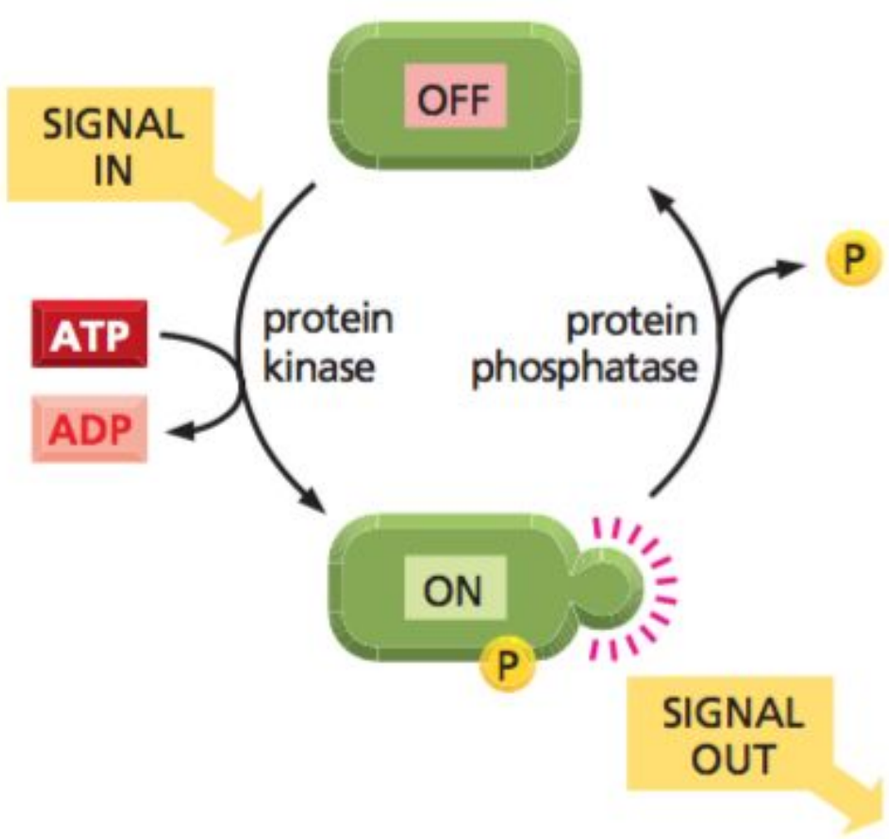
Receptor signalling

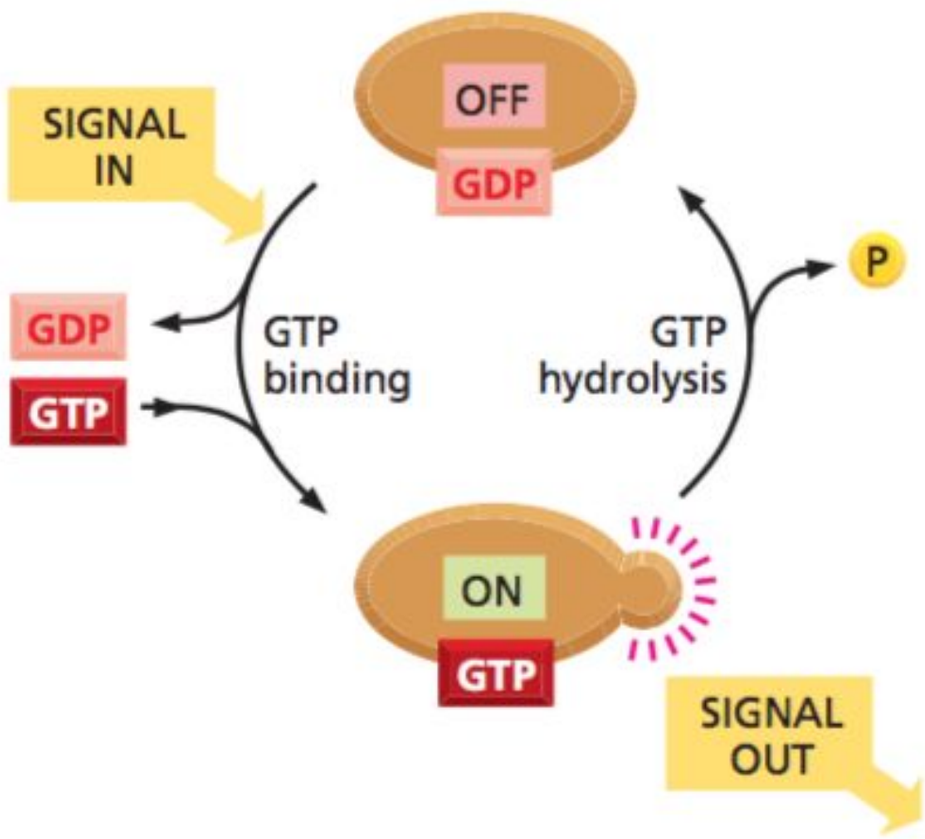
GPCR

Fall into three classes:

