

INTRACELLULAR
HORMONE RECEPTOR
PATHWAY

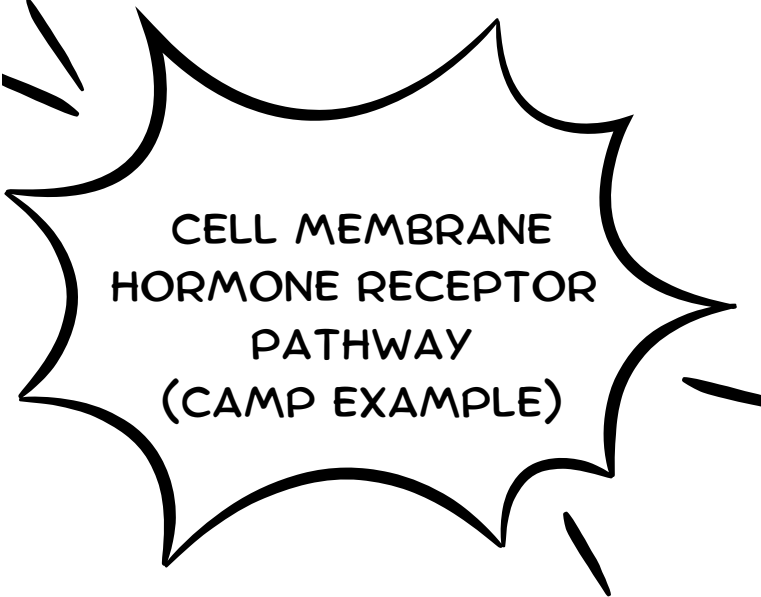
The hormone binds to transport proteins

The hormone is released from the transport protein and diffuses through the cell membrane

The hormone binds to the receptor within the cytoplasm (or nucleus)

The receptor-hormone complex enters the nucleus, triggering transcription

In the cytosol, mRNA is translated into proteins



CELL MEMBRANE
HORMONE RECEPTOR
PATHWAY
(CAMP EXAMPLE)

The hormone binds to a
receptor on the exterior of
the cell membrane

G-protein is activated

G-protein activates adenylyl
cyclase

Adenylyl cyclase converts
ATP to cAMP

cAMP activates protein
kinase in the cytosol

The protein kinase
phosphorylates proteins