

Product data sheet



MedKoo Cat#: 571579 Name: Quinoclamine CAS: 2797-51-5 Chemical Formula: C ₁₀ H ₆ ClNO ₂ Exact Mass: 207.0087 Molecular Weight: 207.61	
Product supplied as: Powder	
Purity (by HPLC): ≥ 98%	
Shipping conditions: Ambient temperature	
Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Quinoclamine has anti-tumor activity.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	4.82 mL	24.08 mL	48.17 mL
5 mM	0.96 mL	4.82 mL	9.63 mL
10 mM	0.48 mL	2.41 mL	4.82 mL
50 mM	0.10 mL	0.48 mL	0.96 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- Cheng WY, Lien JC, Hsiang CY, Wu SL, Li CC, Lo HY, Chen JC, Chiang SY, Liang JA, Ho TY. Comprehensive evaluation of a novel nuclear factor-kappaB inhibitor, quinoclamine, by transcriptomic analysis. *Br J Pharmacol.* 2009 Jul;157(5):746-56. doi: 10.1111/j.1476-5381.2009.00223.x. Epub 2009 Apr 30. PMID: 19422389; PMCID: PMC2721260.

In vivo study

- Aida M, Ikeda H, Itoh K, Usui K. Effects of five rice herbicides on the growth of two threatened aquatic ferns. *Ecotoxicol Environ Saf.* 2006 Mar;63(3):463-8. doi: 10.1016/j.ecoenv.2005.02.010. PMID: 16406589.

7. Bioactivity

Biological target:

Quinoclamine is a naphthoquinone derivative and an NF-κB inhibitor.

In vitro activity

This study evaluated the anti-cancer potential of quinoclamine. They found that quinoclamine suppressed endogenous NF-κB activity in HepG2 cells through the inhibition of IκB -alpha phosphorylation and p65 translocation. Quinoclamine also inhibited induced NF-κB activities in lung and breast cancer cell lines. These findings suggest that quinoclamine is a novel NF-κB inhibitor with anti-cancer potential.

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Reference: Br J Pharmacol. 2009 Jul;157(5):746-56. <https://pubmed.ncbi.nlm.nih.gov/19422389/>

In vivo activity

The effects of five rice herbicides (one being quinoclamine) on the growth of Azolla japonica and Salvinia natans were tested. The results from this study suggest that bensulfuron methyl runoff in drainages and rivers in Japan is expected to have adverse effects on the growth of these threatened aquatic ferns, but there are minimal effects for the other four herbicides tested (one being quinoclamine)

Reference: Ecotoxicol Environ Saf. 2006 Mar;63(3):463-8. <https://pubmed.ncbi.nlm.nih.gov/16406589/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.