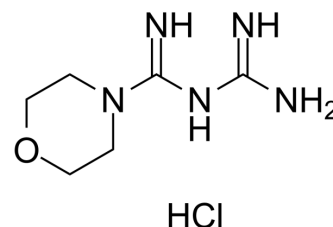


Moroxydine hydrochloride

Cat. No.:	HY-B0420A
CAS No.:	3160-91-6
Molecular Formula:	C ₆ H ₁₄ ClN ₃ O
Molecular Weight:	207.66
Target:	Influenza Virus; HCV
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 100 mg/mL (481.56 mM)
 DMSO : 50 mg/mL (240.78 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.8156 mL	24.0778 mL	48.1556 mL
	5 mM	0.9631 mL	4.8156 mL	9.6311 mL
	10 mM	0.4816 mL	2.4078 mL	4.8156 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (481.56 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (12.04 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (12.04 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (12.04 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Moroxydine (ABOB) hydrochloride has multi-antiviral activities against DNA and RNA viruses including influenza symptoms, herpes simplex, varicellazoster, measles, mumps disease, hepatitis C virus, etc. Moroxydine hydrochloride shows high anti-grass carp reovirus (GCRV) activity^[1].

In Vitro

Moroxydine (ABOB; 1.0-100 µg/mL; 24-96 h) hydrochloride shows concentration- and time-dependent induction of cell

viability in GCRV infected CIK cells^[1].

Moroxydine (40 µg/mL; 48, 96 h) hydrochloride blocks the virus-induced cytopathic effect (CPE) and cell death within 96 h^[1].

Moroxydine (40 µg/mL; 12-48 h) hydrochloride completely avoids the apoptosis and also significantly inhibits the caspase 3 activity, Bax expression and down-regulated Bcl-2 at 48 h^[1].

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

Cell Viability Assay^[1]

Cell Line:	GCRV infected CIK cells
Concentration:	1.0, 2.5, 6.3, 15.9, 39.8, 100 µg/mL
Incubation Time:	24, 48, 72, 96 h
Result:	Showed concentration- and time-dependent induction of cell viability.

Apoptosis Analysis^[1]

Cell Line:	GCRV infected CIK cells
Concentration:	40 µg/mL
Incubation Time:	48, 96 h
Result:	Could block the virus-induced CPE and cell death within 96 h.

Western Blot Analysis^[1]

Cell Line:	GCRV infected CIK cells
Concentration:	40 µg/mL
Incubation Time:	12, 24, 48 h
Result:	Completely avoided the apoptosis and also significantly inhibited the caspase 3 activity, Bax expression and down-regulated Bcl-2 at 48 h, compared with GCRV infection group.

REFERENCES

[1]. Xiao-Bo Yu, et al. Moroxydine hydrochloride inhibits grass carp reovirus replication and suppresses apoptosis in Ctenopharyngodon idella kidney cells. Antiviral Res. 2016 Jul;131:156-65.

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

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