Introduction

Oxidative phosphorylation combines two simultaneous processes: the electron transport chain and chemiosmotic coupling. The electron transport chain (also known as the respiratory chain) comprises 4 complexes located in the inner mitochondrial membrane, which pass electrons from one electron acceptor to the next to generate a transmembrane redox potential while the electron loss energy. Typically, NADH and FADH₂, produced from glycolysis and the Krebs cycle, release electrons at certain points in the chain.

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Products descriptions
Technical and scientific information

CCCP #09164

- **Name:** Carbonyl cyanide 3-chlorophenylhydrazone
- **Catalog Number:** 091640, 500mg
- **Structure:** CAS: [555-60-2]
- **Molecular Weight:** MW = 204.62
- **Solubility:** Soluble to 100 mM in DMSO
- **Storage:** Room Temperature, protect from moisture

**Biological Activity:**
Widely used uncoupler of oxidative phosphorylation

**References:**

FCCP (mCCP) #33361

- **Name:** Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone
- **Catalog Number:** 333861, 10mg
- **Structure:** CAS:[370-86-5]
- **Molecular Weight:** MW = 251.1
- **Solubility:** Soluble to 100 mM in DMSO and to 5 mM in ethanol
- **Storage:** Room Temperature, protect from moisture

Contact your local distributor
Interbiotech@interchim.com

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03103 Montluçon Cedex - France
Tel: 04 70 03 88 56 - Fax 04 70 03 92 60

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Biological Activity:
A very potent uncoupler of oxidative phosphorylation in mitochondria

References:

Maloneben #RL240

Name : 3,5-Di-tert-butyl-4-hydroxybenzylidenemalononitrile
Catalog Number : FP-RL2400, 10mg
Structure : CAS:[10537-47-0]
Molecular Weight : MW= 282.38
Solubility: Soluble to 75 mM in DMSO
Storage: Room Temperature, protect from moisture

Biological Activity:
Potent uncoupler of oxidative phosphorylation

References:

Enterostatin #MV889

Name : Ala-Pro-Gly-Pro-Arg
Sequence: APGPR
Catalog Number : MV8890, 2mg
Structure : CAS:[117830-79-2]
Molecular Weight : MW= 496.57
Solubility: Soluble to 100 mM in DMSO and to 5 mM in ethanol
Storage: -20°C, protect from moisture

Biological Activity:
N’ terminal peptide fragment of procolipase that binds to the β-subunit of F1-ATPase. Activates the ERK and cAMP signaling pathways, and downregulates expression of Krüppel-like factor 4 (KLF4) and agouti-related peptide (AgRP) in vitro. Inhibits insulin secretion from pancreatic β-cells by downregulating expression of dynamin2 and altering protein trafficking. Reduces dietary fat intake via activation of CCK1, induces satiety, enhances memory-consolidation and exhibits hypocholesterolemic activity in vivo. Orally active. Technical Data M.Wt:496.57Formula:Storage:Store at -20°C CAS No:[]

References:
BioSciences

FT-091640
Rotenone #61964

Name: Rotenone
Catalog Number: 02859A, 50mg
Structure: CAS: [83-79-4]
Molecular Weight: MW = 394.42
Solubility: Soluble to 100 mM in DMSO and to 5 mM in ethanol
Storage: Room Temperature, protect from moisture

(2R,6aS,12aS)-1,2,12,12a-Tetrahydro-8,9-dimethoxy-2-(1-methylethenyl)-[1]benzopyrano[3,4-b]furo[2,3-h][1]benzopyran-6(6aH)-one

Biological Activity:
Mitochondrial electron transport chain inhibitor (IC50 = 1.7 - 2.2 μM at complex I). Inhibits NADH oxidation by cardiac sarcoplasmic reticulum (IC50 = 3.4 nM). Commonly used pesticide and induces Parkinsonism in animal models. Cell-permeable and brain penetrant.

References:

Directions for use

Guidelines for use
Protocol may be found in the literature.

Related / associated products and documents
See Products Highlights, BioSciences Innovations catalogue and e-search tool.

Ordering information

Catalog size quantities and prices may be found at www.interchim.com/
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : Interchim; Hotline : +33(0)4 70 03 73 06
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