

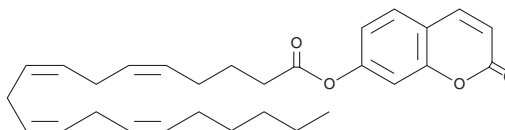
# PRODUCT INFORMATION



## 7-hydroxycoumarinyl Arachidonate

Item No. 62910

**CAS Registry No.:** 161180-11-6  
**Formal Name:** 5Z,8Z,11Z,14Z-eicosatetraenoic acid, 2-oxo-2H-1-benzopyran-7-yl ester  
**Synonym:** Umbelliferyl Arachidonate  
**MF:** C<sub>29</sub>H<sub>36</sub>O<sub>4</sub>  
**FW:** 448.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 282, 312 nm  
**Supplied as:** A solution in ethanol  
**Storage:** -80°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

7-hydroxycoumarinyl Arachidonate is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 7-hydroxycoumarinyl arachidonate in these solvents is approximately 25 and 50 mg/ml, respectively.

7-hydroxycoumarinyl Arachidonate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of umbelliferyl arachidonate should be diluted with the aqueous buffer of choice. 7-hydroxycoumarinyl Arachidonate has a solubility of approximately 50 µg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

7-hydroxycoumarinyl Arachidonate is the arachidonic acid ester of 7-hydroxycoumarin (umbelliferone) and behaves as a substrate for the cPLA<sub>2</sub>. Hydrolysis of 7-hydroxycoumarinyl arachidonate by phospholipase results in the release of the fluorescent compound, 7-hydroxycoumarin, which can be monitored spectrophotometrically (excitation at 335 nm, emission at 450 nm).<sup>1,2</sup>

### References

- Huang, Z., Lalibertè, F., Tremblay, N.M., *et al.* A continuous fluorescence-based assay for the human high-molecular-weight cytosolic phospholipase A<sub>2</sub>. *Anal. Biochem.* **222**, 110-115 (1994).
- Pickard, R.T., Chiou, X.G., Striffler, B.A., *et al.* Identification of essential residues for the catalytic function of 85-kDa cytosolic phospholipase A<sub>2</sub>. Probing the role of histidine, aspartic acid, cysteine, and arginine. *J. Biol. Chem.* **271**, 19225-19231 (1996).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM