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# Sotrastaurin

National Cancer Institute

## Source

National Cancer Institute. *Sotrastaurin*. NCI Thesaurus. Code C80630.

An orally available pan-protein kinase C (PKC) inhibitor with potential immunosuppressive and antineoplastic activities. Sotrastaurin inhibits both T- and B-cell activations via PKC theta and beta isozymes, respectively. Both PKCs are important in the activation of nuclear factor-kappaB (NF-κB). Inhibition of PKC beta in B-cells results in prevention of NF-κB-mediated signaling and down regulation of NF-κB target genes. This may eventually lead to an induction of G1 cell cycle arrest and tumor cell apoptosis in susceptible tumor cells. This agent may act synergistically with other chemotherapeutic agents. PKC, a family of serine/threonine protein kinases overexpressed in certain types of cancer cells, is involved in cell differentiation, mitogenesis, inflammation, and the activation and survival of lymphocytes.