

## CERTIFICATE OF ANALYSIS

**Product No.**

F3R001C

**Lot No.**

CI09A-SF

### RUB-C3-COOH

**Bis(2,2'-bipyridine)-[4-(4'-methyl-2,2'-bipyridine-4-yl)butanoic acid] ruthenium bis(hexafluorophosphate)**

**Comments:**

Carboxylic acid functionalised Ru(bpy)<sub>3</sub> derivative bearing a short (C3) spacer arm. Useful label for fluorescence and electrochemiluminescence detection. Reacts towards amines via carbodiimide activation.

**CAS No:**

**Mol. Formula:** C<sub>35</sub>H<sub>32</sub> F<sub>12</sub>N<sub>6</sub>O<sub>2</sub>P<sub>2</sub>Ru

**Mol. Weight:** 959.67

**λ<sub>abs</sub> (nm):** 452

**λ<sub>em</sub> (nm):** 628

**ε (M<sup>-1</sup>cm<sup>-1</sup>):** 14600

**Assay:** Min. 98%

**Storage:** Store at RT

**Expiry Date:** No expiry

TEST	SPECIFICATIONS	LOT RESULT
Appearance (Colour/Form):	Orange solid	Orange solid
<sup>1</sup> H-NMR:	Conforms to structure Min. 98%	Conforms >98%

**Quality Release Date:** 14/03/2013

**Quality Retest Date:** --/--/----

**Approved:**

*R. P. Jansen*  
Quality Control Technician

**Reviewed:**

*[Signature]*  
Dr. T. P. Jansen  
Production Manager

Cyanagen warrants that its products conform to the information contained in this and other Cyanagen publications. Purchaser must determine the suitability of the product for its particular use. The values given on the 'Certificate of Analysis' are the results determined at the time of analysis.

Cyanagen Srl - Sede legale: Via degli Stradelli Guelfi 40/c - 40138 Bologna - Italia C.F./P.IVA: 0236011203  
iscritta nel Registro Imprese di Bologna n. REA: 433637 Capitale sociale sottoscritto e versato € 10.000,00.

"Società soggetta a direzione e coordinamento da parte di Finance & Technology Srl - art.2497 bis cc". - C.F./P.IVA 02958121200 -  
Capitale sociale: € 119.000,00.