PRODUCT INFORMATION



KT195

Item No. 14818

CAS Registry No.: 1402612-58-1

Formal Name: [4-(4'-methoxy[1,1'-biphenyl]-4-yl)-

1H-1,2,3-triazol-1-yl](2-phenyl-1-

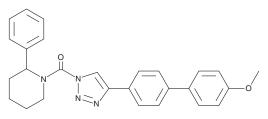
piperidinyl)-methanone

Synonym: ML-295 MF: $C_{27}H_{26}N_4O_2$ FW: 438.5 Purity: ≥98%

 λ_{max} : 288 nm UV/Vis.: Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

KT195 is supplied as a crystalline solid. A stock solution may be made by dissolving the KT195 in the solvent of choice, which should be purged with an inert gas. KT195 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of KT195 in these solvents is approximately 10 and 5 mg/ml, respectively.

KT195 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KT195 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. KT195 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The serine hydrolase known as α/β -hydrolase domain-containing protein 6 (ABHD6) hydrolyzes 2-arachidonoyl glycerol (2-AG; Item No. 62160) to regulate its availability at cannabinoid receptors, KT195 is a selective inhibitor of ABHD6 (IC_{50} = 10 nM) with negligible activity against other serine hydrolases such as DAGL β . While it can be used as a probe to study ABHD6, it also has use as a negative control for studies of DAGLβ.¹ By inactivating ABHD6, KT195 has been shown to induce a significant accumulation of 2-AG in Neuro2a cells. KT195 is also reported to reduce IL-1β secretion from lipopolysaccharide-treated macrophages.1

References

- 1. Hsu, K.-L., Tsuboi, K., Adibekian, A., et al. DAGLβ inhibition perturbs a lipid network involved in macrophage inflammatory responses. Nat. Chem. Biol. 8(12), 999-1007 (2012).
- 2. Iglesias, J., Lamontagne, J., Erb, J., et al. Simplified assays of lipolysis enzymes for drug discovery and specificity assessment of known inhibitors. J. Lipid Res. 57(1), 131-141 (2016).

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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