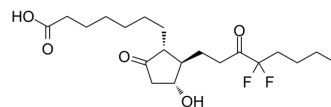


## Lubiprostone

<b>Cat. No.:</b>	HY-B0679		
<b>CAS No.:</b>	136790-76-6		
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>32</sub> F <sub>2</sub> O <sub>5</sub>		
<b>Molecular Weight:</b>	390.46		
<b>Target:</b>	Chloride Channel		
<b>Pathway:</b>	Membrane Transporter/Ion Channel		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (256.11 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5611 mL	12.8054 mL	25.6108 mL
	5 mM	0.5122 mL	2.5611 mL	5.1222 mL
	10 mM	0.2561 mL	1.2805 mL	2.5611 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 3.25 mg/mL (8.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 3.25 mg/mL (8.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 3.25 mg/mL (8.32 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Lubiprostone(SPI-0211;RU0211) is a gastrointestinal agent used for the treatment of idiopathic chronic constipation.Target: OthersLubiprostone is a bicyclic fatty acid derived from prostaglandin E1 that acts by specifically activating ClC-2 chloride channels on the apical aspect of gastrointestinal epithelial cells, producing a chloride-rich fluid secretion. These secretions soften the stool, increase motility, and promote spontaneous bowel movements (SBM). From Wikipedia.

### CUSTOMER VALIDATION

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- Dig Dis Sci. 2019 Sep;64(9):2527-2537.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[1]. <http://en.wikipedia.org/wiki/Lubiprostone>

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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