

Product Name: RuBi-Dopa

Catalog No.: 4932

Batch No.: 2

IUPAC Name: (bis(2,2'-Bipyridine-*N,N'*)trimethylphosphine)-(S)-(3,4-Dihydroxyphenyl)ethylamino ruthenium(2⁺) dichloride complex

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₁H₃₆Cl₂N₅O₂PRu

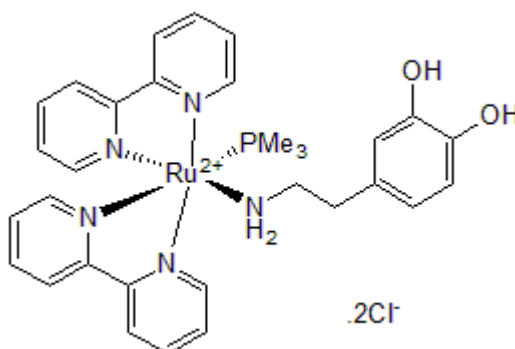
Batch Molecular Weight: 713.6

Physical Appearance: Orange solid

Solubility: water to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

RuBi-caged dopamine (Cat. No. 3548); exhibits two-photon sensitivity. Enables non-invasive, optical activation of dopamine receptors with the spatial resolution of a single dendritic spine. Does not display phototoxicity at a concentration of 300 μ M.

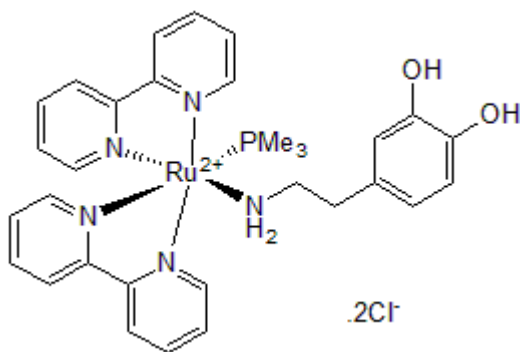
Physical and Chemical Properties:

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Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

water to 20 mM

CAUTION: RuBi-Dopa is light sensitive and all experiments should be conducted with minimal light.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Araya *et al* (2013) Two-photon optical interrogation of individual dendritic spines with caged dopamine. ACS Chem. Neurosci. [Epub ahead of print]. PMID: 23672485.

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