

PRODUCT INFORMATION



RuBi-GABA

Item No. 43423

CAS Registry No.: 1028141-88-9
Formal Name: (OC-6-23)-[4-(amino-κN)butanoato]
bis(2,2'-bipyridine-κN¹,κN^{1'})
(triphenylphosphine)-ruthenium(1+),
hexafluorophosphate(1-)

Synonym: [Ru(bpy)₂PPh₃GABA]²⁺

MF: C₄₂H₃₉N₅O₂PRu • F₆P

FW: 922.8

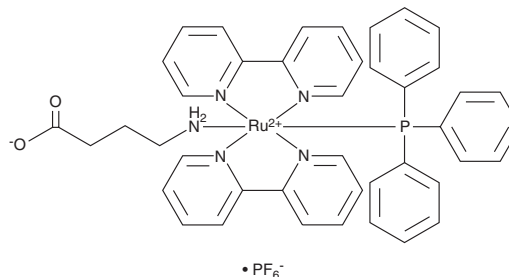
Purity: ≥90%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Special Conditions: Light sensitive



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

RuBi-GABA is supplied as a solid. A stock solution may be made by dissolving the RuBi-GABA in the solvent of choice, which should be purged with an inert gas. RuBi-GABA is soluble (≥10 mg/ml) in DMSO. RuBi-GABA is sparingly soluble (1-10 mg/ml) in ethanol.

Description

RuBi-GABA is a ruthenium bipyridine and triphenylphosphine caged complex that contains GABA.¹ It displays an absorbance maxima at 424 nm and releases GABA upon excitation at 450 nm. RuBi-GABA (30 μM) decreases membrane ion currents in isolated frog oocytes. Perfusion of RuBi-GABA (0.2 mM) and excitation at 473 nm reduces the duration of 4-aminopyridine-induced neocortical seizures in mice.²

References

1. Zayat, L., Noval, M.G., Campi, J., *et al.* A new inorganic photolabile protecting group for highly efficient visible light GABA uncaging. *Chembiochem* **8**(17), 2035-2038 (2007).
2. Wang, D., Yu, Z., Yan, J., *et al.* Photolysis of caged-GABA rapidly terminates seizures *in vivo*: Concentration and light intensity dependence. *Front. Neurol.* **8**, 215 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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