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



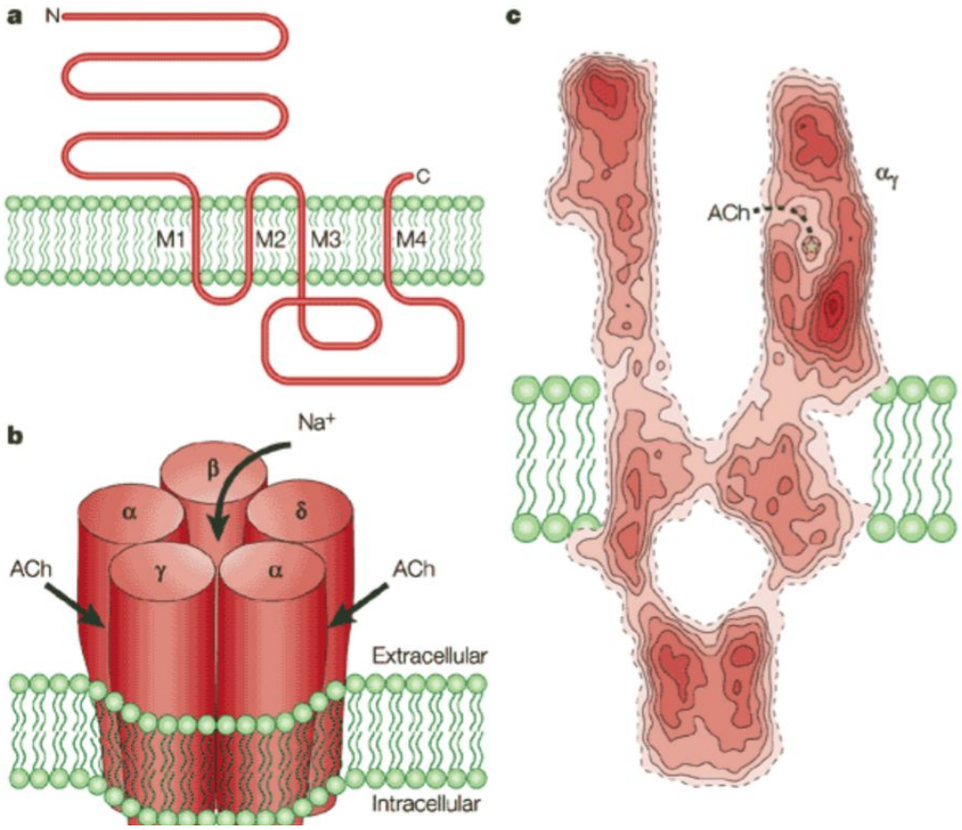
(A) SIGNALING BY PROTEIN PHOSPHORYLATION

