

Product Name : TASIN-1 Hydrochloride

Synonyms : TASIN 1 Hydrochloride; TASIN1 Hydrochloride; TASIN-1 HCl; TASIN 1 HCl; TASIN1 HCl

Cat No. : M27797

CAS Number : 1678515-13-3

Molecular Formula : C₁₈H₂₉ClN₂O₃S

Formula Weight : 389.0

Chemical Name : —

Description : TASIN-1 Hydrochloride is a selective inhibitor of truncated APC that acts by selectively killing colorectal cancer cells that express truncated APC by reducing cellular cholesterol levels and inducing apoptotic cell death through the ER stress/ROS/JNK signaling in colon cancer cells. (In Vitro): In two authentic human CRC cell lines HCT116 (WT APC) and DLD1 (truncated APC1417), TASIN-1 exhibited potent and selective toxicity toward DLD1 cells (IC₅₀: 70 nM but not toward HCT116 cells (IC₅₀ >50 μM)). TASIN-1 also reduced the endogenous cholesterol biosynthesis rate. TASIN-1 exerted its killing effects primarily by depleting cholesterol through inhibition of emopamil-binding protein (EBP) activity. However, knockdown of truncated APC (>90%) expression desensitized DLD1 cells to TASIN-1, suggesting that APC is required for TASIN-1's cytotoxicity. (In Vivo): In nude mice with established DLD1 and HT29 tumors, intraperitoneal injection of TASIN-1 twice daily for 18 days reduced the size of tumor xenografts and tumor growth rates. TASIN-1 resulted in the appearance of apoptotic cells with fragmented nuclei and induced an increase in cleaved caspase 3 and cleaved PARP1. However, TASIN-1 did not inhibit tumor growth in HCT116 xenografts. In a genetically engineered CRC mouse model, TASIN-1 significantly reduced tumor formation in the colons of CPC.

Pathway : Others

Target : Other Targets

Receptor : Ca(2+) receptor

Solubility : —

SMILES : Cl.COC1ccc(cc1)S(=O)(=O)N1CCC(CC1)N1CCC(C)CC1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1.Sewing KF, et al. Calcium channel antagonists verapamil and gallopamil are powerful inhibitors of acid secretion in isolated and enriched guinea pig parietal cells. Pharmacology. 1983;27(1):9-14.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.