

**Product Name** : FASN-IN-2

**Synonyms** : TVB-2640

**Cat No.** : M22842

**CAS Number** : 1399177-37-7

**Molecular Formula** : C<sub>27</sub>H<sub>29</sub>N<sub>5</sub>O

**Formula Weight** : 439.55

**Chemical Name** : —

**Description**

FASN-IN-2 is a Fatty Acid Synthase (FASN) inhibitor (IC<sub>50</sub> of 0.052 μM and an EC<sub>50</sub> of 0.072 μM), with potential antineoplastic activity. TVB-2640 is 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. Check for active clinical trials or closed clinical trials using this agent.

**Pathway** : Metabolic Enzyme/Protease

**Target** : Fatty Acid Synthase

**Receptor** : FASN

**Solubility** : DMSO: 250 mg/mL (568.76 mM)

**SMILES** : N#CC1=CC=C(C2CCN(C(C3=CC(C4=NC(C)=NN4)=C(C5CCCC5)C=C3C)=O)CC2)C=C1

**Storage** : (-20°C)

**Stability** : ≥ 2 years

**Reference** :

1. Johan D., et al. Heterocyclic modulators of lipid synthesis. WO2012122391A1.