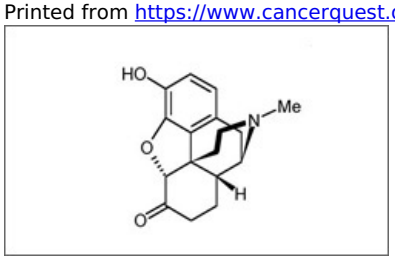
Hydromorphone, Idromorfone

Printed from https://www.cancerquest.org/patients/drug-reference/hydromorphone-idromorfone on 11/16/2026



Brand name: Dilaudid®
IUPAC: 4,5 alpha-epoxy-3-hydroxy-17-methyl morphinan-6-one
FDA approval: Yes
Manufacturer Link
Usage:

Hydromorphone is an opiate related to morphine that helps to relieve pain. Hydromorphone can be given as a tablet, liquid, injection or suppository, usually several times daily. 1

1 Hydromorphone. MedlinePlus. https://medlineplus.gov/druginfo/meds/a682013.html

Mechanism:

Hydromorphone binds primarily to the mu opioid receptor to relieve pain by changing the way the brain and nervous system responds to pain.1

The structure below shows the 3D conformer Hydromorphone.

Stick Sphere Line Rotate

1 Hydromorphone. MedlinePlus. https://medlineplus.gov/druginfo/meds/a682013.html

Side effects:

Side effects include : sedation or drowsiness, nausea and vomiting may become a problem at high doses and constipation with prolonged use. Hydromorphone can be habit-forming. Psychological and physiological withdrawal symptoms can occur if the patient becomes drug-dependent. Higher doses maybe needed to achieve pain relief because patients may build tolerance to the drug. Patients should avoid alcohol consumption while taking hydromorphone because it may intensify some of the mental and emotional side effects of hydromorphone, such as drowsiness and changes in mood. Hydromorphone can cause respiratory depression. This may result in a potentially dangerous slowing of a patient's breathing rate.1

1 Hydromorphone. MedlinePlus. https://medlineplus.gov/druginfo/meds/a682013.html