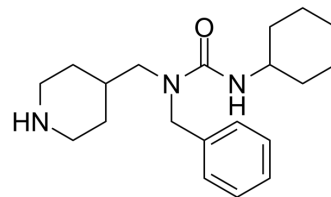


SRI-011381 hydrochloride

Cat. No.:	HY-100347A
CAS No.:	2070014-88-7
Molecular Formula:	C ₂₀ H ₃₂ ClN ₃ O
Molecular Weight:	365.94
Target:	TGF-beta/Smad
Pathway:	Stem Cell/Wnt; TGF-beta/Smad
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



H-Cl

SOLVENT & SOLUBILITY

In Vitro	DMSO : 33.33 mg/mL (91.08 mM; Need ultrasonic)					
	H ₂ O : 25 mg/mL (68.32 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		2.7327 mL	13.6634 mL	27.3269 mL
5 mM			0.5465 mL	2.7327 mL	5.4654 mL	
	10 mM		0.2733 mL	1.3663 mL	2.7327 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 50 mg/mL (136.63 mM); Clear solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.83 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.83 mM); Clear solution					
	4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.83 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	SRI-011381 hydrochloride is an orally active TGF-β signaling agonist, exhibits neuroprotective effects ^{[1][2]} .
IC₅₀ & Target	TGF-beta ^[1]
In Vitro	SRI-011381 (10 μM) hydrochloride promotes the proliferation of mouse lung fibroblasts, and significantly increases TGF-β1, NALP3, collagen-1, and α-SMA expression ^[1] .

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

In Vivo

SRI-011381 (30 mg/kg; i.p.; every 2 d; for 22 days) hydrochloride partially rescues the deficits in optic nerve and retina of YAPGFAP-CKO EAE mice^[2].

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

Animal Model:	YAPGFAP-CKO mice bearing experimental autoimmune encephalomyelitis (EAE) ^[2]
Dosage:	30 mg/kg
Administration:	Intraperitoneally injection; every 2 d; for 22 days
Result:	Significantly inhibited inflammatory infiltration and relieved the loss of neurons in YAPGFAP-CKO EAE mice.

CUSTOMER VALIDATION

- Nature. 2023 Jan;613(7942):120-129.
- Theranostics. 2021; 11(17):8480-8499.
- Cell Commun Signal. 2023 Jul 4;21(1):168.
- Cell Mol Biol Lett. 2023 Feb 27;28(1):15.
- Phytomedicine. 1 June 2022, 154234.

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REFERENCES

[1]. Jingyin Han, et al. The Improvement Effect of Sodium Ferulate on the Formation of Pulmonary Fibrosis in Silicosis Mice Through the Neutrophil Alkaline Phosphatase 3 (NALP3)/Transforming Growth Factor- β 1 (TGF- β 1)/ α -Smooth Muscle Actin (α -SMA) Pathway. Med

[2]. Qian Wu, et al. Astrocytic YAP protects the optic nerve and retina in an experimental autoimmune encephalomyelitis model through TGF- β signaling. Theranostics. 2021 Jul 25;11(17):8480-8499.

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

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