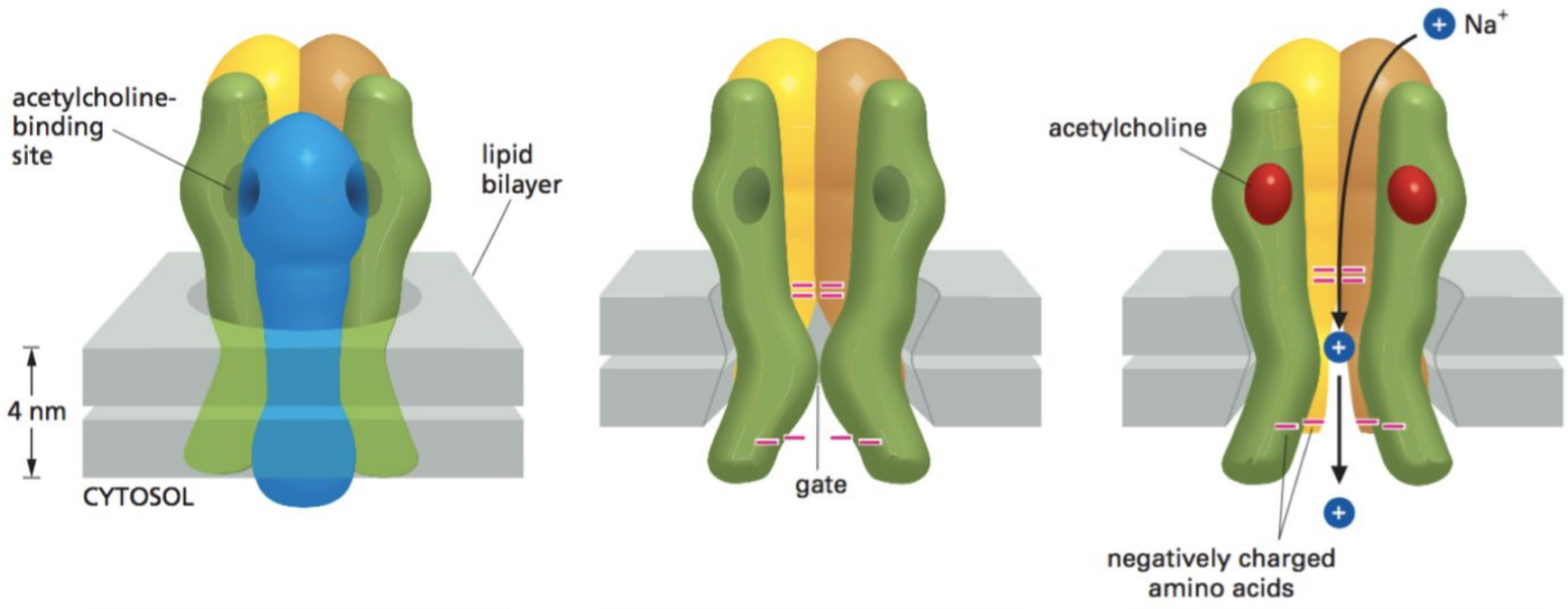


(B) SIGNALING BY GTP-BINDING PROTEIN

Nicotinic *acetyl