



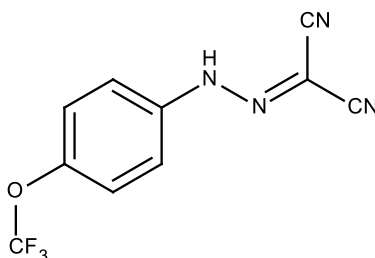
Catalog # 10-1182

FCCP

CAS# 370-86-5

Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone

Lot # X102240



An extremely potent uncoupler of mitochondrial oxidative phosphorylation ($IC_{50} = 20 \text{ nM}$).¹ Induces apoptosis in a variety of cell lines.² Inhibits wild type and mutant beta-amyloid production in embryonic kidney 293 cells expressing either wild-type or "Swedish" mutant APP.³ An important tool for inhibiting mitochondrial membrane potential.^{2,4} Cell permeable.

- 1) Benz R & McLaughlin S, (1983). *The molecular mechanism of action of the proton ionophore FCCP (carbonylcyanide p-trifluoromethoxyphenylhydrazone)*. Biophys J **41** 381
- 2) Gautier *et al.* (2000), *A moderate but not total decrease of mitochondrial membrane potential triggers apoptosis in neuron-like cells.*; Neuroreport **11** 2953
- 3) Connop *et al.* (1999), *Novel effects of FCCP [carbonyl cyanide p-(trifluoromethoxy)phenylhydrazone] on amyloid precursor protein processing*; J. Neurochem. **72** 1457
- 4) Collins *et al.* (2000), *Inositol 1,4,5-trisphosphate-induced Ca²⁺ release is inhibited by mitochondrial depolarization.*; Biochem. J. **347** 593

PHYSICAL DATA

Molecular Weight:	254.17
Molecular Formula:	C ₁₀ H ₅ F ₃ N ₄ O
Purity:	>98% HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml); ethanol (up to 25 mg/ml)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at room temperature for up to 2 years from the date of purchase. Protect from exposure to moisture and air. Solutions in DMSO and ethanol may be stored at -20°C for up to 2 months.

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