# **PRODUCT** INFORMATION



## **ML-233**

Item No. 15187

Formal Name:	(E)-4-methyl-5-(((phenylsulfonyl) oxy)imino)-[1,1'-bi(cyclohexane)]-
	3,6-dien-2-one
Synonym:	CID-46905036 N <sub>\\</sub> Ö
MF:	$C_{19}H_{21}NO_4S$
FW:	359.4
Purity:	≥95%
UV/Vis.:	λ <sub>max</sub> : 219, 286 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-233 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-233 in the solvent of choice. ML-233 is soluble in DMSO at a concentration of approximately 5 mg/ml.

ML-233 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

The apelin receptor (APJ) signaling pathway mediates cardiovascular homeostasis and is involved in the pathogenesis of cardiovascular diseases.<sup>1-4</sup> ML-233 is a novel APJ agonist (EC<sub>50</sub> = 3.7  $\mu$ M) that is >21-fold selective over the closely related angiotensin 1 receptor (EC<sub>50</sub> = >79  $\mu$ M).<sup>5</sup>

### References

- 1. Tatemoto, K., Hosoya, M., Habata, Y., et al. Isolation and characterizaton of a novel endogenous peptide ligand for the human APJ receptor. Biochem. Biophys. Res. Commun. 251, 471-476 (1998).
- 2. Lee, D.K., Cheng, R., Nguyen, T., et al. Characterization of apelin, the ligand for the APJ receptor. J. Neurochem. 74, 34-41 (2000).
- 3. Kleinz, M.J. and Davenport, A.P. Emerging roles or apelin in biology and medicine. Pharmacol. Ther. 107, 198-211 (2005).
- 4. Scimia, M.C., Hurtado, C., Ray, S., et al. APJ acts as a dual receptor in cardiac hypertrophy. Nature 488, 394-398 (2012).
- 5. Khan, P., Maloney, P.R., Hedrick, M., et al. Functional agonists of the apelin J (APJ) receptor. Probe Reports from the NIH Molecular Libraries Program. 1-22 (2011).

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.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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