BioVision 2/13

PRODUCT: Rotenone

ALTERNATE NAME: (2*R*,6a*S*,12a*S*)-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

CATALOG #: 2248-250, 1000

AMOUNT: 250 mg, 1g

STRUCTURE:

MOLECULAR FORMULA: C₂₃H₂₂O₆

MOLECULAR WEIGHT: 394.42

CAS NUMBER: 83-79-4

APPEARANCE: White to yellow solid

SOLUBILITY: DMSO (100 mM) or EtOH (5 mM)

PURITY: ≥95% by HPLC

STORAGE: At -20°C. Protect from light and moisture

DESCRIPTION: A broad spectrum insecticide that is cell-permeable and brain-

permeable. Acts as a mitochondrial electron transport chain inhibitor ($IC_{50} = 1.7 - 2.2 \,\mu\text{M}$ at complex I). Inhibits NADH oxidation by cardiac sarcoplasmic reticulum ($IC_{50} = 3.4 \,\text{nM}$). Neurotoxic agent that has also been used successfully to reproduce Parkinsons-like characteristics in *in-vitro* slice

culture models.

REFRENCE: Marella, M., et al. (2008). PLoS One 3, e1433; Gomez, C., et

al. (2007). Front. Biosci. 12, 1079-1093.

HANDLING: Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

Antimycin A (Cat. No. 2247-5, 25)
Aptenin A5 (Cat. No. 2210-250, 1000)
Auranofin (Cat. No. 2219-10, 50)
Bilobalide (Cat. No. 2028-10, 50)
Decylubiquinone (Cat. No. 2099-1, 10)

JC-1 (Cat. No. 1130-5)

Phenformin hydrochloride (Cat. No. 1889-100, 1000)

USAGE: FOR RESEARCH CH USE ONLY! Not to be used in

humans