

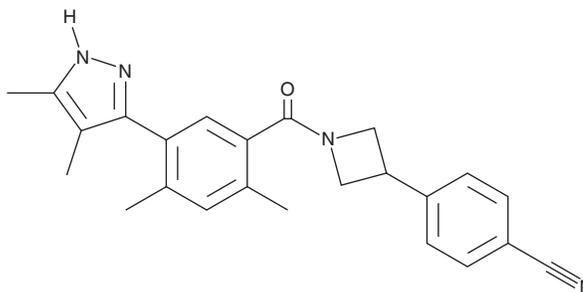
PRODUCT INFORMATION



TVB-3166

Item No. 33533

CAS Registry No.: 1533438-83-3
Formal Name: 4-[1-[5-(4,5-dimethyl-1H-pyrazol-3-yl)-2,4-dimethylbenzoyl]-3-azetidiny]-benzonitrile
MF: C₂₄H₂₄N₄O
FW: 384.5
Purity: ≥98%
UV/Vis.: λ_{max}: 234 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

TVB-3166 is supplied as a solid. A stock solution may be made by dissolving the TVB-3166 in the solvent of choice, which should be purged with an inert gas. TVB-3166 is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

Description

TVB-3166 is an inhibitor of fatty acid synthase (FASN; IC₅₀ = 0.042 μM).¹ It inhibits the biosynthesis of palmitate (Item No. 10010279) in Calu-6 non-small cell lung cancer (NSCLC) cells and MRC-5 lung fibroblasts in a concentration-dependent manner. TVB-3166 (0.2 μM) induces apoptosis in Calu-6, as well as 22Rv1 prostate cancer, cells. It reduces tumor growth in an OVCAR-8 mouse xenograft model and K-Ras-wild-type or -mutant patient-derived xenograft (PDX) mouse models when administered at a dose of 60 mg/kg. TVB-3166 (50 mg/kg) also reduces lung viral titers in mice infected with respiratory syncytial virus A (RSV-A).²

References

1. Ventura, R., Mordec, K., Waszczuk, J., *et al.* Inhibition of de novo palmitate synthesis by fatty acid synthase induces apoptosis in tumor cells by remodeling cell membranes, inhibiting signaling pathways, and reprogramming gene expression. *EBioMedicine* **2(8)**, 808-824 (2015).
2. Ohol, Y.M., Wang, Z., Kemble, G., *et al.* Direct inhibition of cellular fatty acid synthase impairs replication of respiratory syncytial virus and other respiratory viruses. *PLoS One* **10(12)**, e0144648 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/13/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM