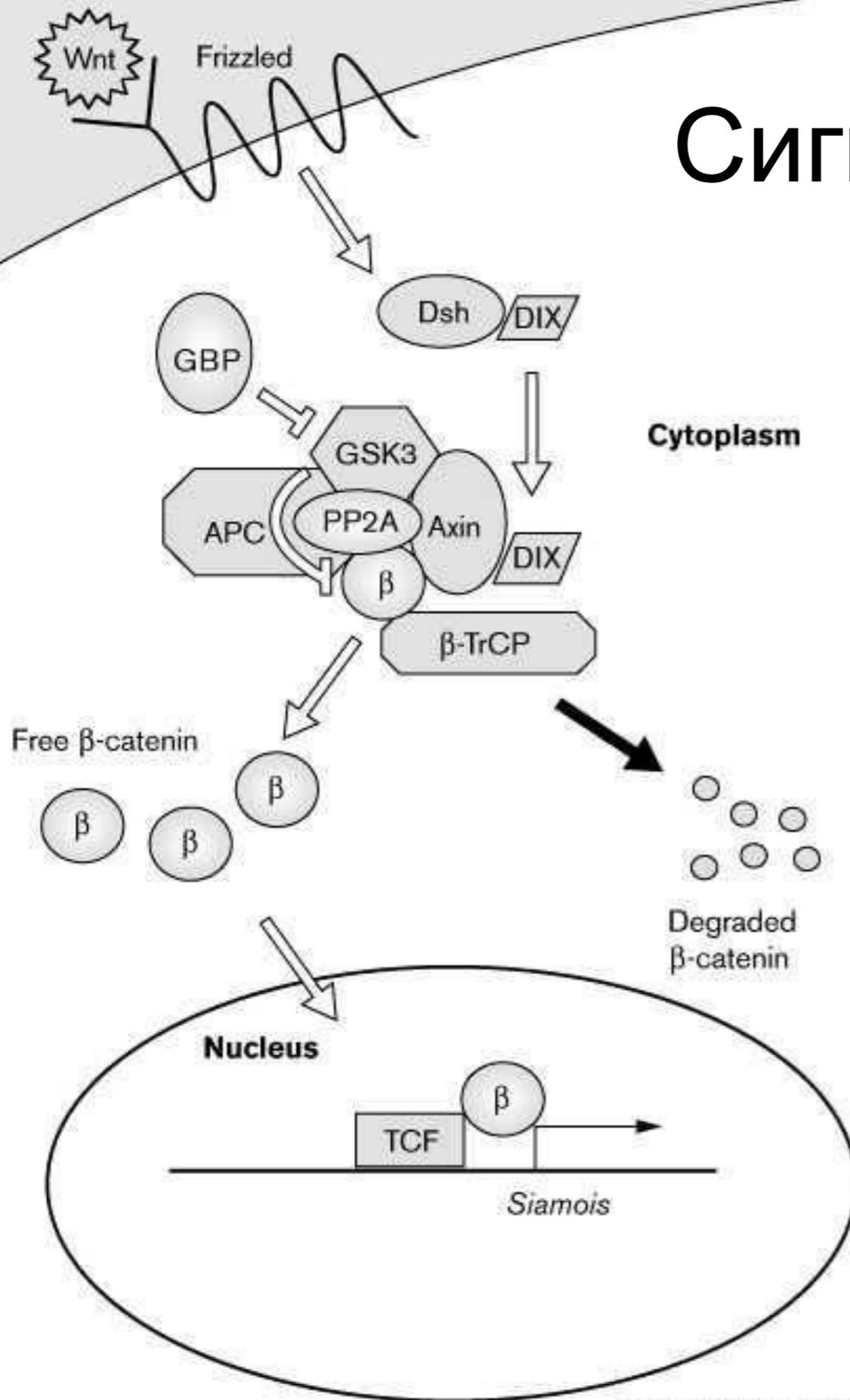
# Signalling is via both $\alpha$ and $\beta\gamma$ subunits



# Receptor tyrosine kinases



# Сигнальный путь Wnt



Один из важнейших сигнальных путей клетки животных

Регулирует эмбриогенез и дифференцировку тканей

Несвоевременная активация вызывает развитие раковых опухолей

# Сигнальный путь Wnt: ингибирование в терапевтических целях