choline* receptors

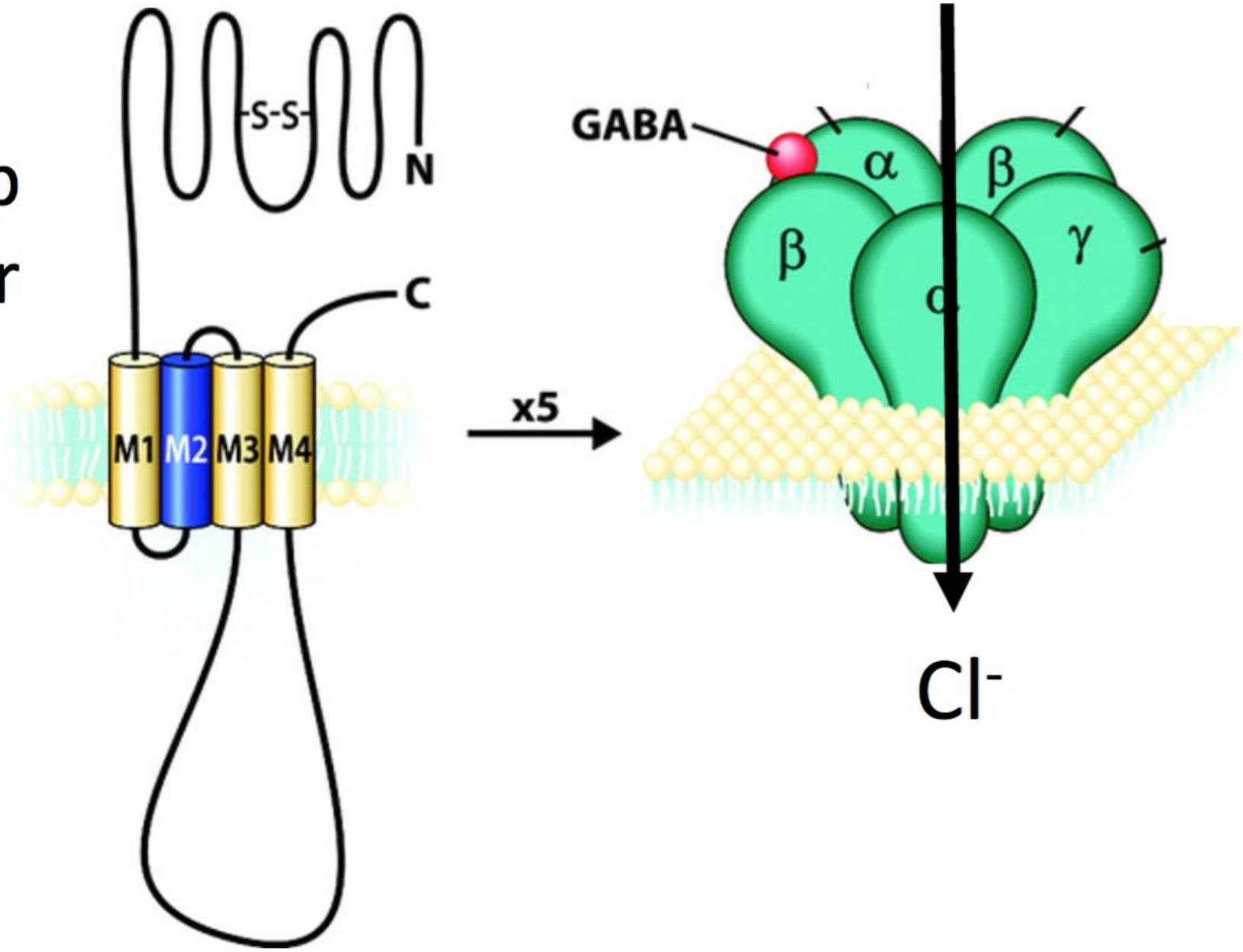
Cys-loop receptor





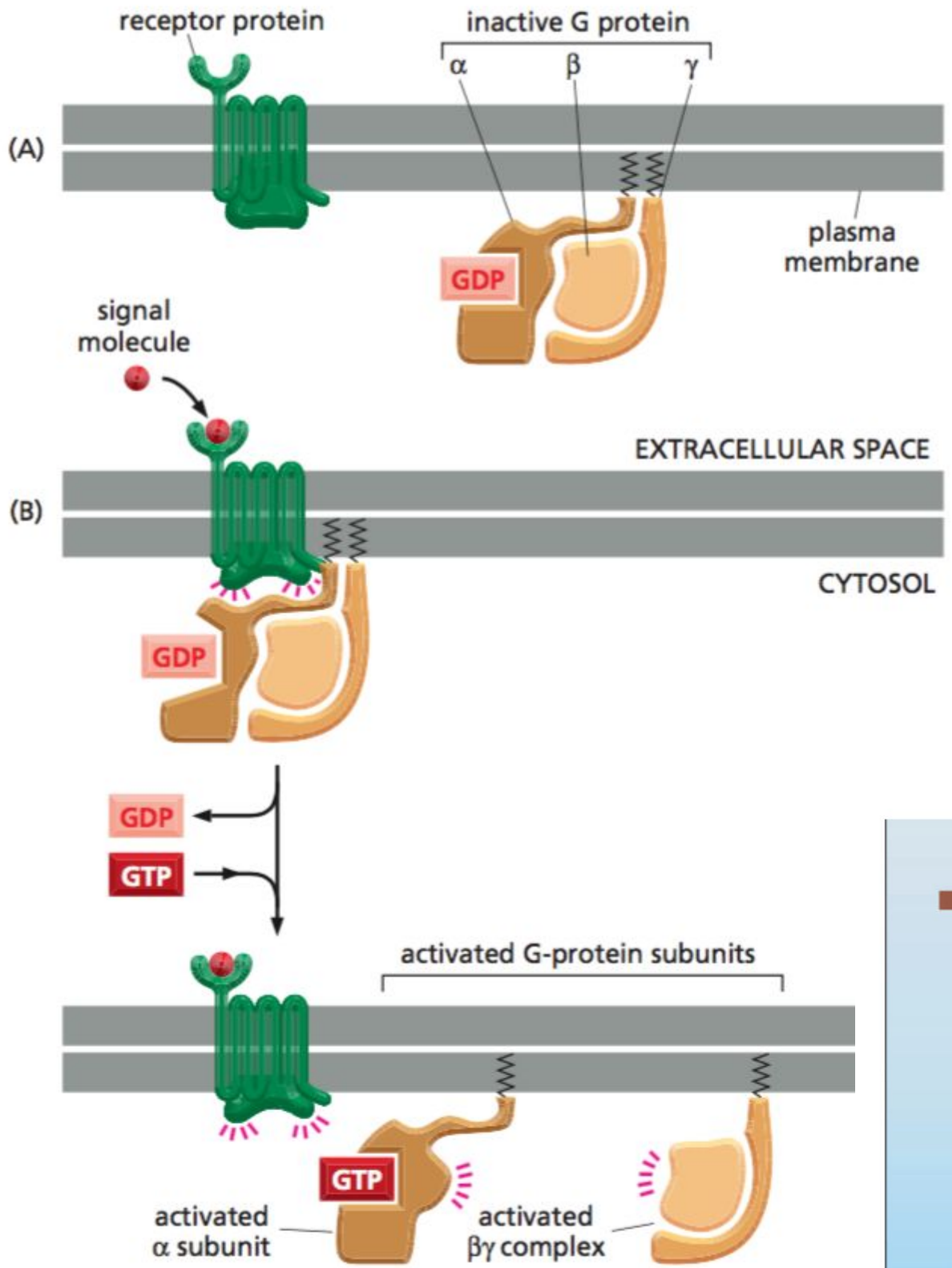
