

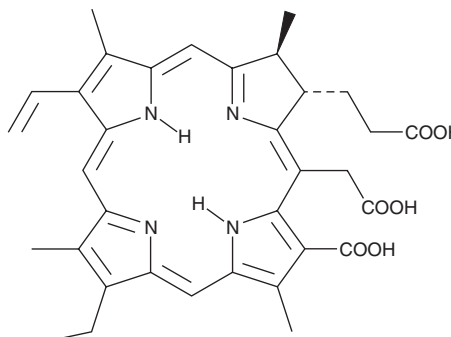
# PRODUCT INFORMATION



## Chlorin e6

Item No. 21684

**CAS Registry No.:** 19660-77-6  
**Formal Name:** (7S,8S)-3-carboxy-5-(carboxymethyl)-13-ethenyl-18-ethyl-7,8-dihydro-2,8,12,17-tetramethyl-21H,23H-porphine-7-propanoic acid  
**Synonym:** Ce6  
**MF:** C<sub>34</sub>H<sub>36</sub>N<sub>4</sub>O<sub>6</sub>  
**FW:** 596.7  
**Purity:** ≥90%  
**UV/Vis.:** λ<sub>max</sub>: 286, 400, 501, 608, 663 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

Chlorin e6 (Ce6) is supplied as a crystalline solid. A stock solution may be made by dissolving the Ce6 in the solvent of choice, which should be purged with an inert gas. Ce6 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of Ce6 in these solvents is approximately 30 mg/ml. Ce6 is also slightly soluble in ethanol.

Ce6 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Ce6 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ce6 has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Ce6 is a photosensitizer.<sup>1,2</sup> It is active against *S. aureus*, *P. aeruginosa*, *E. coli*, and *S. typhimurium* when used at a concentration of 20 μM in combination with photodynamic therapy (PDT).<sup>1</sup> Ce6 (5 and 10 mg/kg) induces tumor regression when combined with PDT in several sarcoma rat xenograft models.<sup>2</sup>

### References

1. Park, J.-H., Moon, Y.-H., Bang, I.-S., et al. Antimicrobial effect of photodynamic therapy using a highly pure chlorin e6. *Lasers Med. Sci.* **25**(5), 705-710 (2010).
2. Kostenich, G.A., Zhuravkin, I.N., Furmanchuk, A.V., et al. Sensitivity of different rat tumour strains to photodynamic treatment with chlorin e6. *J. Photochem. Photobiol. B.* **17**(2), 187-194 (1993).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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