

Pdk1 is a highly conserved Eukaryotic protein kinase that functions as a master regulator of many members of the AGC subfamily of protein kinases. Pdk1 has been shown, in mammals, to regulate many basic cellular functions including cell growth, translation, glucose metabolism, and programmed cell death. In plant systems Pdk1 has not been as well studied but has been shown to be involved in signaling regulating root hair development (Anthony et al. 2004. *EMBO J.* 23:572), auxin transport (Zegzouti et al. 2006. *PNAS.* 103:6404), and programmed cell death (Devarenne et al. 2006. *EMBO J.* 25:255).