$GABA_A$ receptors

Cys-loop receptor



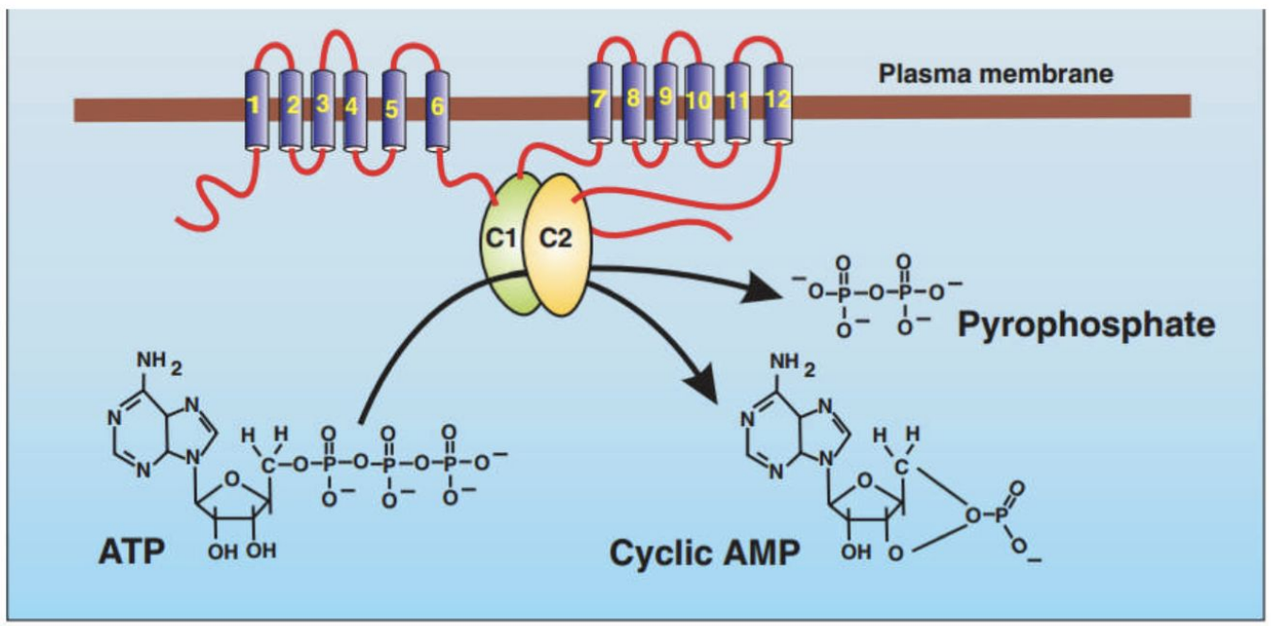
