

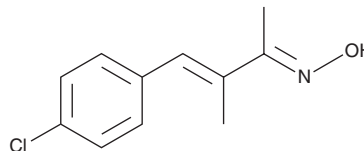
PRODUCT INFORMATION



AP-18

Item No. 11912

CAS Registry No.: 55224-94-7
Formal Name: 4-(4-chlorophenyl)-3-methyl-3-buten-2-one, oxime
MF: C₁₁H₁₂ClNO
FW: 209.7
Purity: ≥98%
UV/Vis.: λ_{max}: 216, 274 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

AP-18 is supplied as a crystalline solid. A stock solution may be made by dissolving the AP-18 in the solvent of choice, which should be purged with an inert gas. AP-18 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AP-18 in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

AP-18 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AP-18 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AP-18 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

AP-18 is a channel blocker which reversibly inhibits TRPA1 (IC₅₀s = 3.1 and 4.5 μM, human and mouse, respectively).^{1,2} It has minimal effect on TRPV1-4 or TRPM8.¹ AP-18 has been used to study TRPA1 signaling in mice and rats as well as *in vitro*.^{1,3,4}

References

1. Petrus, M., Peier, A.M., Bandell, M., *et al.* A role of TRPA1 in mechanical hyperalgesia is revealed by pharmacological inhibition. *Mol. Pain* **3**, 40 (2007).
2. Fanger, C.M., del Camino, D., and Moran, M.M. TRPA1 as an analgesic target. *Open Drug Discov. J.* **2**, 64-70 (2010).
3. Chen, J., Kim, D., Bianchi, B.R., *et al.* Pore dilation occurs in TRPA1 but not in TRPM8 channels. *Mol. Pain* **5**, 3 (2009).
4. Taylor-Clark, T.E., Ghatta, S., Bettner, W., *et al.* Nitrooleic acid, an endogenous product of nitroative stress, activates nociceptive sensory nerves *via* the direct activation of TRPA1. *Mol. Pharmacol.* **75(4)**, 820-829 (2009).

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.

WARRANTY AND LIMITATION OF REMEDY

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