

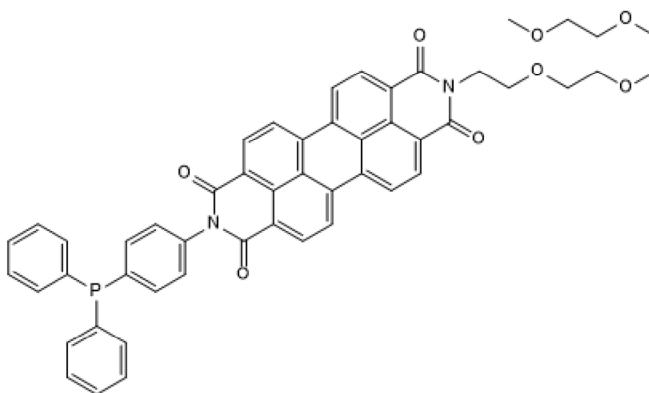
# Certificate of Analysis

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|                      |                                                                                                                                                                            |                     |             |                   |          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|-------------------|----------|
| <b>Product Name:</b> | <b>Liperfluo</b>                                                                                                                                                           | <b>Catalog No.:</b> | <b>8868</b> | <b>Batch No.:</b> | <b>2</b> |
| CAS Number:          | 1448846-35-2                                                                                                                                                               |                     |             |                   |          |
| IUPAC Name:          | 2-[4-(Diphenylphosphino)phenyl]-9-(3,6,9,12-tetraoxatridec-1-yl)anthra[2,1,9- <i>def</i> :6,5,10- <i>d'e'f'</i> ]diisoquinoline-1,3,8,10 (2 <i>H</i> ,9 <i>H</i> )-tetrone |                     |             |                   |          |

## 1. PHYSICAL AND CHEMICAL PROPERTIES

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| <b>Batch Molecular Formula:</b>   | C <sub>51</sub> H <sub>41</sub> N <sub>2</sub> O <sub>8</sub> P |
| <b>Batch Molecular Weight:</b>    | 840.87                                                          |
| <b>Physical Appearance:</b>       | Dark red solid                                                  |
| <b>Storage:</b>                   | Store at +4°C                                                   |
| <b>Batch Molecular Structure:</b> |                                                                 |



## 2. ANALYTICAL DATA

|              |                    |
|--------------|--------------------|
| <b>HPLC:</b> | Shows 96.3% purity |
|--------------|--------------------|

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

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**Catalog No.:** 8868

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IUPAC Name: 2-[4-(Diphenylphosphino)phenyl]-9-(3,6,9,12-tetraoxatridec-1-yl)anthra[2,1,9-*def*:6,5,10-*d'e'f'*]diisoquinoline-1,3,8,10 (2*H*,9*H*)-tetrone

**Description:**

Key information: Liperfluo is a fluorescent probe for the selective detection and imaging of lipid peroxides in living cells. Upon reaction with lipid peroxides, Liperfluo is oxidized and becomes fluorescent. Used for: imaging lipid peroxides in living cells. Liperfluo can be used to monitor lipid peroxidation in ferroptosis research. Application: fluorescent microscopy and flow cytometry. Properties and Photophysical Data: Liperfluo has a high solubility in organic solvents. It displays minimal photo damage and auto-fluorescence and shows high selectivity to lipid peroxidases over ROS and other radical species. Excitation and emission max... Please see product specific page on [www.tocris.com](http://www.tocris.com) for full description.

**Physical and Chemical Properties:**

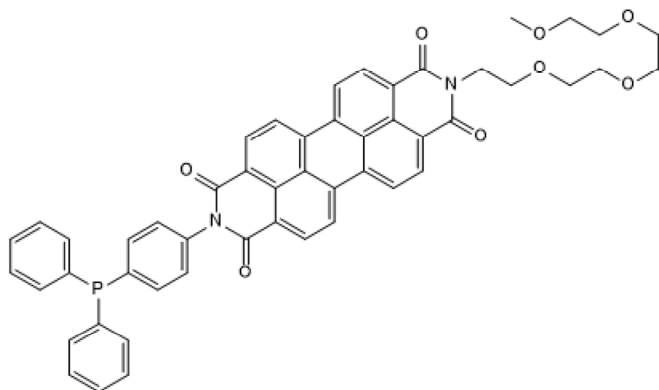
Batch Molecular Formula: C<sub>51</sub>H<sub>41</sub>N<sub>2</sub>O<sub>8</sub>P

Batch Molecular Weight: 840.87

Physical Appearance: Dark red solid

**Minimum Purity:** ≥90%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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 aliquoted 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.

**References:**

**Yamanaka *et al*** (2012) A novel fluorescent probe with high sensitivity and selective detection of lipid hydroperoxides in cells. *RSC Adv.* 2 7894.

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