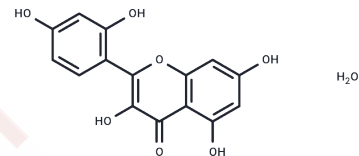


## Morin monohydrate

## Chemical Properties

CAS No. :	6202-27-3
Formula:	C <sub>15</sub> H <sub>12</sub> O <sub>8</sub>
Molecular Weight:	320.25
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Morin monohydrate (oxylon pomiferum monohydrate) is a flavonoid extracted from Morus alba plant with anticancer, antioxidant, and anti-inflammatory activities, which reduces T-2 toxin-induced TNF-alpha, COX-2, IL-1β, IL-6, caspase-1, caspase-3, and caspase-11 mRNA. BML-286 is a WNP-containing WNP-containing BML-286, which reduces T-2 toxin-induced TNF-α, COX-2, IL-1β, IL-6, caspase-1, caspase-3, and caspase-11 mRNA expression, and ameliorates T-2 toxin-induced injury by decreasing malondialdehyde (MDA) and increasing superoxide dismutase (SOD), catalase (CAT), glutathione (GSH), and glutathione peroxidase (GSH-PX).
Targets(IC50)	Antioxidant,CAT
In vitro	Morin hydrate(Aurantica) is a flavonoid isolated from Maclura pomifera (Osage orange), Maclura tinctoria (old fustic) and from leaves of Psidium guajava (common guava). Morin hydrate as an antioxidant improves the survival time of rat glomerular mesangial cells which are attacked by oxyradicals. [1] Morin is also an effective hepatoprotector, both in cultured cells and in hepatic ischemia-reperfusion. [2] Morin hydrate is a new type of Islet Amyloid Polypeptide (IAPP) inhibitor, which may be used in type-2 diabetes and islet cell transplants. [3]

## Solubility Information

Solubility	H <sub>2</sub> O: <1 mg/mL, Ethanol: 2 mg/mL (6.25 mM),Heating is recommended. DMSO: 18.15 mg/mL (56.67 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 1.81 mg/mL (5.65 mM),Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1226 mL	15.6128 mL	31.2256 mL
5 mM	0.6245 mL	3.1226 mL	6.2451 mL
10 mM	0.3123 mL	1.5613 mL	3.1226 mL
50 mM	0.0625 mL	0.3123 mL	0.6245 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

- Duthie G, et al. Antioxidant capacity of flavonoids in hepatic microsomes is not reflected by antioxidant effects in vivo. *Oxid Med Cell Longev.* 2012;2012:165127.
- Yin Z, Guo H, Jiang K, et al. Morin decreases acrolein-induced cell injury in normal human hepatocyte cell line LO2. *Journal of Functional Foods.* 2020, 75: 104234.
- Lian HZ, et al. Morin applied in speciation of aluminium in natural waters and biological samples by reversed-phase high-performance liquid chromatography with fluorescence detection. *Anal Bioanal Chem.* 2003 Jun;376(4): 542-8.
- Noor H, et al. *Protein Sci*, 2012, 21(3), 373-382.
- Yin Z, Guo H, Jiang K, et al. Morin decreases acrolein-induced cell injury in normal human hepatocyte cell line LO2 [J]. *Journal of Functional Foods.* 2020, 75: 104234.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481