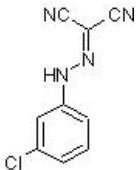


CCCP, Mitochondrial oxidative phosphorylation uncoupler ab141229

[16 References](#) [5 图像](#)

概述

产品名称	CCCP, Mitochondrial oxidative phosphorylation uncoupler
描述	Potent mitochondrial oxidative phosphorylation uncoupler
生物学描述	Potent mitochondrial oxidative phosphorylation uncoupler. Renders mitochondrial inner membrane permeable to protons. Induces apoptosis <i>in vitro</i> .
纯度	> 99%
CAS编号	555-60-2
化学结构	

性能

化学名称	2-[2-(3-Chlorophenyl)hydrazinylidene]propanedinitrile
分子量	204.62
分子式	C ₉ H ₅ ClN ₄
PubChem识别号	2603
存放说明	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
溶解度概述	Soluble in DMSO to 100 mM and in ethanol to 100 mM
处理	<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>Toxic, refer to SDS for further information.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>

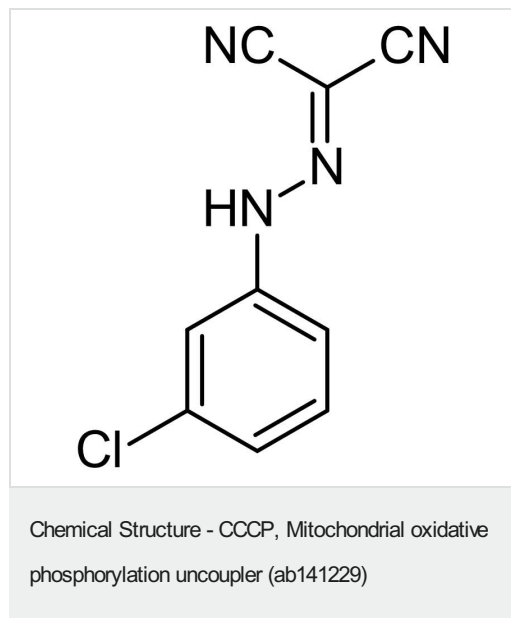
SMILESClc1cc(NN=C(/C#N)C#N)ccc1**来源**

Synthetic

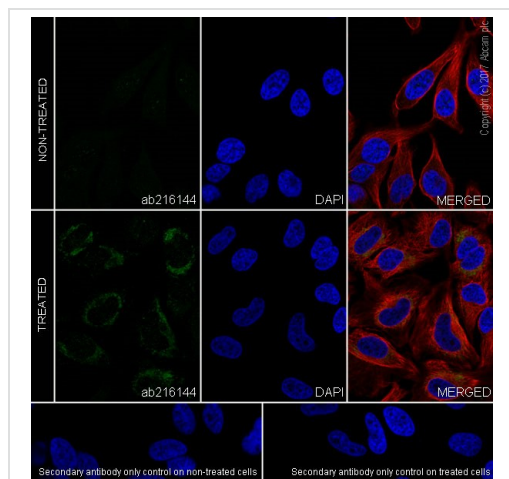
应用**The Abpromise guarantee****Abpromise™** 承诺保证使用 ab141229 于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

应用	Ab 评论	说明
Functional Studies		Use at an assay dependent concentration.

图片

2D chemical structure image of ab141229, CCCP, Mitochondrial oxidative phosphorylation uncoupler

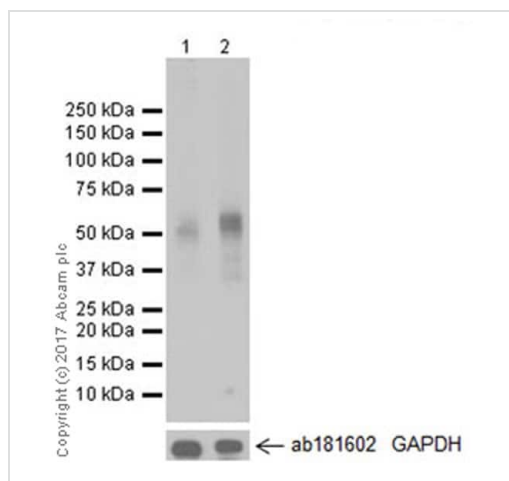


Immunocytochemistry/ Immunofluorescence -
CCCP, Mitochondrial oxidative phosphorylation
uncoupler (ab141229)

