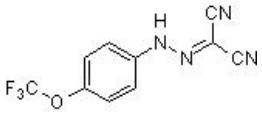
abcam

Product datasheet

FCCP, mitochondrial oxidative phosphorylation uncoupler ab120081

1 Abreviews 38 References 2 Images

Overview

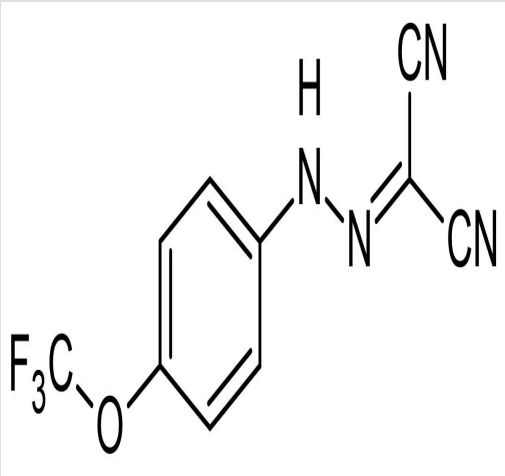
Product name	FCCP, mitochondrial oxidative phosphorylation uncoupler
Description	Potent mitochondrial oxidative phosphorylation uncoupler
Biological description	Potent mitochondrial oxidative phosphorylation uncoupler (IC_{50} = 20 nM). Disrupts ATP synthesis by transporting protons across mitochondrial inner membranes. Depolarises mitochondrial membrane potential.
Purity	> 99%
CAS Number	370-86-5
Chemical structure	

Properties

Chemical name	Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone
Molecular weight	254.17
PubChem identifier	3330
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

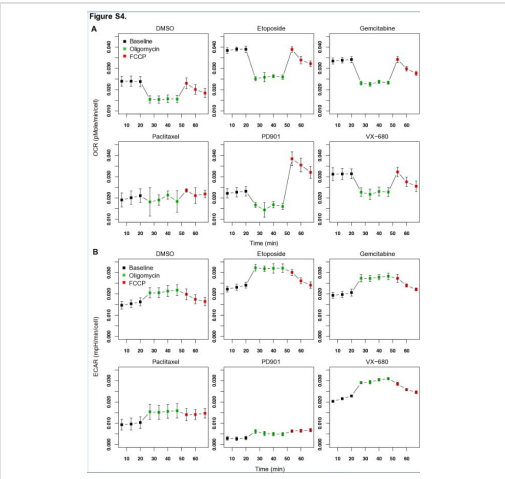
Source Synthetic

Images



2D chemical structure image of ab120081, FCCP, mitochondrial oxidative phosphorylation uncoupler

Chemical Structure - FCCP, mitochondrial oxidative phosphorylation uncoupler (ab120081)



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.

Cellular activation - FCCP, mitochondrial oxidative phosphorylation uncoupler (ab120081)

Image from Chan G K Y, et al. Plos One, 8(5), e63583. Fig S4,; doi: 10.1371/journal.pone.0063583

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