

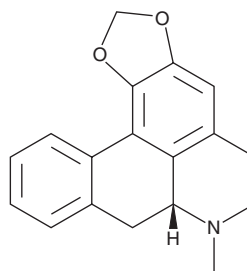
# PRODUCT INFORMATION



## Remerin

Item No. 36035

**CAS Registry No.:** 548-08-3  
**Formal Name:** 6,7aR,7a,8-tetrahydro-7-methyl-5H-benzo[g]-1,3-benzodioxolo[6,5,4-de]quinoline  
**Synonyms:** (-)-Roemerine, (R)-Roemerine  
**MF:** C<sub>18</sub>H<sub>17</sub>NO<sub>2</sub>  
**FW:** 279.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230, 272 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Nelumbo nucifera*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Remerin is supplied as a solid. A stock solution may be made by dissolving the remerin in the solvent of choice, which should be purged with an inert gas. Remerin is soluble in chloroform.

### Description

Remerin is an aporphine alkaloid that has been found in *N. nucifera* and has diverse biological activities.<sup>1-4</sup> It selectively binds to the serotonin (5-HT) receptor subtype 5-HT<sub>2A</sub> over 5-HT<sub>1A</sub> and dopamine D<sub>1</sub> and D<sub>2</sub> receptors (K<sub>i</sub>s = 0.0621, 1.17, 1.4, and 22.6 μM, respectively).<sup>2</sup> Remerin is active against *C. albicans* as well as chloroquine-resistant and -sensitive strains of *P. falciparum* with IC<sub>50</sub> values of 4.5, 0.4, and 0.2 μg/ml, respectively.<sup>1</sup> It enhances cytotoxicity induced by vinblastine (Item No. 11762) in multidrug-resistant KB-V1 oral epidermoid carcinoma cells.<sup>3</sup> Remerin (20 mg/kg) improves survival in a mouse model of sepsis induced by methicillin-resistant *S. aureus* (MRSA).<sup>4</sup>

### References

1. Agnihotri, V.K., ElSohly, H.N., Khan, S.I., *et al.* Constituents of *Nelumbo nucifera* leaves and their antimalarial and antifungal activity. *Phytochem. Lett.* **1(2)**, 89-93 (2008).
2. Munusamy, V., B.K., Y., Buckle, M.J.C., *et al.* Structure-based identification of aporphines with selective 5-HT<sub>2A</sub> receptor-binding activity. *Chem. Biol. Drug Des.* **81(2)**, 250-256 (2012).
3. You, M., Wickramaratne, D.B.M., Silva, G.L., *et al.* (-)-Roemerine, an aporphine alkaloid from *Annona senegalensis* that reverses the multidrug-resistance phenotype with cultured cells. *J. Nat. Prod.* **58(4)**, 598-604 (1995).
4. Yin, S., Rao, G., Wang, J., *et al.* Roemerine improves the survival rate of septicemic BALB/c mice by increasing the cell membrane permeability of *Staphylococcus aureus*. *PLoS One* **10(11)**, e0143863 (2015).

#### 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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