

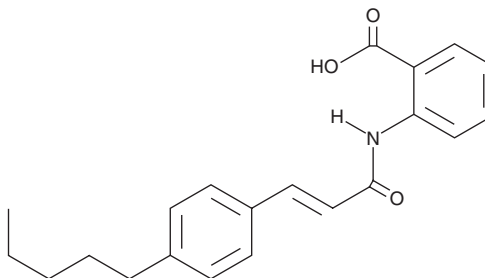
# PRODUCT INFORMATION



## N-(p-amylocinnamoyl) Anthranilic Acid

Item No. 14531

**CAS Registry No.:** 110683-10-8  
**Formal Name:** 2-[[1-oxo-3-(4-pentylphenyl)-2-propen-1-yl]amino]-benzoic acid  
**Synonym:** ACA  
**MF:** C<sub>21</sub>H<sub>23</sub>NO<sub>3</sub>  
**FW:** 337.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 216, 300, 323 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

N-(p-amylocinnamoyl) Anthranilic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the N-(p-amylocinnamoyl) anthranilic acid in the solvent of choice, which should be purged with an inert gas. N-(p-amylocinnamoyl) Anthranilic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-(p-amylocinnamoyl) anthranilic acid in ethanol and DMF is approximately 5 mg/ml and approximately 11.1 mg/ml in DMSO.

N-(p-amylocinnamoyl) Anthranilic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-(p-amylocinnamoyl) anthranilic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. N-(p-amylocinnamoyl) Anthranilic acid has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

N-(p-amylocinnamoyl) Anthranilic acid (ACA) is a channel blocker that acts on several transient receptor potential (TRP) channels, including TRPM2, TRPM8, and TRPC6 (IC<sub>50</sub> = 1.7, 3.8, and 2.3 μM, respectively).<sup>1,2</sup> It is a weak inhibitor of TRPV1.<sup>2</sup> ACA is also an inhibitor of phospholipase A<sub>2</sub>, blocking the release of arachidonic acid when given at 50 μM.<sup>3,4</sup>

### References

1. Kraft, R., Grimm, C., Frenzel, H., *et al.* Inhibition of TRPM2 cation channels by N-(p-amylocinnamoyl) anthranilic acid. *Br. J. Pharmacol.* **148(3)**, 264-273 (2006).
2. Harteneck, C., Frenzel, H., and Kraft, R. N-(p-amylocinnamoyl)anthranilic acid (ACA): A phospholipase A<sub>2</sub> inhibitor and TRP channel blocker. *Cardiovasc. Drug Rev.* **25(1)**, 61-75 (2007).
3. Konrad, R.J., Jolly, Y.C., Major, C., *et al.* Inhibition of phospholipase A<sub>2</sub> and insulin secretion in pancreatic islets. *Biochim. Biophys. Acta* **1135(2)**, 215-220 (1992).
4. Simonsson, E., Karlsson, S., and Ahrén, B. Ca<sup>2+</sup>-independent phospholipase A<sub>2</sub> contributes to the insulinotropic action of cholecystokinin-8 in rat islets. *Diabetes* **47(9)**, 1436-1443 (1998).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/27/2023

#### 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