Product Name: Peroxy Orange 1
Catalog No.: 4944
Batch No.: 2
CAS Number: 1199576-10-7
IUPAC Name: 2′,3′,6′,7′-Tetrahydro-12′-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-spiro[isobenzofuran-1(3H),9′-[1H,5H,9H]
  xantheno[2,3,4-ij]quinolizin]-3-one

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: C₃₂H₃₂BNO₅
   Batch Molecular Weight: 521.41
   Physical Appearance: Pink solid
   Solubility: DMSO to 10 mM
   Storage: Store at -20°C

2. ANALYTICAL DATA

   HPLC: Shows 99.2% purity
   ¹H NMR: Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis:

     Theoretical 73.71 6.19 2.69
     Found 73.39 6.19 2.82
**Product Name:** Peroxy Orange 1  
**Catalog No.:** 4944  
**Batch No.:** 2

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**IUPAC Name:** 2',3',6',7'-Tetrahydro-12'-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-spiro[isobenzofuran-1(3H),9'-[1H,5H,9H]xantheno[2,3,4-ij]quinolinizin]-3-one

**Description:**
Fluorescent probe for imaging hydrogen peroxide (H$_2$O$_2$); cell permeable. Displays an orange intracellular fluorescence in response to H$_2$O$_2$ signals produced in RAW 264.7 macrophages and A431 cells during immune response and growth factor stimulation, respectively. Excitation wavelength 543 nm, emission between 545 and 750 nm.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C$_{32}$H$_{32}$BNO$_5$
- **Batch Molecular Weight:** 521.41
- **Physical Appearance:** Pink solid

** Batch Molecular Structure:**

![Batch Molecular Structure](image)

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.  
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:**
DMSO to 10 mM

This product may be used for research purposes only. It is not licensed for resale and may only be used by the buyer. This product may not be used and is not licensed for clinical assays, where the results of such assays are provided as a diagnostic service. If a diagnostic or therapeutic use is anticipated, then a license must be requested from the University of California. The availability of such diagnostic and therapeutic use license(s) cannot be guaranteed from the University of California.

**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 aliquotted 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.

**Licensing Information:**
Sold under license from the Regents of the University of California

**References:**

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

**bio-techne.com**  
info@bio-techne.com  
technicalsupport@bio-techne.com

**North America**  
Tel: (800) 343 7475

**China**  
info.cn@bio-techne.com  
Tel: +86 (21) 52380373

**Europe Middle East Africa**  
Tel: +44 (0)1235 529449

**Rest of World**  
www.tocris.com/distributors  
Tel:+1 612 379 2956