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# FASN Inhibitor TVB-2640

National Cancer Institute

## Source

National Cancer Institute. *FASN Inhibitor TVB-2640*. NCI Thesaurus. Code C118285.

An orally bioavailable fatty acid synthase (FASN) inhibitor, with potential antineoplastic activity. Upon administration, TVB-2640 binds to and blocks FASN, which prevents the synthesis of palmitate needed for tumor cell growth and survival. This leads to a reduction in cell signaling, an induction of tumor cell apoptosis and the inhibition of cell proliferation in susceptible tumor cells. FASN, an enzyme responsible for the de novo synthesis of palmitic acid, is overexpressed in tumor cells and plays a key role in tumor metabolism, lipid signaling, tumor cell survival and drug resistance; tumor cells are dependent on increased fatty acid production for their enhanced metabolic needs and rapid growth.