# FCCP, mitochondrial oxidative phosphorylation uncoupler ab120081

## Overview

**Product name**
FCCP, mitochondrial oxidative phosphorylation uncoupler

**Description**
Potent mitochondrial oxidative phosphorylation uncoupler

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

**CAS Number**
370-86-5

**Chemical structure**
![Chemical structure of FCCP](image)

**Chemical name**
Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone

**Molecular weight**
254.17

**Molecular formula**
C$_{10}$H$_5$F$_3$N$_4$O

**PubChem identifier**
330

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

## Properties

**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
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"

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