Polyvinylpyrrolidone

Cat. No.: HY-B1620

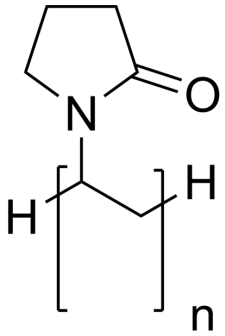
CAS No.: 9003-39-8

Molecular Formula: $(C_6H_9NO)n$

Target: Biochemical Assay Reagents

Pathway: Others

Storage: Powder -20°C 3 years
4°C 2 years



SOLVENT & SOLUBILITY

In Vitro

H_2O : ≥ 50 mg/mL
DMSO : 25 mg/mL (Need ultrasonic)
* "≥" means soluble, but saturation unknown.

BIOLOGICAL ACTIVITY

Description

Polyvinylpyrrolidone is a compound which has been widely tested and used in human and veterinary medicine as an effective wound healing accelerator and disinfectant when combined with iodine and other compounds.

In Vivo

Goldfishes which are treated with salt have significantly lower mucus weights at 25 h. Goldfishes treated with Polyvinylpyrrolidone (PVP) have significantly higher mucus weights at 25 h. Koi treated with salt and Polyvinylpyrrolidone (PVP) has significantly lower mucus weight at 1 and 25 h. Control koi has significantly higher mucus at 25 h. At the end of 2 weeks, it is determined that the three koi treated with salt and Polyvinylpyrrolidone(PVP) remain healthy and show a higher degree of healing than other treatment koi and the control group[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]

Each fish within a tank serves as a replicate. Treatments are designated as Polyvinylpyrrolidone (at a dose of 10 mL/10 gallon) and saline/salt at 3g/L. A control group that does not receive any chemical is also included in the study. All fishes from each treatment group are sampled at 0 min, 15 min, 1 h, 4 h and 25 h. At each time interval, all fishes from each treatment group are anaesthetized using buffered tricaine methanesulfonate, weighed, and slime is scraped from one 1 cm^2 area over the epaxial musculature using a preweighed plastic coverslip[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Shivappa RB, et al. Laboratory evaluation of different formulations of Stress Coat? for slime production in goldfish (Carassius auratus) and koi (Cyprinus carpio). PeerJ. 2017 Sep 6;5:e3759.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA