

Product Name: RuBi-GABA

Catalog No.: 3400

Batch No.: 12

CAS Number: 1028141-88-9

IUPAC Name: (bis(2,2'-Bipyridine-*N,N'*)triphenylphosphine)-4-aminobutyric acid ruthenium hexafluorophosphate complex

1. PHYSICAL AND CHEMICAL PROPERTIES

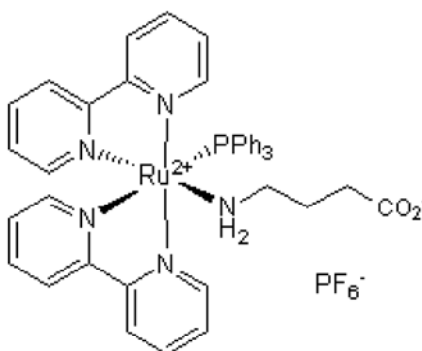
Batch Molecular Formula: C₄₂H₃₉F₆N₅O₂P₂Ru

Batch Molecular Weight: 922.8

Physical Appearance: Orange solid

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure

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

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Description:

RuBi-GABA is a ruthenium-bipyridine-triphenylphosphine caged GABA (Cat. No. 0344) that is excited by visible wavelengths. Provides greater tissue penetration, less phototoxicity, faster photorelease kinetics and better spatial resolution than UV light-sensitive caged compounds. Produces GABA receptor-mediated currents in pyramidal neurons in vitro and displays no effect on endogenous GABAergic or glutamatergic transmission at concentrations effective for uncaging.

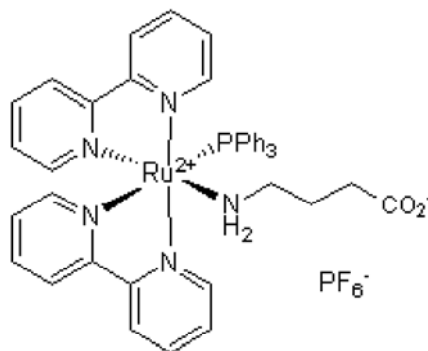
Physical and Chemical Properties:

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Solubility & Usage Info:

RuBi-GABA is soluble in water, but its PF₆ salts are slow to solubilise. To achieve concentrations of greater than 1mM (up to 10mM) please refer to the detailed solubility guidelines available on-line.

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

Licensing Information:

Sold under licence from Columbia University

References:

Rial Verde et al (2008) Photorelease of GABA with visible light using an inorganic caging group. *Front.Neural Circuits* **2** 2. PMID: 18946542.

Zayat et al (2003) A new strategy for neurochemical photodelivery: Metal-ligand heterolytic cleavage. *J.Am.Chem.Soc.* **125** 882. PMID: 12537482.

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