# **PRODUCT** INFORMATION



3,4-Methylenedioxy Pyrovalerone metabolite 1 (hydrochloride)

Item No. 10518

CAS Registry No.:	2748590-34-1
Formal Name:	1-(4-hydroxy-3-methoxyphenyl)-
	2-(pyrrolidin-1-yl)pentan-1-one, monohydrochloride
Synonyms:	Demethylenyl-methyl-MDPV,
	3,4-MDPV metabolite 1
MF:	$C_{16}H_{23}NO_3 \bullet HCI$
FW:	313.8
Purity:	≥95% HO <sup>7</sup> • HCl
UV/Vis.:	λ <sub>max</sub> : 237, 290, 319 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥5 years

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

## Laboratory Procedures

3,4-MDPV metabolite 1 is supplied as a crystalline solid. A stock solution may be made by dissolving the 3,4-MDPV metabolite 1 in the solvent of choice, which should be purged with an inert gas. 3,4-MDPV metabolite 1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 3,4-MDPV metabolite 1 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 3,4-MDPV metabolite 1 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3,4-MDPV metabolite 1 in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

3,4-Methylenedioxy pyrovalerone (3,4-MDPV, Item No. 10624) is an analog of pyrovalerone (Item No. 10817) that includes the 3,4-methylenedioxy moiety found on 3,4-methylenedioxymethamphetamine (Item No. 13971), a DEA Schedule I controlled substance. 3,4-MDPV is commonly abused as a recreational drug.<sup>1-3</sup> 3,4-MDPV metabolite 1 is produced during phase I metabolism of 3,4-MDPV.<sup>4,5</sup> This compound can be further modified, e.g., by glucuronidation, before secretion in urine.4 This product is intended for forensic and research purposes.

## References

- 1. Brandt, S.D., Sumnall, H.R., Measham, F., et al. Drug Test. Anal. 2(8), 377-382 (2010).
- 2. Kikura-Hanajiri, R., Uchiyama, N., and Goda, Y. Leg. Med. (Tokyo) 13(3), 109-15 (2011).
- 3. Prosser, J.M. and Nelson, L.S. J. Med. Toxicol. 8(1), 33-42 (2012).
- 4. Strano-Rossi, S., Cadwallader, A.B., de la Torre, X., et al. Rapid Commun. Mass Spectrom. 24, 2706-2714 (2010).
- 5. Meyer, M.R., Du, P., Schuster, F., et al. J. Mass Spectrom. 45(12), 1426-1442 (2010).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY 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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