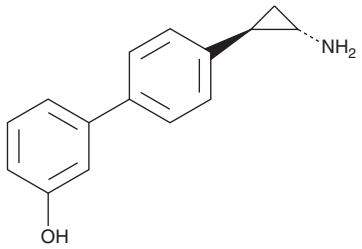
PRODUCT INFORMATION

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%
UV/Vis.:	λ_{max}: 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

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.[1] 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 µM) that less effectively inhibits the monoamine oxidases A (MAO-A) and MAO-B (IC_{50}s = 1.38 and 0.72 µM).[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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM