

# PRODUCT INFORMATION



## AZ 505

Item No. 16875

**CAS Registry No.:** 1035227-43-0  
**Formal Name:** N-cyclohexyl-3-[[2-(3,4-dichlorophenyl)ethyl]amino]-N-[2-[[2-(3,4-dihydro-5-hydroxy-3-oxo-2H-1,4-benzoxazin-8-yl)ethyl]amino]ethyl]-propanamide

**MF:** C<sub>29</sub>H<sub>38</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>

**FW:** 577.6

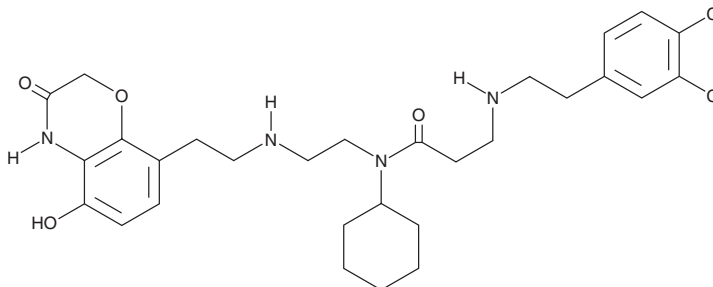
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 260 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

AZ 505 is supplied as a crystalline solid. A stock solution may be made by dissolving the AZ 505 in the solvent of choice. AZ 505 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of AZ 505 in these solvents is approximately 30 mg/ml.

AZ 505 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AZ 505 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. AZ 505 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

AZ 505 is an inhibitor of the lysine N-methyltransferase SMYD2 (IC<sub>50</sub> = 0.12 μM).<sup>1</sup> It is selective for SMYD2 over SMYD3, DOT1L, EZH2, GLP, G9A, and SET7/9 (IC<sub>50</sub>s = >83.3 μM). AZ 505 (10 mg/kg) delays cyst growth in early- and late-stage *Pdk1* conditional knockout mouse models of polycystic kidney disease.<sup>2</sup>

## References

1. Ferguson, A.D., Larsen, N.A., Howard, T., *et al.* Structural basis of substrate methylation and inhibition of SMYD2. *Structure* **19(9)**, 1262-1273 (2011).
2. Li, L.X., Fan, L.X., Zhou, J.X., *et al.* Lysine methyltransferase SMYD2 promotes cyst growth in autosomal dominant polycystic kidney disease. *J. Clin. Invest.* **127(7)**, 2751-2764 (2017).

### 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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