

# PRODUCT INFORMATION



## ML-179

Item No. 15180

**CAS Registry No.:** 1883548-87-5  
**Formal Name:** 3-cyclohexyl-6-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]-2,4(1H,3H)-pyrimidinedione

**Synonym:** CID-45100448

**MF:** C<sub>21</sub>H<sub>25</sub>F<sub>3</sub>N<sub>4</sub>O<sub>2</sub>

**FW:** 422.4

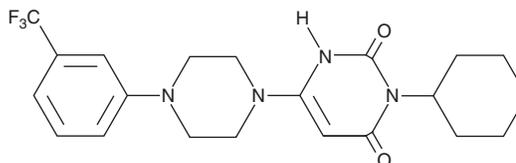
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 274 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-179 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-179 in the solvent of choice, which should be purged with an inert gas. ML-179 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

ML-179 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

## Description

ML-179 is a potent inverse agonist of liver receptor homolog-1 (LRH-1) (IC<sub>50</sub> = 320 nM) with maximum efficacy of 40% repression.<sup>1</sup> It is inactive at the related steroidogenic factor-1 transcriptional activator.<sup>1</sup> Through LRH-1, ML-179 alters the expression of haptoglobin and serum amyloid proteins A1 and A4, induces the death of estrogen-receptor negative MDA-MB-231 breast cancer cells, and inhibits the steroidogenic acute regulatory promoter (IC<sub>50</sub> = 2.12 μM).<sup>1</sup>

## Reference

1. Busby, S., Nuhant, P., Cameron, M., *et al.* Discovery of inverse agonists for the liver receptor homologue-1 (LRH1; NR5A2), in Probe Reports from the NIH Molecular Libraries Program, 1 (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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