PRODUCT INFORMATION



OG-L002

Item No. 17471

CAS Registry No.: 1357302-64-7

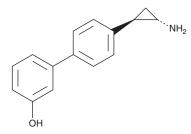
Formal Name: 4'-[(1R,2S)-2-aminocyclopropyl]-

[1,1'-biphenyl]-3-ol

MF: $C_{15}H_{15}NO$ FW: 225.3 **Purity:** ≥98% λ_{max} : 260 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 vears

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



Laboratory Procedures

OG-L002 is supplied as a crystalline solid. A stock solution may be made by dissolving the OG-L002 in the solvent of choice, which should be purged with an inert gas. OG-L002 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of OG-L002 in ethanol is approximately 10 mg/ml and approximately 50 mg/ml in DMSO and DMF.

OG-L002 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, OG-L002 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. OG-L002 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lysine-specific demethylase 1 (LSD1) is a protein lysine demethylase that specifically demethylates histone H3 lysine 4 (H3K4) and H3K9, resulting in transcriptional repression. Host LSD1 is also recruited by certain viruses to limit H3K9 methylation, which can repress viral genes necessary for infection.² OG-L002 is a potent inhibitor of LSD1 (IC $_{50}$ = 0.02 μ M) that less effectively inhibits the monoamine oxidases A (MAO-A) and MAO-B (IC₅₀s = 1.38 and $0.72 \mu M$).² It blocks the expression of immediate early (IE) genes of herpes simplex virus (HSV) in HeLa cells but not that of cellular control genes.² OG-L002 also reduces the expression of human cytomegalovirus IE genes and adenovirus E1A gene in mammalian cells.² It is effective in vivo, repressing HSV primary infection in mice and blocking HSV reactivation from latency in a mouse ganglion explant model.²

References

- 1. Forneris, F., Binda, C., Vanoni, M.A., et al. Human histone demethylase LSD1 reads the histone code. J. Biol. Chem. 280(50), 41360-41365 (2005).
- 2. Liang, Y., Quenelle, D., Vogel, J.L., et al. A novel selective LSD1/KDM1A inhibitor epigenetically blocks Herpes simplex virus lytic replication and reactivation from latency. mBio 4(1), 1-9 (2013).

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.

WARRANTY AND LIMITATION OF REMEDY

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