PRODUCT INFORMATION



ML-226

Item No. 25681

CAS Registry No.: 2055172-43-3

Formal Name: (2-ethyl-1-piperidinyl)

[4-(hydroxydiphenylmethyl)-2H-

1,2,3-triazol-2-yl]-methanone

MF: $C_{23}H_{26}N_4O_2$ FW: 390.5

Purity: ≥98% UV/Vis.: λ_{max} : 239 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥2 years

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

Laboratory Procedures

ML-226 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-226 in the solvent of choice. ML-226 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ML-226 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

ML-226 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-226 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-226 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ML-226 is an inhibitor of α/β hydrolase domain-containing protein 11 (ABHD11) that inhibits ABHD11 in vitro and in situ (IC_{50} S = 15 and 0.68 nM, respectively). It is 100-fold selective for ABHD11 over approximately 20 other serine hydrolases. ML-226 covalently carbamoylates the active site serine of ABHD11. It can be used as an anti-probe for ML-211 (Item No. 17630), an inhibitor of the protein palmitoyl thioesterases lysophospholipase 1 (LYPLA1) and LYPA2.2

References

- 1. Adibekian, A., Hsu, K.-L., Speers, A.E., et al. Optimization and characterization of a triazole urea inhibitor for alpha/beta hydrolase domain-containing protein 11 (ABHD11): Anti-probe for LYPLA1/LYPLA2 dual inhibitor ML211. Probe Reports from the NIH Molecular Libraries Program (2010).
- 2. Adibekian, A., Martin, B.R., Speers, A.E., et al. Optimization and characterization of a triazole urea dual inhibitor for lysophospholipase 1 (LYPLA1) and lysophospholipase 2 (LYPLA2). Probe Reports from the NIH Molecular Libraries Program 1 R01 CA132630, 1-42 (2013).

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

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.

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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