

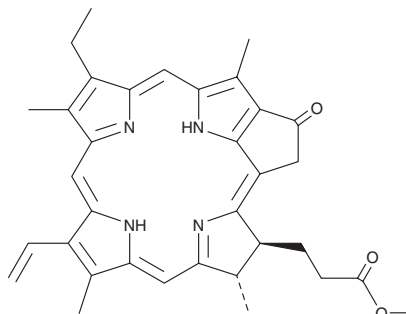
# PRODUCT INFORMATION



## Pyropheophorbide *a* methyl ester

Item No. 36512

**CAS Registry No.:** 6453-67-4  
**Formal Name:** 9-ethenyl-14-ethyl-4S,8,13,18-tetramethyl-20-oxo-3S-phorbinepropanoic acid, methyl ester  
**Synonyms:** Methyl pyropheophorbide *a*, NSC 267052, PPME  
**MF:** C<sub>34</sub>H<sub>36</sub>N<sub>4</sub>O<sub>3</sub>  
**FW:** 548.7  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 410, 667 nm  
**Supplied as:** A 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

Pyropheophorbide *a* methyl ester is supplied as a solid. A stock solution may be made by dissolving the pyropheophorbide *a* methyl ester in the solvent of choice, which should be purged with an inert gas. Pyropheophorbide *a* methyl ester is slightly soluble in chloroform and methanol (heated).

### Description

Pyropheophorbide *a* methyl ester is a photosensitizer and a derivative of chlorophyll *a* (Item No. 33399).<sup>1</sup> It induces cell death in RIF-1 cells when used in combination with photodynamic therapy (PDT) at concentrations of 0.06 and 1 μM. Pyropheophorbide *a* methyl ester localizes to cell membranes and induces IL-1 receptor internalization and NF-κB activation following light exposure in HCT116 cells.<sup>2</sup>

### References

1. Chen, Y., Zheng, X., Dobhal, M.P., *et al.* Methyl pyropheophorbide-*a* analogues: Potential fluorescent probes for the peripheral-type benzodiazepine receptor. Effect of central metal in photosensitizing efficacy. *J. Med. Chem.* **48(11)**, 3692-3695 (2005).
2. Matroule, J.-Y., Bonizzi, G., Morlière, P., *et al.* Pyropheophorbide-*a* methyl ester-mediated photosensitization activates transcription factor NF-κB through the interleukin-1 receptor-dependent signaling pathway. *J. Biol. Chem.* **274(5)**, 2988-3000 (1999).

#### 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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