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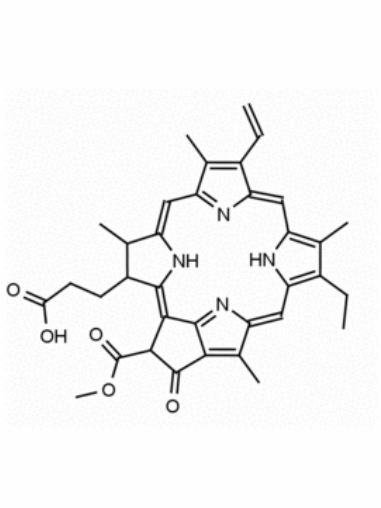
Technical Data Sheet
Catalog Number: **Pha-592**

For research use only
Not intended or approved for diagnostic or therapeutic use.

Product Name: Pheophorbide a (diastereomer mixture)

Catalog Number: Pha-592



Sizes Available: 50 mg, 100 mg, 250 mg, 500 mg and larger sizes available, Bulk pricing available

Molecular weight: 592.7 g/mol

Molecular Formula: $C_{35}H_{36}N_4O_5$

CAS Number: 15664-29-6

Storage: Store at room temperature, protect from light

Synonyms: Pheophorbide a, 15664-29-6, Phaeophorbid a, Phaeophorbid-a, Phaeophorbide A, UNII-IA2WNI2HO2, EINECS 239-738-5, IA2WNI2HO2, CHEBI:38257, CHEMBL510103, CHEMBL2006244

Field of Interest: Photodynamic Therapy, Inflammation activity, Photosynthesis and Chlorophyll degradation product

Background: Pheophorbide a is active as a photosensitizer in solar cell appliactions and is a substrate for mammalian cell transport proteins.[1, 2] It also is a catabolite of photosynthetic processes and a breakdown product of chlorophyll during senescence caused by oxygenases.[3,4]

References:

1) Kay, Andreas; Graetzel, Michael, Artificial photosynthesis. 1. Photosensitization of titania solar cells with chlorophyll derivatives and related natural porphyrins, Journal of Physical Chemistry (1993), 97(23), 6272-7.
2) Robey, Robert W.; Steadman, Kenneth; Polgar, Orsolya; Morisaki, Kuniaki; Blayney, Margaret; Mistry, Prakash; Bates, Susan E., 9. Pheophorbide a Is a Specific Probe for ABCG2 Function and Inhibition, Cancer Research (2004), 64(4), 1242-1246. DOI:10.1158/0008-5472.CAN-03-3298
3) Schelbert, Silvia; Aubry, Sylvain; Burla, Bo; Agne, Birgit; Kessler, Felix; Krupinska, Karin; Hortensteiner, Stefan, Pheophytin pheophorbide hydrolase (pheophytinase) is involved in chlorophyll breakdown during leaf senescence in Arabidopsis, Plant Cell (2009), 21(3), 767-785. DOI:10.1105/tpc.108.064089
4) Pruzinska, Adriana; Tanner, Gaby; Anders, Iwona; Roca, Maria; Hoertensteiner, Stefan, Chlorophyll breakdown: pheophorbinde a oxygenase is a Rieske-type iron-sulfur protein, encoded by the accelerated cell death 1 gene, Proceedings of the National Academy of Sciences of the United States of America (2003), 100(25), 15259-15264. Language: English, Database: CAPLUS, DOI:10.1073/pnas.2036571100