Found at *inhibitory* synapses

GPCR

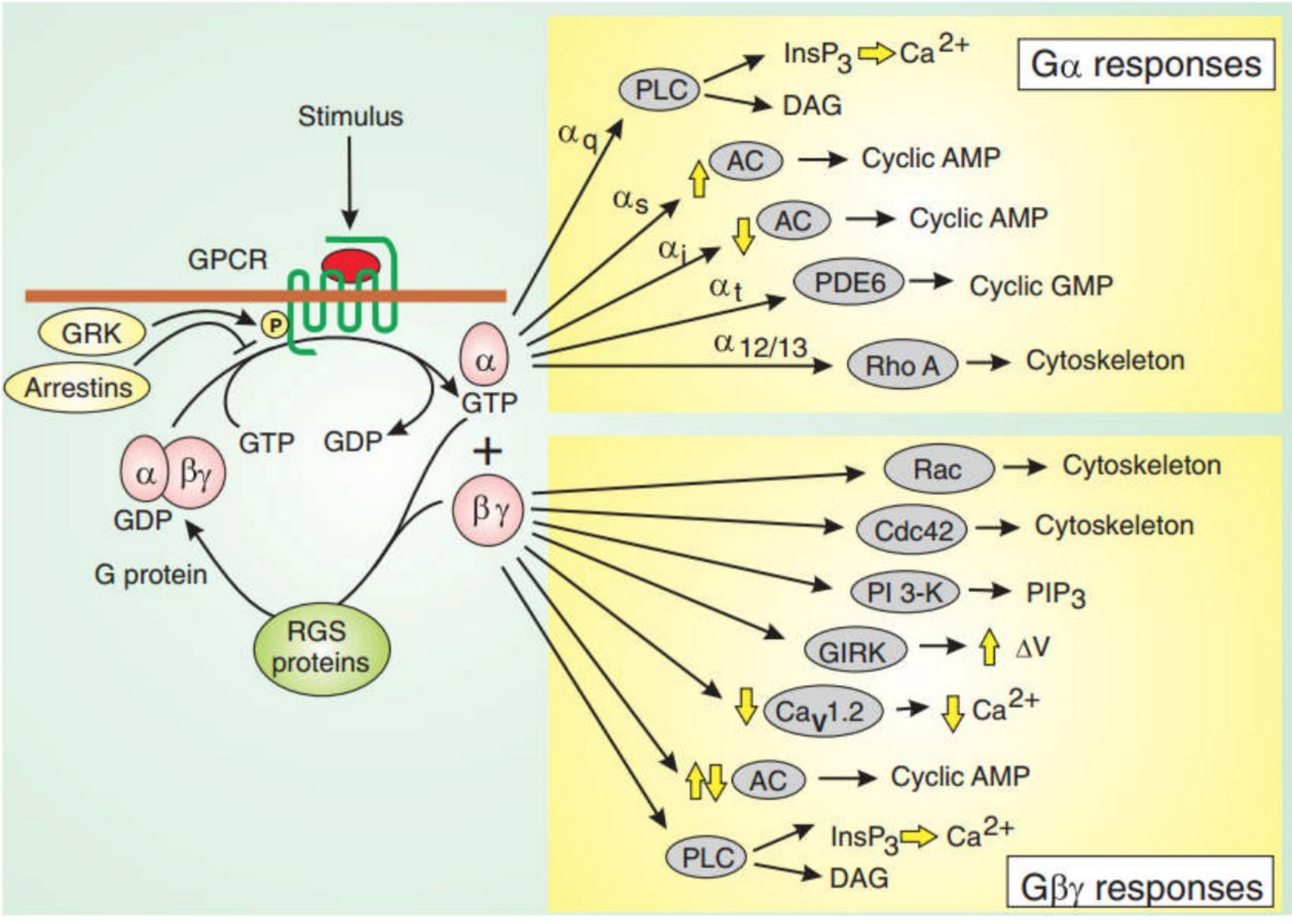


Can be activated by:

