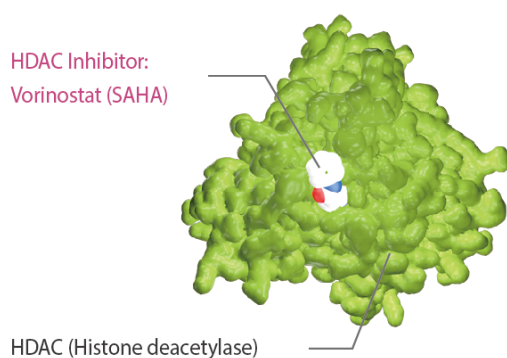


# PDK-1

## Phosphoinositide dependent protein kinase-1



PDK-1 (phosphoinositide dependent protein kinase-1) is a protein which in humans is encoded by the PDK1 gene. It is implicated in the development and progression of melanomas. PDK-1 is a master kinase, which is crucial for the activation of AKT/PKB and many other AGC kinases including PKC, S6K, SGK. An important role for PDK-1 is in the signalling pathways activated by several growth factors and hormones including insulin signaling. More recent data indicate that alteration of PDK-1 is a critical component of oncogenic PI3K signalling in breast cancer, suggesting that inhibition of PDK-1 can inhibit breast cancer progression. PDK-1 has an essential role in regulating cell migration especially in the context of PDK-1 deficiency.

PDK-1 is a valid therapeutic target and suggests that PDK-1 inhibitors may be useful to prevent cancer progression and abnormal tissue dissemination.

