

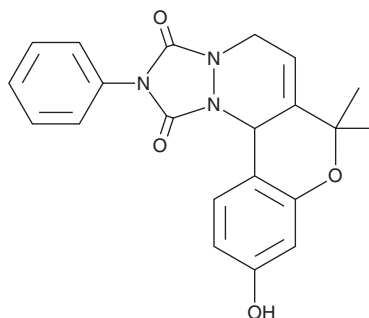
# PRODUCT INFORMATION



## Inflachromene

Item No. 17006

**CAS Registry No.:** 908568-01-4  
**Formal Name:** 5,12b-dihydro-10-hydroxy-7,7-dimethyl-2-phenyl-1H,7H-[1]benzopyrano[4,3-c][1,2,4]triazolo[1,2-a]pyridazine-1,3(2H)-dione  
**Synonym:** ICM  
**MF:** C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub>  
**FW:** 377.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 281 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

Inflachromene is supplied as a crystalline solid. A stock solution may be made by dissolving the inflachromene in the solvent of choice, which should be purged with an inert gas. Inflachromene is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of inflachromene in ethanol is approximately 2.5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Inflachromene is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, inflachromene should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Inflachromene has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Inflachromene is an anti-inflammatory agent that directly binds high mobility group protein 1 (HMGB1) and HMGB2 and reduces their cytoplasmic accumulation in microglial cells.<sup>1</sup> It is functional *in vivo*, downregulating proinflammatory functions of HMGB proteins and reducing neuronal damage.<sup>2</sup> Inflachromene also ameliorates inflammatory pathogenesis in a mouse model of sepsis.<sup>1</sup>

### References

1. Lee, S., Nam, Y., Koo, J.Y., *et al.* A small molecule binding HMGB1 and HMGB2 inhibits microglia-mediated neuroinflammation. *Nat. Chem. Biol.* **10(12)**, 1055-1060 (2014).
2. Cho, W., Koo, J.Y., Park, Y., *et al.* Treatment of sepsis pathogenesis with high mobility group box protein 1-regulating anti-inflammatory agents. *J. Med. Chem.* **60(1)**, 170-179 (2017).

#### 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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