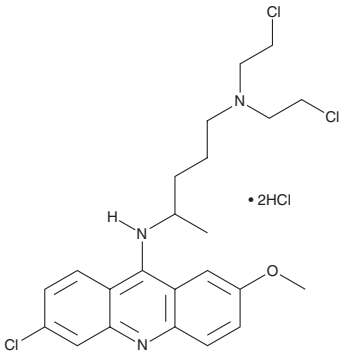
PRODUCT INFORMATION

Quinacrine mustard (hydrochloride)

Item No. 29653

CAS Registry No.:	4213-45-0
Formal Name:	N^1,N^1-*bis*(2-chloroethyl)-N^4-(6-chloro-2-methoxy-9-acridinyl)-1,4-pentanediamine, dihydrochloride
Synonym:	NSC 3424
MF:	$C_{23}H_{28}Cl_3N_3O$ • 2HCl
FW:	541.8
Purity:	≥85%
UV/Vis.:	λ_{max}: 222, 280, 424 nm
Ex./Em. Max:	425/480 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

Quinacrine mustard (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the quinacrine mustard (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Quinacrine mustard (hydrochloride) is soluble in the organic solvent chloroform. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Quinacrine mustard is a fluorescent DNA-intercalating agent.[1] It selectively binds to adenine-thymine (AT) base pairs over guanine-cytosine (GC) base pairs.[2,3] Quinacrine mustard has been used to label metaphase chromosomes for karyotyping by autoradiography.[1] It displays excitation/emission maxima of 425/480 nm, respectively.[4]

References

1. Caspersson, T., Farber, S., Foley, G.E., *et al.* Chemical differentiation along metaphase chromosomes. *Exp. Cell Res.* **49(1)**, 219-222 (1968).
2. Ellison, J.R. and Barr, H.J. Quinacrine fluorescence of specific chromosome regions. Late replication and high A:T content in *Samoaia leonensis*. *Chromosoma* **36(4)**, 375-390 (1972).
3. Weisblum, B. and De Haseth, P.L. Quinacrine, a chromosome stain specific for deoxyadenylate-deoxythymidylate-rich regions in DNA. *Proc. Natl. Acad. Sci. U.S.A.* **69(3)**, 629-632 (1972).
4. Chen, R.F. Fluorescence of quinacrine mustard conjugated to proteins. *Arch. Biochem. Biophys.* **172(1)**, 39-50 (1976).

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.

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