Hormone binds GPCR dissociating Gα-GTP

I. 

inactive adenyl cyclase → active adenyl cyclase

II. 

ATP → cAMP → AMP 

phosphodiesterase

III. 

inactive PKA → active PKA

IV. 

ATP → ADP → active phosphorlase kinase 

 inactive phosphorlase kinase 

phosphatase

V. 

ATP → ADP → active glycogen phosphorylase a 

 inactive glycogen phosphorylase b 

phosphoprotein phosphatase 1

GP reaction

glycogen [glucose]_n α(1 → 4)

[HO O P O OH]

HPO_4^{2-}

[HO O P O OH]_n + [glucose]_{n-1}

Supplementary notes, CHEM 641, 10/11/07