

# Product Information

## Morphine 3- $\beta$ -D-Glucuronide

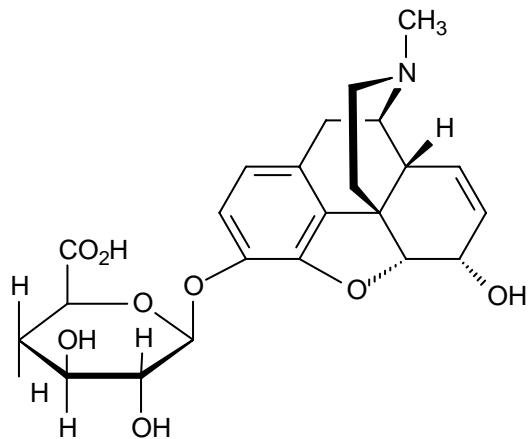
Product Number **M 6886**

Store at Room Temperature

CAS# 20290-09-9

Synonyms: M3G; (5 $\alpha$ ,6 $\alpha$ )-7,8-Didehydro-4,5-epoxy-6-hydroxy-17-methylmorphinan-3-yl- $\beta$ -D-glucopyranosiduronic acid

### Product Description



Molecular Formula: C<sub>23</sub>H<sub>27</sub>NO<sub>9</sub>

Molecular Weight: 461.5 (anhydrous)

Morphine 3- $\beta$ -D-Glucuronide is a major metabolite of morphine, which has been shown to antagonize the analgesic and antinociceptive effects of morphine and morphine 6- $\beta$ -D-glucuronide.

### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Preparation Instructions

The product is soluble in dilute, aqueous acid (>20 mg/ml), methanol (>14 mg/ml), or water (4 mg/ml).

### Storage/Stability

Store the product at room temperature protected from light.

### References

1. Gong, Q.L. *et al.*, Antinociceptive and ventilatory effects of the morphine metabolites: Morphine-6-glucuronide and morphine 3-glucuronide. *Eur. J. Pharmacol.*, **193**, 47-56 (1991).
2. Smith, M.T. *et al.*, Morphine-3-glucuronide - a potent antagonist of morphine analgesia. *Life Sci.*, **47**, 579-585 (1990).
3. Gong, Q.L. *et al.*, Morphine-3-glucuronide may functionally antagonize morphine-6-glucuronide induced antinociception and ventilatory depression in the rat. *Pain*, **48**, 249-255 (1992).

VNC/MAM 08/04

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.