

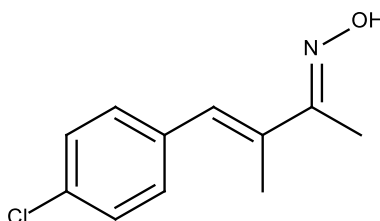
Catalog # 10-1127

AP-18

CAS# 55224-94-7

4-(4-Chlorophenyl)-3-methylbut-3-en-2-oxime

Lot # X101322



TRPA1 channel blocker IC_{50} =3.1-4.5 μ M in various cell lines. Reduces cinnamaldehyde-induced nociception *in vivo* and blocks cold- and mustard oil-induced activation of mouse TRPA1 but not capsaicin-induced activation. Does not block TRPV1, V2, V3, V4 or M8 at concentrations up to 50 μ M.¹ Blocks TRPA1 pore dilation (IC_{50} =10.3 μ M).² An important tool for assessing the role of TRPA1 in cell signaling and physiological processes.³⁻⁵

- 1) Petrus *et al* (2007) *A role of TRPA1 in mechanical hyperalgesia is revealed by pharmacological inhibition*. Mol.Pain **3** 40
- 2) Chen *et al.* (2009) *Pore dilation occurs in TRPA1 but not in TRPM8 channels*; Mol. Pain, **5** 3
- 3) Lieder *et al.* (2017) *The Alkamide trans-Pellitorine Targets PPAR γ via TRPV1 and TRPA1 to Reduce Lipid Accumulation in Developing 3T3-L1 Adipocytes*; Front. Pharmacol., **8** 316
- 4) Chepurny *et al.* (2016) *GPR119 Agonist AS1269574 Activates TRPA1 Cation Channels to Stimulate GLP-1 Secretion*; Mol. Endocrinol., **30** 614
- 5) Cheah *et al.* (2014) *Acrolein relaxes mouse isolated tracheal smooth muscle via a TRPA1-dependent mechanism*; Biochem. Pharmacol., **89** 148

PHYSICAL DATA

| | |
|------------------------|---|
| Molecular Weight: | 209.67 |
| Molecular Formula: | C ₁₁ H ₁₂ ClNO |
| Purity: | >98% (TLC: 10% Methanol/methylene chloride; R _f = 0.60) NMR: (Conforms) |
| Solubility: | DMSO (up to 25 mg/ml); ethanol (up to 25 mg/ml) |
| Physical Description: | White solid |
| Storage and Stability: | Store as supplied at room temperature for up to 2 years from the date of purchase. Protect from exposure to moisture. Solutions in DMSO may be stored at -20°C for up to 2 months. |

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