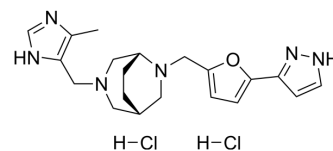


DRP1i27 dihydrochloride

Cat. No.:	HY-152086A
Molecular Formula:	C ₂₀ H ₂₈ Cl ₂ N ₆ O
Molecular Weight:	439.38
Target:	Dynamin
Pathway:	Cytoskeleton
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (113.80 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		2.2759 mL	11.3797 mL	22.7593 mL
	5 mM		0.4552 mL	2.2759 mL	4.5519 mL
	10 mM		0.2276 mL	1.1380 mL	2.2759 mL

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

BIOLOGICAL ACTIVITY

Description

DRP1i27 dihydrochloride is a potent inhibitor of human Drp1 (dynamin-related protein 1). DRP1i27 dihydrochloride binds to the GTPase site of Drp1, with hydrogen bonds to Gln34 and Asp218. DRP1i27 dihydrochloride targets Drp1-mediated mitochondrial fission in cell line models and protects against simulated ischemia-reperfusion injury^[1].

In Vitro

DRP1i27 (0-50 μM) dihydrochloride directly binds to and inhibits GTPase activity of human Drp1^[1]. DRP1i27 (0-50 μM) dihydrochloride is able to increase cellular networks of mitochondria in human and mouse fibroblasts in a Drp1-dependent manner^[1]. DRP1i27 dihydrochloride has a binding affinity of 286 μM in the SPR assay and a K_D value of 190 μM via the MST assay^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Rosdah AA, et al. A novel small molecule inhibitor of human Drp1. Sci Rep. 2022 Dec 13;12(1):21531.

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

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