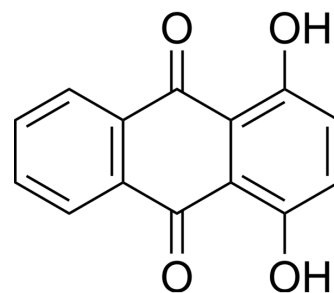


Quinizarin

| | |
|---------------------------|------------------------------------------------------------------------------------------------|
| Cat. No.: | HY-D0226 |
| CAS No.: | 81-64-1 |
| Molecular Formula: | C ₁₄ H ₈ O ₄ |
| Molecular Weight: | 240.21 |
| Target: | DNA/RNA Synthesis; Fungal |
| Pathway: | Cell Cycle/DNA Damage; Anti-infection |
| Storage: | 4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light) |



SOLVENT & SOLUBILITY

In Vitro

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

| Solvent | Mass | Concentration | | |
|---------------------------|-------|---------------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| Preparing Stock Solutions | 1 mM | 4.1630 mL | 20.8151 mL | 41.6302 mL |
| | 5 mM | 0.8326 mL | 4.1630 mL | 8.3260 mL |
| | 10 mM | 0.4163 mL | 2.0815 mL | 4.1630 mL |

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

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]}.

In Vitro

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 Cu(2+) in aqueous solution^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [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 Cu²⁺ and further for Cr³⁺. 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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