
Product Data Sheet

Product Name: Quinizarin

Cat. No.: GC61666

Chemical Properties

Cas. No. 81-64-1

SMILES O=C1C2=C(C=CC=C2)C(C3=C(O)C=CC(O)=C13)=OFormula $C_{14}H_8O_4$

M.Wt 240.21

Solubility DMSO : 3.33 mg/mL (13.86 mM; ultrasonic and warming and heat to 60°C)

Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Quinizarin (1,4-Dihydroxyanthraquinone), a part of the anticancer agents such as Doxorubicin, Daunorubicin, and Adriamycin, interacts with DNA by intercalating mode ($K_d=86.1 \mu\text{M}$). Quinizarin is used as a fungicide and pesticide chemical and has shown the ability to inhibit tumor cell growth[1][2].

1,4-Dihydroxyanthraquinone (1,4-DHAQ, a fluorophore) doped cellulose (CL) (denoted as 1,4-DHAQ@CL) microporous nanofiber film has been achieved via simple electrospinning and subsequent deacetylating, and used for highly sensitive and selective fluorescence detection of $\text{Cu}(2+)$ in aqueous solution[1].

[1]. Verebová V, et al. Anthraquinones quinizarin and danthron unwind negatively supercoiled DNA and lengthen linear DNA. *Biochem Biophys Res Commun.* 2014;444(1):50-55. [2]. Dominic Cheuk, et al. Investigation into solid and solution properties of quinizarin. [3]. Wang M, et al. Electrospun 1,4-DHAQ-doped cellulose nanofiber films for reusable fluorescence detection of trace Cu^{2+} and further for Cr^{3+} . *Environ Sci Technol.* 2012;46(1):367-373.

Caution: Product has not been fully validated for medical applications. For research use only.

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