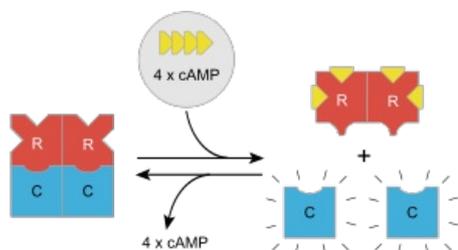


Protein kinase A

Protein kinase A (or cAMP-dependent protein kinase) is an enzyme whose activation leads to the phosphorylation of some intracellular proteins. It is one of the most important intracellular signaling enzymes. Protein kinase A is a protein composed of four subunits – two catalytic (C) and two regulatory (R). Its activity is regulated by cAMP (cyclic adenosine monophosphate). At a low intracellular concentration of cAMP, all subunits of the enzyme are held together and the entire complex has low enzymatic activity. When the intracellular concentration of cAMP increases, the cAMP molecule binds to the regulatory subunit, reducing its affinity for the catalytic subunit. This results in the separation of the catalytic subunit and an increase in its enzymatic activity.



Links

Source

ŠVÍGLEROVÁ, Jitka. *Proteinkináza A* [online]. [cit. 12.11.2010]. <https://web.archive.org/web/20160306065550/http://wiki.lfp-studium.cz/index.php/Proteinkinaza_A>.