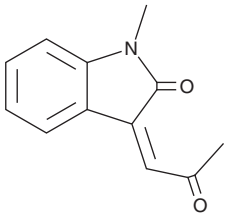
PRODUCT INFORMATION

Supercinnamaldehyde

Item No. 21019

CAS Registry No.:	70351-51-8
Formal Name:	1,3-dihydro-1-methyl-3-(2-oxopropylidene)-2H-indol-2-one
MF:	$C_{12}H_{11}NO_2$
FW:	201.2
Purity:	≥95%
UV/Vis.:	λ_{max}: 260, 324 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

Supercinnamaldehyde is supplied as a crystalline solid. A stock solution may be made by dissolving the supercinnamaldehyde in the solvent of choice, which should be purged with an inert gas. Supercinnamaldehyde is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of supercinnamaldehyde in ethanol is approximately 2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Supercinnamaldehyde is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, supercinnamaldehyde should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Supercinnamaldehyde has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Supercinnamaldehyde is an activator of the transient receptor potential ankyrin 1 (TRPA1) channel (EC_{50} = 0.8 µM) and an analog of cinnamaldehyde.[1] TRPA1 is a nociceptor expressed on sensory neurons and is activated by hot and cold temperatures, mechanical stimuli, and pain.[2]

References

1. Macpherson, L.J., Dubin, A.E., Evans, M.J., *et al.* Noxious compounds activate TRPA1 ion channels through covalent modification of cysteines. *Nature* **445(7127)**, 541-545 (2007).
2. Baraldi, P.G., Preti, D., Materazzi, S., *et al.* Transient receptor potential ankyrin 1 (TRPA1) channel as emerging target for novel analgesics and anti-inflammatory agents. *J. Med. Chem.* **53(14)**, 5085-5107 (2010).

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