## Open Peer Review on Qeios

## Polo-like Kinase 4 Inhibitor CFI-400945 Fumarate

National Cancer Institute

## Source

*National Cancer Institute. <u>Polo-like Kinase 4 Inhibitor CFI-400945 Fumarate</u>. NCI Thesaurus. Code C111990.* 

An orally available fumarate salt form of CFI-400945, a polo-like kinase 4 (PLK4) inhibitor with potential antineoplastic activity. Upon oral administration, polo-like kinase 4 inhibitor CFI-400945 selectively inhibits PLK4, which results in the disruption of mitosis and the induction of apoptosis. PLK4 inhibition also prevents cell division and inhibits proliferation of PLK4-overexpressing tumor cells. PLK4, a member of the polo family of serine/threonine kinases overexpressed in a variety of cancer cell types, plays a crucial role in the regulation of centriole duplication during the cell cycle.