

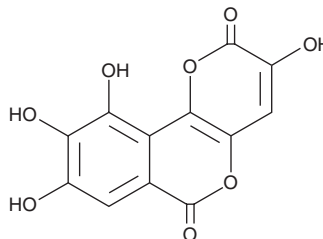
# PRODUCT INFORMATION



## Galloflavin

Item No. 14846

**CAS Registry No.:** 568-80-9  
**Formal Name:** 3,8,9,10-tetrahydroxy-pyrano[3,2-c][2]benzopyran-2,6-dione  
**Synonym:** NSC 107022  
**MF:** C<sub>12</sub>H<sub>6</sub>O<sub>8</sub>  
**FW:** 278.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 259, 379, 397 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Galloflavin is supplied as a crystalline solid. A stock solution may be made by dissolving the galloflavin in the solvent of choice, which should be purged with an inert gas. Galloflavin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of galloflavin in these solvents is approximately 12 mg/ml.

Galloflavin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, galloflavin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Galloflavin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Galloflavin is an inhibitor of both the A and B isoforms of lactate dehydrogenase ( $K_i$ s = 5.46 and 15.06  $\mu$ M, respectively).<sup>1</sup> It has been shown to prevent proliferation of many different cancer cell lines *in vitro* by blocking glycolysis and ATP production.<sup>2</sup>

### References

1. Manerba, M., Vettriano, M., Fiume, L., *et al.* Galloflavin (CAS 568-80-9): A novel inhibitor of lactate dehydrogenase. *ChemMedChem* **7**(2), (2012).
2. Han, X., Sheng, X., Jones, H. M., *et al.* Evaluation of the anti-tumor effects of lactate dehydrogenase inhibitor galloflavin in endometrial cancer cells. *J. Hematol. Oncol.* **8**(2), (2015).

#### 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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