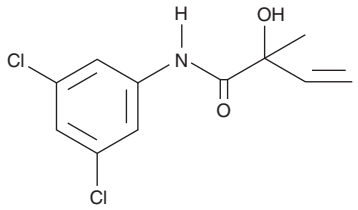
PRODUCT INFORMATION

Vinclozolin M_2

Item No. 10007452

CAS Registry No.:	83792-61-4
Formal Name:	N-(3,5-dichlorophenyl)-2-hydroxy-2-methyl-3-butenamide
Synonym:	M2
MF:	$C_{11}H_{11}Cl_2NO_2$
FW:	260.1
Purity:	≥98%
UV/Vis.:	λ_{max}: 216, 249 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

Vinclozolin M_2 is supplied as a crystalline solid. A stock solution may be made by dissolving the vinclozolin M_2 in the solvent of choice, which should be purged with an inert gas. Vinclozolin M_2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of vinclozolin M_2 in these solvents is approximately 30 mg/ml.

Vinclozolin M_2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, vinclozolin M_2 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Vinclozolin M_2 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

Vinclozolin M_2 is an active metabolite of vinclozolin (Item No. 23939).[1] It is formed from vinclozolin by successive esterase activity and decarboxylation of vinclozolin in *C. elegans* and by decarboxylation in human liver microsomes.[1,2] Vinclozolin M_2 is an antagonist of the mineralocorticoid receptor (IC_{50} = 1,400 nM) and androgen receptor (IC_{50} = 0.17 nM) in reporter assays using MCF-7 cells.[3]

References

1. Pothuluri, J.V., Freeman, J.P., Heinze, T.M., *et al.* Biotransformation of vinclozolin by the fungus *Cunninghemella elegans*. *J. Agric. Food Chem.* **48(12)**, 6138-6148 (2000).
2. Cruz-Hurtado, M., López-González, M.d.L., Mondragón, V., *et al. In vitro phase* I metabolism of vinclozolin by human liver microsomes. *Xenobiotica* **49(8)**, 895-904 (2019).
3. Molina-Molina, J.-M., Hillenweck, A., Jouanin, I., *et al.* Steroid receptor profiling of vinclozolin and its primary metabolites. *Toxicol. Appl. Pharmacol.* **216(1)**, 44-54 (2006).

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