Immunofluorescent analysis of 4 % paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma)(+/- treatment with 10μM carbonyl cyanide 3-chlorophenylhydrazone (CCCP, ab141229) for 24 hours) cells labeling PINK1 with **ab216144** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HeLa cells treated with 10μM carbonyl cyanide 3-chlorophenylhydrazone (CCCP, ab141229) for 24 hours. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

The negative controls are as follows:

-ve control: PBS, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Western blot - CCCP, Mitochondrial oxidative
phosphorylation uncoupler (ab141229)

All lanes : Anti-PINK1 antibody [EPR20730] (**ab216144**) at 1/1000 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : HeLa cells (treated with 10uM carbonyl cyanide 3-chlorophenylhydrazone (CCCP, ab141229) for 24 hours) whole cell lysate

Lysates/proteins at 20 μg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

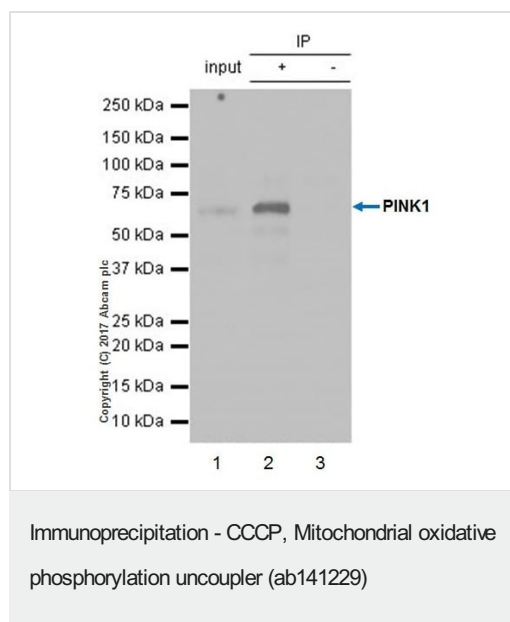
Developed using the ECL technique.

Observed band size: 62 kDa

Exposure time: 5 seconds

Blocking and dilution buffer: 5% NFDm/TBST

PINK1 can be induced by CCCP treatment (PMID: 24184327).



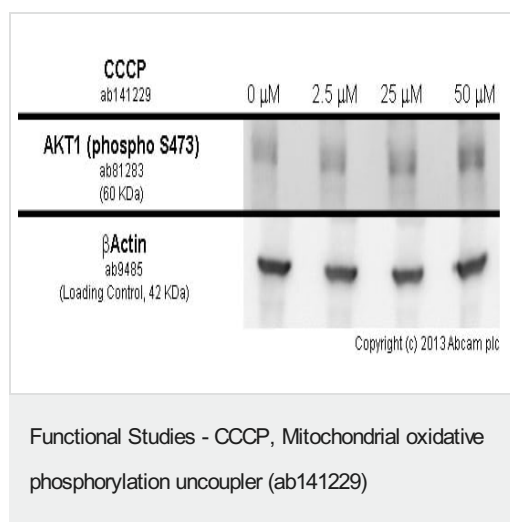
PINK1 was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) (treated with 10uM carbonyl cyanide 3-chlorophenylhydrazone (CCCP. ab141229) for 24 hours) whole cell lysate with **ab216144** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab216144** at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: HeLa (CCCP-treated, ab141229) lysate 10 µg (Input).

Lane 2: **ab216144** IP in HeLa (CCCP-treated, ab141229) lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab216144** in HeLa (CCCP-treated, ab141229) whole cell lysate.

Blocking and dilution buffer: 5% NFDM/TBST.



MCF7 cells were incubated at 37°C for 2 hours with vehicle control (0 µM) and different concentrations of CCCP (ab 141229). Increased expression of AKT1 (phospho S473) (**ab81283**) in MCF7 cells correlates with an increase in CCCP concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10 µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with **ab81283** at 2 µg/ml and **ab8227** at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 and visualised using ECL development solution.

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