

# PRODUCT INFORMATION

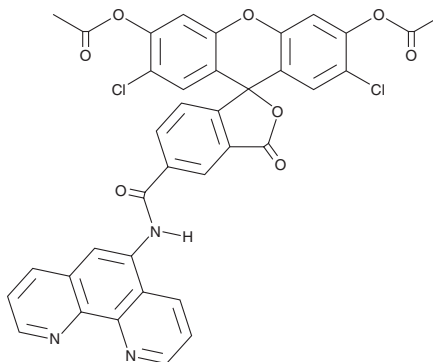


## Phen Green SK diacetate

Item No. 25393

**CAS Registry No.:** 234075-45-7  
**Formal Name:** 3',6'-bis(acetyloxy)-2',7'-dichloro-3-oxo-N-1,10-phenanthrolin-5-yl-spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-5-carboxamide

**Synonym:** PGSK diacetate  
**MF:** C<sub>37</sub>H<sub>21</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>8</sub>  
**FW:** 706.5  
**Purity:** ≥90%  
**Ex./Em. Max:** 507/532  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Phen Green SK (PGSK) diacetate is supplied as a solid. A stock solution may be made by dissolving the PGSK diacetate in the solvent of choice, which should be purged with an inert gas. PGSK diacetate is soluble in DMSO.

### Description

PGSK diacetate is a fluorescent heavy metal indicator that reacts with a variety of metal ions, including Fe<sup>2+</sup>, Cd<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup>, and Zn<sup>2+</sup>.<sup>1</sup> PGSK diacetate displays excitation/emission maxima of 507/532 nm, respectively, and fluorescence is quenched upon interaction with metal ions. It has been used to quantify iron in isolated rat hepatocytes, characterize metal-ion selectivity of divalent metal-ion transporter 1 (DMT1), and monitor copper transport across *P. sativum* chloroplast membranes.<sup>1-3</sup>

### References

1. Illing, A.C., Shawki, A., Cunningham, C.L., *et al.* Substrate profile and metal-ion selectivity of human divalent metal-ion transporter-1. *J. Biol. Chem.* **287**(36), 30485-30496 (2012).
2. Petrat, F., Rauert, U., and de Groot, H. Determination of the chelatable iron pool of isolated rat hepatocytes by digital fluorescence microscopy using the fluorescent probe, phen green SK. *Hepatology* **29**(4), 1171-1179 (1999).
3. Shingles, R., Wimmers, L.E., and McCarty, R.E. Copper transport across pea thylakoid membranes. *Plant Physiol.* **125**(1), 145-151 (2004).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM