

Ppc-1, MitoUncoupler

Catalog NO. FDV-0011

Research use only, not for human or animal therapeutic or diagnostic use.

This product has been commercialized under the license from Tohoku University and Fukushima Medical University.

Product Background

Ppc-1 is a novel small molecule derived from cellular slime mold *Polysphondylium pseudo-candidum*. It enhances oxygen consumption in a dose-dependent manner and acts as moderate mitochondrial oxidative phosphorylation uncoupler without adverse effects on ATP production. In addition, Ppc-1 shows little cytotoxicity and enable us to use it *in vivo*.

Description

Catalog Number: FDV-0011

Size: 5 mg

Formulation: C₂₁H₂₅NO₄

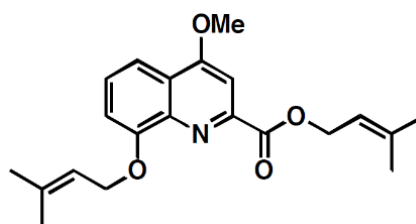
Molecular weight: 355.43 g/mol

Chemical structure: see right figure

CAS No.: 1245818-17-0

Solubility: Soluble in DMSO

Purity: \geq 98%



Reconstitution and Storage

Reconstitution: Stock solution recommended concentration 10 mM in 100% DMSO.

In the case of poor solubility, vortex or heat at 37°C.

Storage (powder): Store powder at -20°C.

Storage (solution): After reconstitution in DMSO, aliquot and store at -20°C.

Avoid repeated freeze-thaw cycles and protect from light.

Reference

1. Suzuki *et al.*, *PLoS One.*, **10**, e0117088 (2015) Weight loss by Ppc-1, a novel small molecule mitochondrial uncoupler derived from slime mold
2. Kikuchi *et al.*, *Bioorg. Med. Chem.*, **23**, 66-72 (2015) Synthesis of prenylated quinolinecarboxylic acid derivatives and their anti-obesity activities
3. Kikuchi *et al.*, *Tetrahedron.*, **66**, 6000-6007 (2010) Novel prenylated and geranylated aromatic compounds isolated from *Polysphondylium* cellular slime molds

Related products

FAOBlue <Fatty Acid Oxidation Detection Reagent>

FAOBlue is a cell-based fatty acid beta-oxidation (FAO) detection dye which emits blue fluorescence upon FAO activity. FAOBlue enables to quantitatively monitor mainly mitochondrial FAO activities under various conditions.

Catalog No. FDV-0033

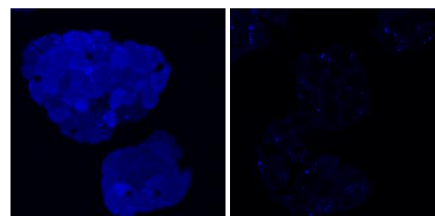
Size 0.2 mg

Features

- Recommended Ex/Em:~405 nm / 460 nm
- Enable to detect cellular FAO activity directly without any specific equipment, only need microscopy.
- Monitor drug-induced change of FAO activity quantitatively.

FAOBlue

FAOBlue
+ FAO inhibitor



Disclaimer/免責事項

This product has been commercialized by Funakoshi Co., Ltd. based on the results of academic research, and the advertisement text, figures and manuals (hereinafter “Product information”) have been prepared based on published research reports on September, 2015. The academic interpretation at the time of creation of the Product Information may change in accordance with future developments in the relevant research field and expansion of various scientific findings, and the latest version and certainty of the Product Information are not guaranteed. The specifications of this product and the Product Information are subject to change without notice. Please contact us for the latest information.

本製品は学術研究成果を基にフナコシ株式会社が製品化したもので、2015年9月時点における公開研究報告を基に広告文章およびマニュアル(以下、製品資料)を作成しています。今後の当該研究分野の発展および各種学術知見の拡大にともない、製品資料作成時の学術的解釈が変更になる可能性があり、最新性・確実性を保証するものではありません。また、本製品の仕様および製品資料を予告なく変更する場合がございます。最新の情報に関しましては、弊社までご確認いただけますようお願い申し上げます。



E-mail Newsletter
Sign Up

Japanese



English



 **funakoshi**
FRONTIERS IN LIFE SCIENCE

URL: <http://funakoshi.co.jp>
9-7 Hongo 2-Chome, Bunkyo-ku, Tokyo 113-0033