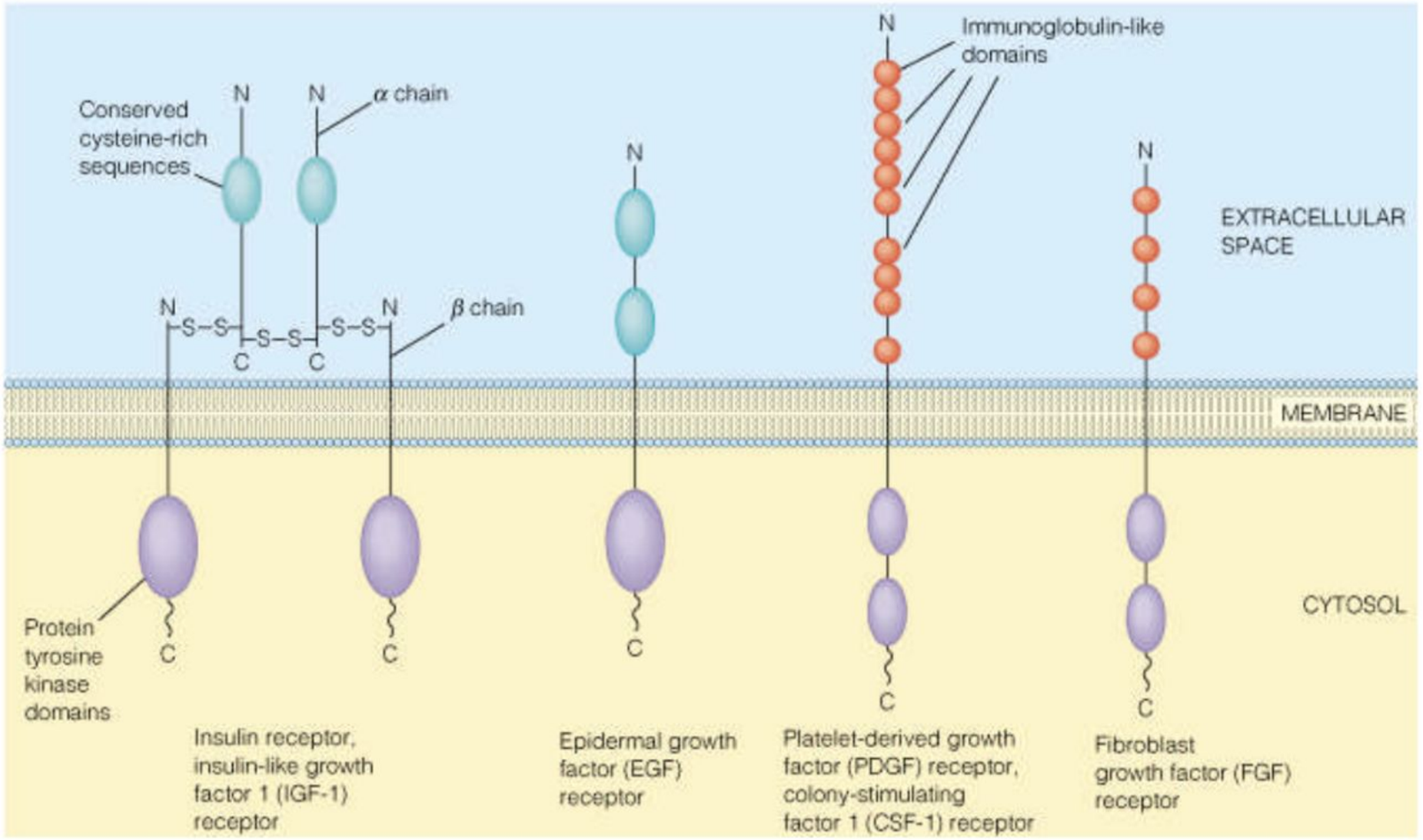
- Neurotransmitters
- Hormons
- Odorants

