

**Product Name:** Phen Green SK diacetate

**Catalog No.:** 7873

**Batch No.:** 1

CAS Number: 234075-45-7

IUPAC Name: 3',6'-Bis(acetyloxy)-2',7'-dichloro-3-oxo-*N*-1,10-phenanthrolin-5-yl-spiro[isobenzofuran-1(3*H*),9'-[9*H*]xanthene]-5-carboxamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

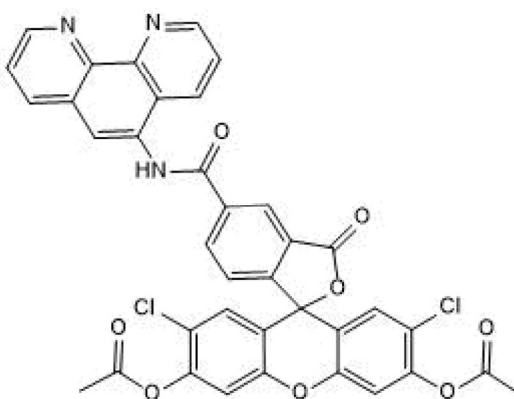
**Batch Molecular Formula:** C<sub>37</sub>H<sub>21</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>8</sub>

**Batch Molecular Weight:** 706.49

**Physical Appearance:** Orange solid

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 90.0% purity at 254 nm

**UV Spectrum:** Consistent with structure

**λ<sub>max</sub>:** 267 nm (Methanol)

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

bio-techne.com

info@bio-techne.com

techsupport@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

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**Description:**

Phen Green SK diacetate is a fluorescent heavy metal ion indicator that can be used to detect various metal ions including Cu<sup>2+</sup>, Cu<sup>+</sup>, Fe<sup>2+</sup>, Hg<sup>2+</sup>, Pb<sup>2+</sup>, Cd<sup>2+</sup>, Zn<sup>2+</sup> and Ni<sup>2+</sup>. Excitation and emission maxima (λ) are 507 and 532 nm, respectively. Intracellular Phen Green SK diacetate fluorescence is quenched upon reaction with metal ions. This product is cell permeable. It is recommended to prepare stock solutions in DMSO.

**Physical and Chemical Properties:**

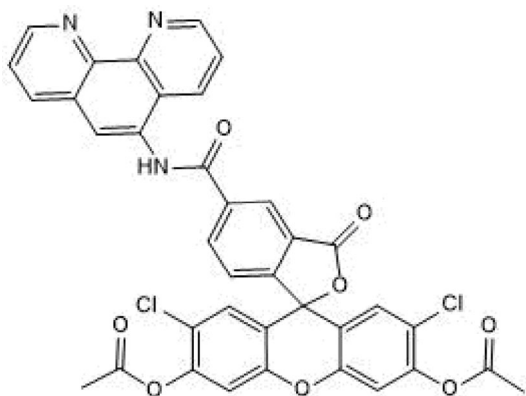
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Batch Molecular Weight: 706.49

Physical Appearance: Orange solid

**Minimum Purity:** ≥90%

**Batch Molecular Structure:**



**References:**

**Lu et al** (2022) Epigenetic regulation of ferroptosis via ETS1/miR-23a-3p/ACSL4 axis mediates sorafenib resistance in human hepatocellular carcinoma. *J.Exp.Clin.Cancer Res.* **41** 3. PMID: 34980204.

**Shen et al** (2022) Geniposide possesses the protective effect on myocardial injury by inhibiting oxidative stress and ferroptosis via activation of the Grsf1/GPx4 Axis. *Front.Pharmacol.* **13** 879870. PMID: 35600863.

**Kim et al** (2006) Calibration of Phen Green for use as a Cu(I)-selective fluorescent indicator. *Anal.Chim.Acta* **575** 223. PMID: 17723595.

**Storage:** Store at -20°C

**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:**

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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.

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Tel: +44 (0)1235 529449

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Tel:+1 612 379 2956