

## Product datasheet

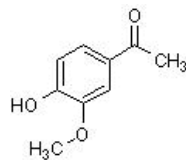
# Apocynin, NADPH-oxidase inhibitor ab120615

[5 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Apocynin, NADPH-oxidase inhibitor
<b>Description</b>	Selective NADPH-oxidase inhibitor
<b>Biological description</b>	Selective NADPH-oxidase inhibitor (IC <sub>50</sub> = 10 µM). Inhibits production of reactive oxygen species. Also elicits a range of <i>in vitro</i> and <i>in vivo</i> anti-inflammatory effects.
<b>CAS Number</b>	498-02-2

### Chemical structure



### Properties

<b>Chemical name</b>	4'-Hydroxy-3'-methoxyacetophenone
<b>Molecular weight</b>	166.18
<b>Molecular formula</b>	C <sub>9</sub> H <sub>10</sub> O <sub>3</sub>
<b>PubChem identifier</b>	2214
<b>Storage instructions</b>	Store at Room Temperature. The product can be stored for up to 12 months.
<b>Solubility overview</b>	Soluble in DMSO to 100 mM and in ethanol to 100 mM
<b>Handling</b>	<p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Refer to SDS for further information.</p> <p>Need more advice on solubility, usage and handling? Please visit our <a href="#">frequently asked questions (FAQ) page</a> for more details.</p>
<b>SMILES</b>	<chem>CC(=O)C1=CC(=C(C=C1)O)OC</chem>
<b>Source</b>	Synthetic

## Applications

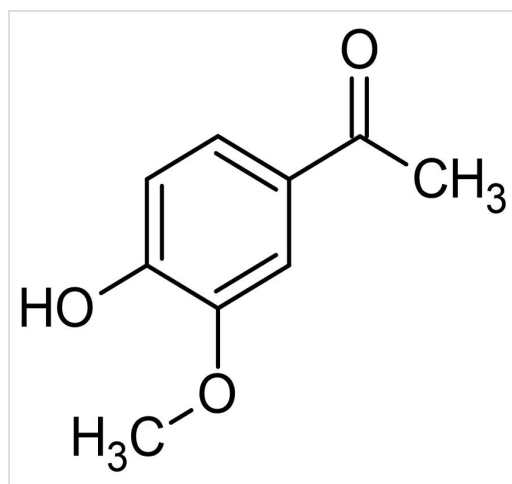
### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab120615 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

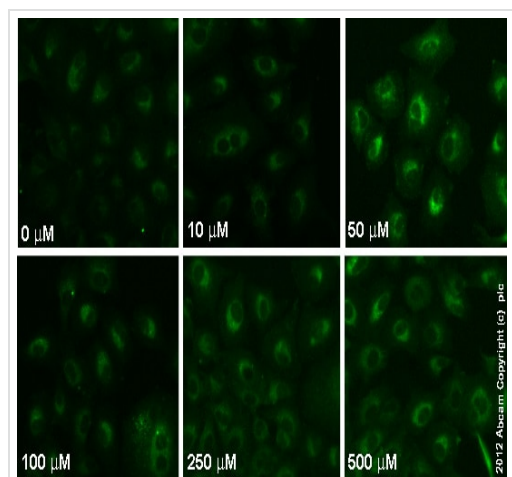
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

## Images



Chemical Structure - Apocynin, NADPH-oxidase inhibitor (ab120615)

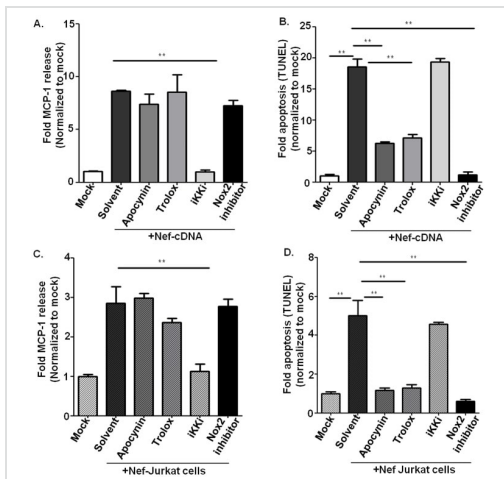
2D chemical structure image of ab120615, Apocynin, NADPH-oxidase inhibitor



Immunocytochemistry/ Immunofluorescence - Apocynin, NADPH-oxidase inhibitor (ab120615)

**ab19534** staining glutathione in A549 cells treated with apocynin (ab120615), by ICC/IF. Increase in glutathione expression correlates with increased concentration of apocynin, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of ab120615 (apocynin) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab19534** (10 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-mouse polyclonal antibody (**ab96879**) at 1/250 dilution was used as the secondary antibody.



Functional Studies - Apocynin, NADPH-oxidase inhibitor (ab120615)

Image from Wang T et al., PloS one., 9(3): e91063. Fig 6.; doi: 10.1371/journal.pone.0091063 Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>

A–B. Endothelial cells were transfected with Nef cDNA, incubated for further 6 hours and treated with apocynin (200 nM), trolox (200 nM), Nox2 inhibitor (1 uM) or IKKi (100 nM). After additional 18 hours supernatants were analyzed for Nef-induced MCP-1 production (A) and endothelial cells for apoptosis using TUNEL (B). C–D. Endothelial cells were cocultured with Nef-transfected Jurkat cells for 24 h, and then treated with apocynin (200 nM), trolox (200 nM), Nox2 inhibitor (1 uM) or IKKi (100 nM) and incubated an additional 18 h, then analyzed for Nef-induced MCP-1 production (C) and apoptosis of endothelial cells (D). Data were expressed as fold MCP-1 production and apoptosis, normalized to the mean of control measurements. Data represent mean±SD from 3 separate experiments in which measurements were made in triplicate.

\*P<0.05, and \*\*P<0.01.

Wang T et al., PloS one., 9(3): e91063. Fig 6.; doi: 10.1371/journal.pone.0091063

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

**Our Abpromise to you: Quality guaranteed and expert technical support**

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

**Terms and conditions**

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team