# RuBi-Glutamate hexafluorophosphate sodium

Cat. No.: HY-131885 CAS No.: 2417096-44-5

Molecular Formula:  $C_{28}H_{32}F_{12}N_{5}Na_{2}O_{4}P_{3}Ru$ 

Molecular Weight: 970.54 Others Target: Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

**Product** Data Sheet

## **BIOLOGICAL ACTIVITY**

Description

RuBi-Glutamate hexafluorophosphate sodium is a novel cage glutamate compound based on ruthenium photochemistry. RuBi-Glutamate hexafluorophosphate sodium can be excited at visible wavelengths and release glutamate after single or two-photon excitation. It has high quantum efficiency and can be used at low concentrations, partially avoiding the blocking of GABA energy transmission by other cage compounds. Two-photon release of RuBi-Glutamate hexafluorophosphate sodium has high spatial resolution and produces a physiodynamic excitatory response in a single dendritic spine<sup>[1]</sup>.

### **REFERENCES**

[1]. Fino E, et al. RuBi-Glutamate: Two-Photon and Visible-Light Photoactivation of Neurons and Dendritic spines. Front Neural Circuits. 2009 May 27;3:2.

Caution: Product has not been fully validated for medical applications. For research use only.