

## Certificate of Analysis

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**Product Name:** Gallein

**Catalog No.:** 3090

**Batch No.:** 2

CAS Number: 2103-64-2

EC Number: 218-272-6

IUPAC Name: 3',4',5',6'-Tetrahydroxyspiro[isobenzofuran-1(3*H*),9'-(9*H*)xanthen]-3-one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{20}H_{12}O_7 \cdot 2\frac{1}{2}H_2O$

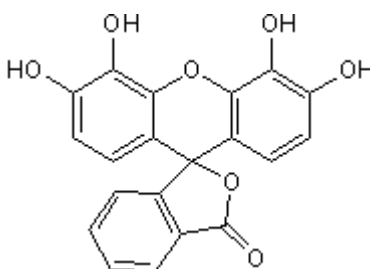
**Batch Molecular Weight:** 409.35

**Physical Appearance:** Black solid

**Solubility:** DMSO to 75 mM  
ethanol to 10 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.68	4.19	
Found	58.51	3.99	

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**Description:**

Inhibitor of G protein  $\beta\gamma$  subunit-dependent signaling. Blocks PI 3-kinase and Rac1 activation in HL60 cells and chemotaxis in HL60 differentiated cells.

**Physical and Chemical Properties:**

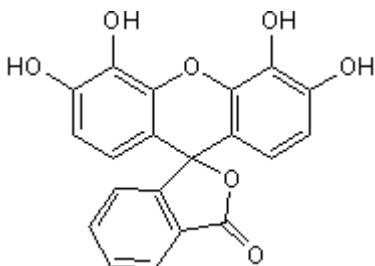
Batch Molecular Formula:  $C_{20}H_{12}O_7 \cdot 2\frac{1}{2}H_2O$

Batch Molecular Weight: 409.35

Physical Appearance: Black solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**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:**

DMSO to 75 mM

ethanol to 10 mM

**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 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:**

**Lehmann et al** (2008) Small molecule disruption of G protein  $\beta\gamma$  subunit signaling inhibits neutrophil chemotaxis and inflammation. *Mol.Pharmacol.* **73** 410. PMID: 18006643.

**Ukhanov et al** (2011) Phosphoinositide 3-kinase-dependent antagonism in mammalian olfactory receptor neurons. *J.Neurosci.* **31** 273. PMID: 21209212.

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