

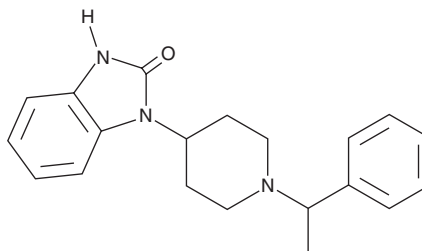
# PRODUCT INFORMATION



## Orphine

Item No. 36303

CAS Registry No.: 59708-49-5  
Formal Name: 1,3-dihydro-1-[1-(1-phenylethyl)-4-piperidinyl]-2H-benzimidazol-2-one  
MF:  $C_{20}H_{23}N_3O$   
FW: 321.4  
Purity:  $\geq 98\%$   
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 5$  years



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

### Description

Orphine (Item No. 36303) is an analytical reference standard categorized as an opioid.<sup>1,2</sup> Orphine induces antinociception in mice that is reduced by naloxone (Item Nos. ISO60191 | 15594).<sup>2</sup> This product is intended for research and forensic applications.

### References

1. Kennedy, N.M., Schmid, C.L., Ross, N.C., *et al.* Optimization of a series of mu opioid receptor (MOR) agonists with high G protein signaling bias. *J. Med. Chem.* **61**(19), 8895-8907 (2018).
2. Vandeputte, M.M., Bilel, S., Tirri, M., *et al.* Elucidating the harm potential of brophine analogues as new synthetic opioids: Synthesis, *in vitro*, and *in vivo* characterization. *Neuropharmacology* **260**, 110113 (2024).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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