Overview

Product name  
FCCP, mitochondrial oxidative phosphorylation uncoupler

Description  
Potent mitochondrial oxidative phosphorylation uncoupler

Biological description  
Potent mitochondrial oxidative phosphorylation uncoupler (IC\textsubscript{50} = 20 nM). Disrupts ATP synthesis by transporting protons across mitochondrial inner membranes. Depolarises mitochondrial membrane potential.

Purity  
> 99%

CAS Number  
370-86-5

Chemical structure

![Chemical Structure](image)

Properties

Chemical name  
Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone

Molecular weight  
254.17

Molecular formula  
C\textsubscript{10}H\textsubscript{5}F\textsubscript{3}N\textsubscript{4}O

Storage instructions  
Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.

Solubility overview  
Soluble in DMSO to 100 mM

Handling  
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.

Toxic, refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

SMILES  
FC(F)(F)Oc1ccc(cc1)NN=C(/C#N)C#N

Source  
Synthetic
HT29 cells were treated with the indicated compounds ((etoposide, 10 µM; gemcitabine 0.1 µM; paclitaxel 0.01 µM; PD901 1 µM, VX-680 0.2 µM) for 24 hours before analysis of oxygen consumption rate (OCR) and extracellular acidification rate (ECAR) using the Seahorse XF96 extracellular flux analyzer. Baseline rates (black) were determined at the indicated times before the addition of oligomycin (green) and then FCCP (red). Rate data are normalized to per-well cell number determined by post-analysis high-content imaging.

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