

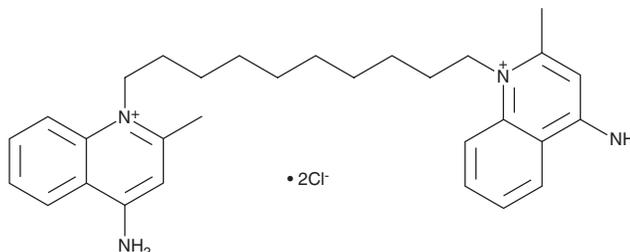
# PRODUCT INFORMATION



## Dequalinium (chloride)

Item No. 17557

**CAS Registry No.:** 522-51-0  
**Formal Name:** 1,1'-(1,10-decanediyl)bis[4-amino-2-methyl-quinolinium, dichloride  
**Synonym:** NSC 166454  
**MF:** C<sub>30</sub>H<sub>40</sub>N<sub>4</sub> • 2Cl  
**FW:** 527.6  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 210, 221, 242, 328, 341 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.

### Description

Dequalinium is a quaternary ammonium cation with diverse biological activities.<sup>1-3</sup> It has antifungal activity against *C. albicans*, *C. glabrata*, and *C. krusei* (MICs = 0.5-2, 64-256, and 128 µg/ml, respectively), antitrichomonal activity against *T. vaginalis* (MICs = 28.8-230.4 µg/ml), and antibacterial activity against a panel of aerobic and facultative anaerobic bacteria (MICs = 0.25-256 µg/ml).<sup>1</sup> Dequalinium inhibits apamin binding to, and net potassium loss mediated by, SK<sub>Ca</sub> channels in guinea pig hepatocytes stimulated by angiotensin II (Item No. 17150).<sup>2</sup> *In vivo*, dequalinium (1-10 mg/kg) inhibits primary and recurrent tumor growth in a W163 rat colon carcinoma isograft model.<sup>3</sup>

### References

1. Della Casa, C., Noll, H., Gonser, S., et al. Antimicrobial activity of dequalinium chloride against leading germs of vaginal infections. *Arzneimittelforschung* **52(9)**, 699-705 (2002).
2. Castle, N.A., Haylett, D.G., Morgan, J.M., et al. Dequalinium: A potent inhibitor of apamin-sensitive K<sup>+</sup> channels in hepatocytes and of nicotinic responses in skeletal muscle. *Eur. J. Pharmacol.* **236(2)**, 201-207 (1993).
3. Bleday, R., Weiss, M.J., and Salem, R.R. Inhibition of rat colon tumor isograft growth with dequalinium chloride. *Arch. Surg.* **121(11)**, 1272-1275 (1986).

#### 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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