STRUCTURE:

02/14

For research use only

Product: Ruthenium Red

ALTERNATE NAME: Ammoniated Ruthenium Oxychloride

CATALOG #: 2490-100, 500

AMOUNT: 100 mg, 500 mg

H₃N - Ru - O - Ru - O - Ru - NH₃ | H₃N | H₃ | H₃N |

MOLECULAR FORMULA: H₄₂N₁₄O₂Ru₃Cl₆

MOLECULAR WEIGHT: 786.35

CAS No. 11103-72-3

APPEARANCE: Brown or dark purple solid

SOLUBILITY: H_2O (~8 mg/ml)

STORAGE: Store at -20°C. Protect from air and light

DESCRIPTION: Ruthenium red is an inhibitor of mitochondrial Ca²⁺ uniporter;

also blocks cell membrane-located capsaicin-activated cation channels (IC $_{50}$ = 14 nM) and voltage-sensitive Ca $^{2+}$ channels to inhibit neurotransmitter release. In addition, it specifically blocks the curcumin-induced apoptosis in U937 cells.

REFERENCES: Bae, J.H., et al. (2003). Biochem. Biophys.Res. Commun.

303. 1073-1079.

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

the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

Amlodipoine besylate (Cat. No. 2378-50, 250)

2-APB (Cat. No. 1798-100)

Calcitriol (Cat. No. 1880-50, 250)

Felodipine (Cat. No. 2399-10, 50)

Pamidronate disodium (Cat. No. 1884-50, 250)

Ryanodine (Cat. No. 2489-500, 1000)

Thapsigargin (Cat. No. 1558-1)

FOR RESEARCH USE ONLY! Not to be used in humans.