

Castor oil

Cat. No.:	HY-107799
CAS No.:	8001-79-4
Molecular Weight:	89.91
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	Pure form -20°C 3 years 4°C 2 years

Castor oil

SOLVENT & SOLUBILITY

In Vitro	Ethanol : 4.55 mg/mL (50.61 mM; Need ultrasonic)
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BIOLOGICAL ACTIVITY

Description	Castor oil is a natural triglyceride and a solvent. Castor oil has a laxative effect and induces labor in pregnant females. Castor oil can be used as a solvent, co-solvent, stabilizing agent and polyol for the formation of polymer-nanoparticle composites ^[1] [2].
In Vitro	Castor oil (CO) is an inedible vegetable oil that has been employed extensively as a bioresource material for the synthesis of biodegradable polymers, cosmetics, lubricants, biofuels, coatings and adhesives. Castor oil is used in medicine, pharmaceuticals and biorefineries, due to its versatile chemistry ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Castor oil is a natural triglyceride which has a laxative effect and induces labor in pregnant females. When given castor oil, wild-type mice respond with a strong diarrhea, starting about 30 min after application. The laxative effect lasts for about 2 h [2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration ^[1]	Mice are used to measure the laxative effects of Castor oil and starved 16 h before the experiments. On the day of the experiment, mice are treated with the Castor oil, and the bottom of the cages is covered with white tissue paper. The weight of shapeless and watery stools is determined hourly ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
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CUSTOMER VALIDATION

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- Biol Res. 2023 Jun 12;56(1):31.
 - Research Square Print. September 9th, 2022.

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REFERENCES

- [1]. Tunaru S, et al. Castor oil induces laxation and uterus contraction via ricinoleic acid activating prostaglandin EP3 receptors. Proc Natl Acad Sci U S A. 2012 Jun 5;109(23):9179-84.
- [2]. Mensah MB, et al. Castor oil: a suitable green source of capping agent for nanoparticle syntheses and facile surface functionalization. R Soc Open Sci. 2018 Aug 15;5(8):180824.
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Caution: Product has not been fully validated for medical applications. For research use only.

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