

# PRODUCT INFORMATION



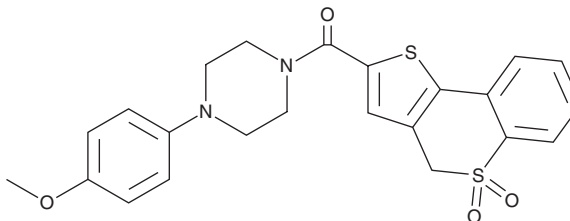
## ML-349

Item No. 20923

CAS Registry No.: 890819-86-0  
Formal Name: (5,5-dioxido-4H-thieno[3,2-c]

[1]benzothiopyran-2-yl)  
[4-(4-methoxyphenyl)-1-  
piperazinyl]-methanone

MF: C<sub>23</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
FW: 454.6  
Purity: ≥98%  
UV/Vis.: λ<sub>max</sub>: 242, 319 nm  
Supplied as: A crystalline 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

ML-349 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-349 in the solvent of choice. ML-349 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of ML-349 in these solvents is approximately 5 mg/ml.

ML-349 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-349 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-349 has a solubility of approximately 0.33 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

ML-349 is a selective and reversible inhibitor of lysophospholipase 2 (LYPLA2; K<sub>i</sub>s = 230 and >10,000 nM for human recombinant LYPLA2 and LYPLA1, respectively).<sup>1</sup> Treatment with ML-349 results in >95% inhibition of LYPLA2 with no change in the activity of 25 other serine hydrolases in BW5147 murine T cell hybridoma cells. ML-349 almost completely inhibits LYPLA2 in HEK293T and mouse T cells and *in vivo* in murine lung, heart, and kidneys. It partially inhibits LYPLA2 in murine brain.

### Reference

1. Adibekian, A., Martin, B.R., Chang, J.W., *et al.* Confirming target engagement for reversible inhibitors *in vivo* by kinetically tuned activity-based probes. *J. Am. Chem. Soc.* **134**(25), 10345-10348 (2012).

#### 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

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