

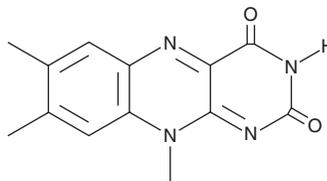
# PRODUCT INFORMATION



## Lumiflavine

Item No. 20645

**CAS Registry No.:** 1088-56-8  
**Formal Name:** 7,8,10-trimethyl-benzo[g]  
pteridine-2,4(3H,10H)-dione  
**MF:** C<sub>13</sub>H<sub>12</sub>N<sub>4</sub>O<sub>2</sub>  
**FW:** 256.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 221, 267, 348, 441 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.

### Description

Lumiflavine is a structural analog of the water-soluble vitamin riboflavin that has been used to study the mechanism of uptake of riboflavin into intestinal epithelial (Caco-2) and human retinal pigment epithelial (hRPE) cells.<sup>1,2</sup> It inhibits the uptake of radiolabeled riboflavin approximately 3-fold (at 25 μM) and 30-fold (at 10 μM) in Caco-2 cells and hRPE cells, respectively.<sup>1,2</sup>

### References

1. Said, H.M., and Ma, T.Y. Mechanism of riboflavine uptake by Caco-2 human intestinal epithelial cells. *Am. J. Physiol.* **266**(1 pt 1), G15-G21 (1994).
2. Said, H.M., Wang, S., and Ma, T.Y. Mechanism of riboflavin uptake by cultured human retinal pigment epithelial ARPE-19 cells: Possible regulation by an intracellular Ca<sup>2+</sup>-calmodulin-mediated pathway. *J. Physiol.* **556**(Pt 2), 369-377 (2005).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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