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# ProductInformation

**Quinacrine dihydrochloride**

Product Number **Q 3251**
Store at Room Temperature

## Product Description

Molecular Formula: $C_{23}H_{30}ClN_3O \cdot 2HCl$
Molecular Weight: 472.9
CAS Number: 69-05-6
Melting Point: 248-250 °C,[1]
$PK_a$: 10.3 and 7.7[2]
Fluorescent Properties:
Excitation maximum = 436 nm[2]
Emission maximum = 525 nm[2]
Synonyms: Atebrin dihydrochloride, Mepacrine dihydrochloride, 6-Chloro-9(4-diethylamino-1-methylbutylamino)-2-methoxyacridine dihydrochloride

Quinacrine is an inhibitor of phospholipase $A_2$ from porcine pancreas ($IC_{50}$ = 17 µM).[3] Quinacrine intercalates with DNA, inhibits some flavoprotein enzymes, and uncouples oxidative and photophosphorylation.[2] Quinacrine can also be used to differentiate between Y and X chromosomes as Y chromosomes apparently stain much better than X chromosomes using quinacrine and can be distinquished by fluorescent microscopy.[4]

## Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

## Preparation Instructions

This product is soluble in water (50 mg/ml with heat), yielding a clear solution.

## References

1. The Merck Index, 10th ed., Entry# 7946.
2. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), pp. 302-303.
3. Magolda, R. L., et al., in Prostaglandins, Leukotrienes, and Lipoxins: biochemistry, mechanism of action, and clinical applications, Bailey, J. M. ed., Plenum Press (New York, NY: 1985), p. 669-676.
4. Conn's Biological Stains, 9th ed., Lillie, R. D., Williams and Wilkins (Baltimore, MD: 1977), p. 361.

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