



A model for PAS kinase activation and function. PAS kinase is inhibited by PAS domain binding to the kinase domain. The mechanism of activation is unknown but may involve the production of a small molecule that binds transiently to the PAS domain relieving autoinhibition. PAS kinase activation may be stabilized by covalent modification, such as auto- or transphosphorylation. Once activated, PAS kinase will phosphorylate downstream substrates and elicit the appropriate physiological response.