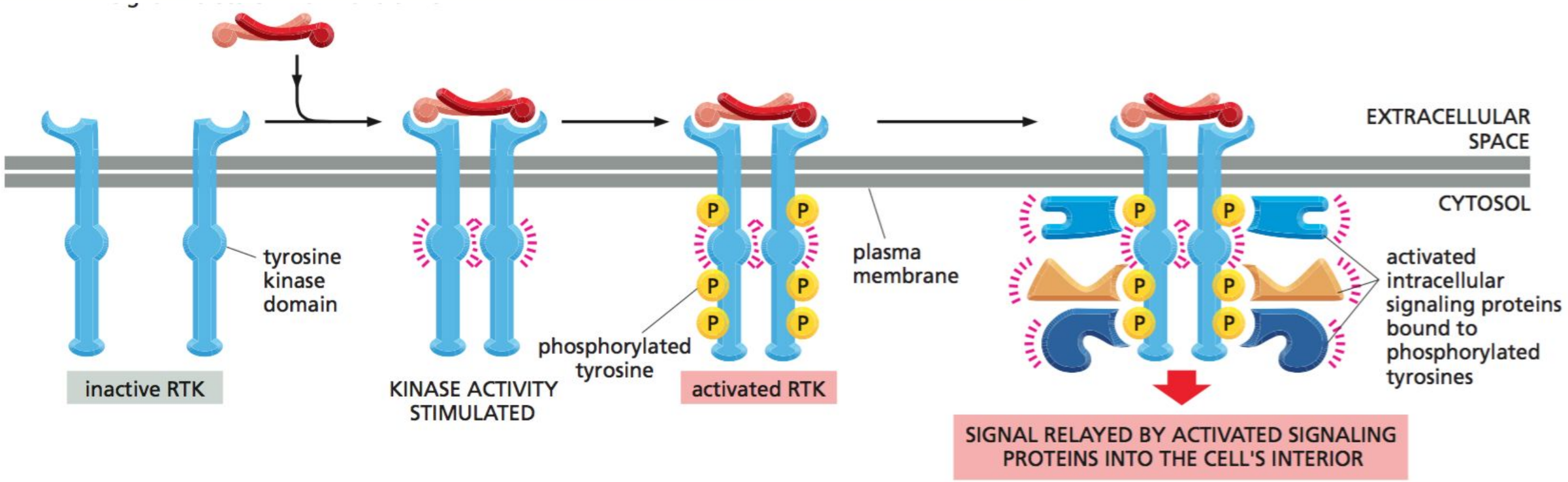


Signalling is via both α and βγ subunits

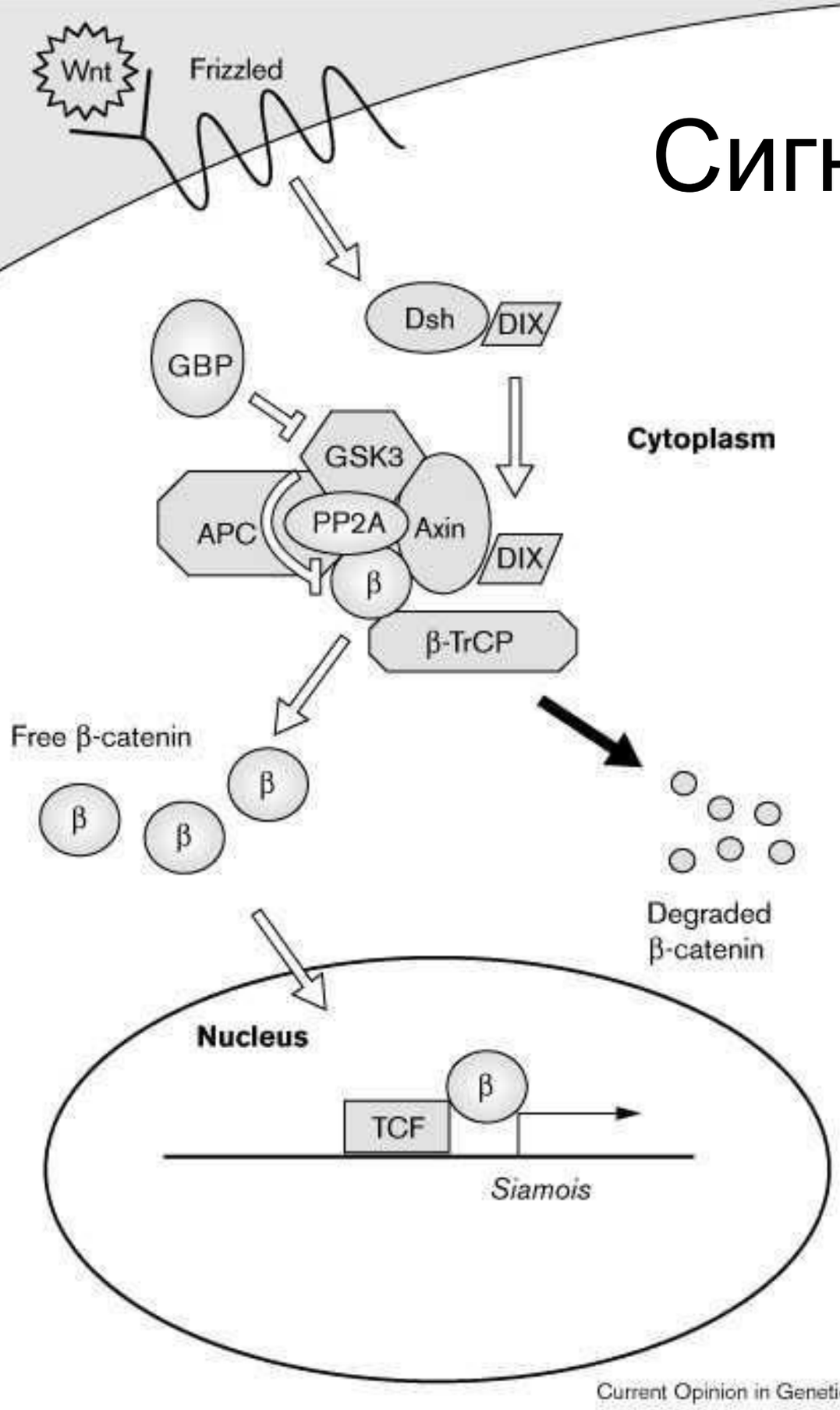


Receptor tyrosine kinases





Сигнальный путь Wnt



Current Opinion in Genetics & Development

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