

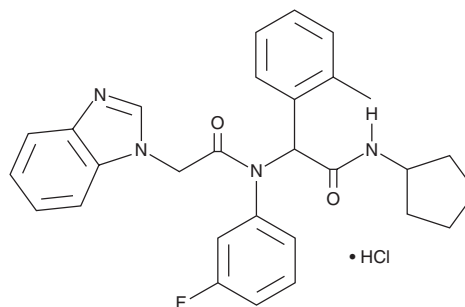
# PRODUCT INFORMATION



## ML-309 (hydrochloride)

Item No. 21519

**CAS Registry No.:** 1355327-02-4  
**Formal Name:** N-[2-(cyclopentylamino)-1-(2-methylphenyl)-2-oxoethyl]-N-(3-fluorophenyl)-1H-benzimidazole-1-acetamide, monohydrochloride  
**MF:** C<sub>29</sub>H<sub>29</sub>FN<sub>4</sub>O<sub>2</sub> • HCl  
**FW:** 521.0  
**Purity:** ≥98%  
**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-309 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-309 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ML-309 (hydrochloride) is soluble in the organic solvent DMSO.

### Description

ML-309 is an inhibitor of mutant isocitrate dehydrogenase 1 (IDH1).<sup>1</sup> It reversibly and selective inhibits IDH1<sup>R132H</sup> over wild-type IDH1 (IC<sub>50</sub>s = 96 and 36,500 nM, respectively). ML-309 reduces 2-hydroxyglutarate production in U87 MG glioblastoma cells (EC<sub>50</sub> = 55 nM).

### Reference

1. Davis, M., Pragani, R., Popovici-Muller, J., et al. ML309: A potent inhibitor of R132H mutant IDH1 capable of reducing 2-hydroxyglutarate production in U87 MG glioblastoma cells. *Probe Reports from the NIH Molecular Libraries Program* (2010).

#### 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.

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