

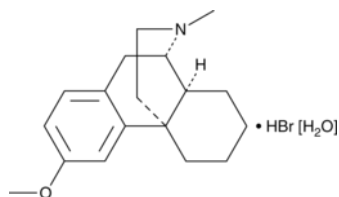
## Dextromethorphan (hydrobromide hydrate)

**ALTERNATE NAME:** (9 $\alpha$ ,13 $\alpha$ ,14 $\alpha$ )-3-methoxy-17-methyl-morphinan, hydrobromide monohydrate, DXM

**CATALOG #:** 2912-50, -100

**AMOUNT:** 50 mg, 100 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>18</sub>H<sub>25</sub>NO • HBr [H<sub>2</sub>O]

**FORMULA WEIGHT:** 370.3

**CAS NUMBER:** 6700-34-1

**APPEARANCE:** Crystalline solid

**SOLUBILITY:** PBS, pH 7.2 (5 mg/ml), Ethanol or DMF (20 mg/ml), DMSO (12 mg/ml). Organic solvents should be purged in inert gas. Aqueous solutions should not be stored for >1 day.

**PURITY:** ≥98%

$\lambda_{\max}$  227, 280 nm

**STORAGE:** -20°C, 2 years shelf-life

**DESCRIPTION:** Dextromethorphan (DXM) is a morphinan with structural similarity to levorphanol, codeine, and morphine. DXM binds to and inhibits NMDA (IC<sub>50</sub> = 0.55  $\mu$ M) and nicotinic receptors (IC<sub>50</sub>s = 0.7-3.9  $\mu$ M) and blocks receptor-gated and voltage-gated calcium channels (IC<sub>50</sub> = 60  $\mu$ M) and voltage-gated sodium channels (IC<sub>50</sub> = 78  $\mu$ M). It is a Cytochrome P450 2D6 substrate and it is converted into the active metabolite dextrorphan in the liver.

**HANDLING:** Do not take internally.

### RELATED PRODUCTS:

AMMC iodide (Cat#2873)  
Atorvastatin (Cat#2278)  
Erlotinib, (Cat#2048)  
Erlotinib, Hydrochloride Salt (Cat#1588)  
EZSolution™ Gefitinib (Cat#2030)  
Gefitinib (Cat#1589)  
Irinotecan Hydrochloride (Cat#1752)  
Lovastatin (Cat#1692)  
Paclitaxel (Cat#1567)  
Rosuvastatin (Cat#1955)  
Simvastatin (Cat#1693)

**FOR RESEARCH USE ONLY! Not to be used on humans.**